Understanding Language Evolution Using an Event-Based Model

Appendices

1. Character Assignments
2. Partition Assignments
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Appendix 1 - Character Assignments

Each segment gets a different number

1 e 2 g 3 oː 4 ʒ 5 ə 6 ʝ 7 o 8 i 9 w 10 ɔ 11 ʤ 12 ɪ 13 j 14 n

15 s 16 u 17 ɔj 18 ʃ 19 oj 20 v 21 b 22 t 23 uː 24 y 25 d 26 f

27 eː 28 m 29 a 30 ɾ 31 ɐ 32 œ 33 ɛ 34 l 35 r 36 x 37 ʎ 38 ʁ 39 iː

40 ɲ 41 o̯a 42 ɑ̃ 43 ĩ 44 ɐ̃ 45 ʧ 46 ɨ 47 ẽj̃ 48 p 49 z 50 ð 51 k

52 ʦ 53 aː 54 ɐ̃j̃ 55 ʁ 56 aj 57 ɛː 58 θ 59 ej 60 ɐj 61 õ 62 h 63 ɛ̃

64 ɐ̃w̃ 65 ẽ 66 c 67 ɨj 68 β 69 ɬ 70 ɥ 71 ɨw 72 ʣ 73 øː 74 ɔː 75 gʷ

76 ŋ 77 õː 78 ç 79 au̯ 80 ø 81 e̯a 82 kʲ 83 ã 84 ɟ 85 ɑ 86 ɣ 87 ɛj

88 kʷ 89 ẽː 90 ɔ̃ 91 ẽu̯ 92 ũ 93 ɻ 94 j̃ 95 œ̃ 96 ʊ

Model: “Linguistically Informed”

1)	e	e eː
2)	i	i iː
3)	a	a aː
4)	u	u uː
5)	o	oː o
6)	ɔ	ɔ ɔː
7)	ɛ	ɛ ɛː
8)	ø	øː ø
9)	Nasal Vowel	ɑ̃ ĩ ɐ̃ ɛ̃j ɐ̃j õ ɛ̃ ɐ̃w̃ ẽ õː ã ẽː ɔ̃ ɛ̃u̯ ũ œ̃
10)	Vowel	ə ɪ ɔj oj y ɐ œ o̯a ɨ aj ej ɐj ɨj ɨw au̯ e̯a ɑ ɛj ʊ
11)	Nasal Consonant	n m ɲ ŋ j̃
12)	Non Sylabic Sonorant	w j l r
13)	Consonant	ɡ ʒ ʝ ʤ s ʃ v b t d f ɾ x ʎ ʁ ʧ p z ð k ʦ ʁ θ h c β ɬ ɥ ʣ g^{w} ç k^{j} ɟ ɣ k^{w} ɻ

Appendix 3 - Concepts Used

	I	We	YouPlural	YouSingular
Latin	- e g oː	n oː - s	w oː - s	t uː
French	ʒ ə - -	n u - -	v u - -	t y
Spanish	ʝ - - o	n o - s	b o - s	t u
Italian	- i - o	n oː i -	v oː i -	t u
PortugueseBrazil	- e - w	n ɔj - s	v ɔj s -	t u
Portuguese	- e - w	n ɔ - ʃ	v o - ʃ	t u
Catalan	ʒ - - ɔ		b u - s	t u
Walloon	ʤ ɪ - -	n o - -	v o - s	t y
Friulian	j - - o	n oː - -	v oː - -	t u
Romanian	j e - w	n oj - -	v oj - -	t u

	YouSingular-VostramMercedem	Woman	Woman-Mulier	Woman-Domina
Latin		f eː - m i - n - a	m u l i e r e m	d o m i n a
French		f a - m - - - - -		d a m - - -
Spanish	- u s t e d	- e - m - b ɾ - a	m u x - e ɾ - -	d o - - ɲ a
Italian		f e m m i - n - a	m o ʎ ʎ e - - -	d ɔ n - n a
PortugueseBrazil	v o s - e -	f e - m e - - - ɐ	m u ʎ - e ʁ - -	d o - - n ɐ
Portuguese	v ɔ s - e -	f e - m j - - - ɐ	m u ʎ - e ɾ - -	d o - - n ɐ
Catalan	v o s t e -	f e - m - b ɾ - a	m u ʎ - e - - -	d ɔ - - n ə
Walloon		f œ - m - - - - -		d œ m - - -
Friulian		f ɛ - m i - n - ɛ	m u - - iː r - -	d ɔ - - n e
Romanian		f e - m e - - j e	m u - j e r e -	d o̯a m - n ə

	Child	Child-Ninnus	Wife	Husband
Latin	i n f a n t e m		- s p o n s a	m a r iː t u s
French	ɑ̃ - f ɑ̃ - - - -		e - p u - z -	m a ʁ i - - -
Spanish	i n f a n t e -	n i ɲ o	e s p o - s a	m a ɾ i ð o -
Italian	- - f a n t e -	n i n o	- s p ɔ - z a	m a r i t o -
PortugueseBrazil	ĩ - f ẽ - ʧ i -	n e n ẽj	i s p o - z a	m a ɾ i d u -
Portuguese	ĩ - f ẽ - t ɨ -	n e n ẽj	ɨ ʃ p o - z ɐ	m ɐ ɾ i ð u -
Catalan		n e n -	ə s p ɔ - z ə	m a ɾ i t - -
Walloon	ɛ - f ɑ̃ - - - -			
Friulian				m a r iː t - -
Romanian				m ə r i t - -

	Husband-Sponsus	Husband-Socius	Mother	Father
Latin	- s p o n s u s	s o k i u s	m aː t r e m	p a t r e
French	e - p u - - - -		m e - ʁ - -	p e - ʁ -
Spanish	e s p o - s o -		m a ð ɾ e -	p a ð ɾ e
Italian	- s p ɔ - z o -	s ɔ ʧ - o -	m aː d r e -	p aː d r e
PortugueseBrazil	i s p o - z u -		m ɐ̃j - - - -	p aj - - -
Portuguese	ɨ ʃ p o - z u -		m ɐ̃j - - - -	p aj - - -
Catalan	ə s p ɔ - s - -		m a - ɾ ə -	p a - ɾ ə
Walloon			m e - ʁ - -	p ɛː - r -
Friulian	- s p oː - s - -		m a - r i -	p a - r i
Romanian		s o ʦ - - -		

Appendix 3 - Concepts Used

	Father-Tata	Animal	Animal-Bestia	Fish-Piskem
Latin	t a t a	a n i m a l i a	b eː s t i a	p i s k e m
French		o - - m a - j -		
Spanish	t a t a	a l i m a ɲ - a		p e θ - - -
Italian	t a t a		b i ʃ ʃ - a	p e ʃ ʃ e -
PortugueseBrazil	t a t a		b i - ʃ - ɐ	p ej ʃ - i -
Portuguese	t a t a		b i - ʃ - ɐ	p ɐj ʃ - ɨ -
Catalan				p e ʃ - - -
Walloon				
Friulian		- n e m aː l - -	b i s - - -	p ɛ s - - -
Romanian	t a t ə	- n ə m a - j e		p e ʃ t e -
	Fish-Pescion	**Bird-Avem**	**Bird-Avicellum**	**Bird-Passerem**
Latin		a w e m	- a w i - k - e l l u m	p a s s e r e m
French	p w a s õ		w a - - - z - o - - -	
Spanish		a b e -		p a - x a ɾ o -
Italian			- - u - t ʧ - ɛ l l o	p a s s e r o -
PortugueseBrazil		a v i -		p a - s ɐ ɾ u -
Portuguese		a v ɨ -		p a - s ɐ ɾ u -
Catalan		a w - -	- - u - - s - e - ʎ - -	
Walloon	p - ɛ h õ		- - uː - - h - ɛː - - - -	
Friulian			- - u - - ʧ j ɛ - l - -	
Romanian				p a - s ə ɾ e -
	Dog	**Louse**	**Snake**	**Worm**
Latin	k - a n e m	p - e d u - k l u s	s - e r p - e n t e m	w e r m e m
French	ʃ j ɛ̃ - - -	p - u - - - - - - -	s - e ʁ p - d̃ - - -	v e ʁ - - -
Spanish	k - a n - -	p j o - - - x - o -	s - e ɾ p j e n t e	b e ɾ m e -
Italian	k - a n e -	p - i d ɔ k k j o -	s - e r p - e n t e	v e r m e -
PortugueseBrazil	k - ẽ - - - w̃	p - i - o - ʎ u - -	s - e ʁ p - ẽ - ʧ i	v e ʁ m i -
Portuguese	k - ẽ - - - w̃	p - i - o - ʎ u - -	s - ɨ ɾ p - ẽ - t ɨ	v e ɾ m ɨ -
Catalan	k - a - - -	p - o - - - ʎ - - -	s - ə r p - e n - -	v ɛ ɾ m - -
Walloon	ʧ - ẽ - - -	p j u - - - - - - -	s j ɛ ʁ p - ẽ - - -	v j ɛ ʁ - -
Friulian	c - a n - -	p - e d o - l i - -	s - a r p - i n t -	v j ɛ r - -
Romanian	k - ɨj n e -	p - ə d u - k j e -	ʃ - a ɾ p - e - - -	v j e r m e
	Tree	**Forest**	**Stick**	**Fruit**
Latin	a r b o r e m	s i l w a	p aː l u s	f r uː - k t u s
French	a ʁ b - ʁ - -		p a l - -	f ʁ ɥ i - - - -
Spanish	a ɾ β o l - -	s e l b a	p a l o -	f ɾ u - - t o -
Italian	a l b e ɾ o -	s e l v a	p a l o -	f r u - t t o -
PortugueseBrazil	a ʁ v o ɾ i -	s ɛ w v a	p a w - -	f ɾ u - - t ɐ -
Portuguese	a ɾ v u ɾ ɨ -	s ɛ ɫ v ɐ	p a w - -	f ɾ u - - t ɐ -
Catalan	a - b - ɾ ə -	s e l b a	p a l - -	f ɾ u j - t - -
Walloon	oː - b - - - -			f ʁ y - - - - -
Friulian	a r b u l - -	s ɛ l v e	p aː l - -	f r u - - t - -
Romanian	a r b o r e -		p a ɾ - -	f r u - k t - -

Appendix 3 - Concepts Used

	Seed	Seed-Sementis	Seed-Granum	Leaf
Latin	s eː m e n	s e m - e n t i s	ɡ r aː n u m	f - o l i a
French		s ə m - d̃ - - - s	ɡ ʁ ɛ n - -	f - œ j - -
Spanish		s i m j e n t e -	ɡ ɾ a n o -	- - o x - a
Italian	s e m e -	s e m - e n t e -	ɡ r a n o -	f - ɔ ʎ ʎ a
PortugueseBrazil		s e m - ẽ - ʧ i -	ɡ ɾ ẽ - - -	f - o ʎ - ɐ
			w̃	
Portuguese		s ɨ m - ẽ - t ɨ -	ɡ ɾ ẽ - - -	f - o ʎ - ɐ
			w̃	
Catalan		s ə m - e n - - -	ɡ ɾ a - - -	f - u ʎ - ə
Walloon		s i m - ẽ - s - -	ɡ r i n - -	f - ɔj - - -
Friulian		s e m - ɛ n ʧ ɛ -	ɡ r a n - -	f w e - - e
Romanian		s ə m - ɨ n ʧ ə -	ɡ r ɨ - - -	f - o̯a - j e
			w	

	Leaf-Frondea	Root	Root-Radix	Root-Radicina
Latin	f r o n d e a	- r aː d iː k e m	r aː d iː k e	r aː d iː k iː n a
French			ʁ a d i - -	ʁ a - - s i n -
Spanish		- r a - i θ - -		
Italian	f r o n ʣ - a		r a d iː ʧ e	
PortugueseBrazil	f ɾ õ - s - ɐ	- ʁ a - i s - -		
Portuguese	f ɾ õ - s - ɐ	- ʁ ɐ - i ʃ - -		
Catalan		ə r ɛ l - - - -		
Walloon				ʁ ɛ - - s ɛ n -
Friulian				
Romanian	f ɾ u n z - ə			r ə d ə ʧ i n ə

	BarkOfATree	BarkOfATree-Corticea	BarkOfATree-Skortea	Flower
Latin	k o r t i k e m	k o r t i - k e a	- s k - o r t e a	f l oː r e m
French			e - k - o ʁ s - -	f l œ ʁ - -
Spanish		k o ɾ t e - θ - a		f l o ɾ - -
Italian	k o r t i ʧ e -	k o r t e t ʧ a -	- s k - ɔ r ʦ - a	f j oː ɾ e -
PortugueseBrazil	k ɔ ʁ ʧ i s i -	k o ʁ ʧ i - s ɐ -		f l o ʁ - -
Portuguese	k ɔ ɾ t i s ɨ -	k u ɾ t i - s ɐ -		f l o ɾ - -
Catalan			ə s k - ɔ r s - ə	f l ɔ - - -
Walloon			- s k w a s - - -	f l øː ʁ - -
Friulian			- s k w a r ʦ - e	f l oː r - -
Romanian			- s k - o̯a ɾ ʦ - ə	f l o̯a ɾ e -

	Grass	Grass-Gramen	Rope	Rope-Restis
Latin	- h e r b a	ɡ r aː m e n	f uː n - e m	r e s t e m
French	- - ɛ ʁ b -	ɡ ʁ a m ɛ n		
Spanish	j - e ɾ b a	ɡ ɾ a m a -		ɾ i s t a -
Italian	- - ɛ r b a		f u n - e -	r ɛ s t a -
PortugueseBrazil	- - e ʁ v ɐ	ɡ ɾ ẽ m ɐ -		ʁ ɛ ʃ ʧ i -
Portuguese	- - ɛ ɾ v ɐ	ɡ ɾ ɐ m ɐ -		ʁ e ʃ t ɨ -
Catalan	- - e r b ə	ɡ ɾ a m - -		
Walloon	j - ɛ - p -			
Friulian	j - a r b e			
Romanian	j - a ɾ b ə		f u n j e -	

Appendix 3 - Concepts Used

	Skin	Skin-Pellis	Meat	Meat-Vivenda
Latin		p - e l l e m	k a r n e m	w iː w - e n d a
French	k w a - - - n -	p - o - - - -	ʃ ɛ ʁ - - -	v j - - q̃ - d -
Spanish		p j e - l - -	k a ɾ n e -	b i b j e n d a
Italian	k - o t e n n a	p - e l l e -	k a r n e -	v i v - a n d a
PortugueseBrazil	k - o ʤ i - - ɐ	p - ɛ - l i -	k a ʁ n i -	v i v - ẽ - d a
Portuguese	k - o d i - - ɐ	p - e - l ɨ -	k a ɾ n ɨ -	v i v - ẽ - d ɐ
Catalan	k - o - - n n ə	p - e - ʎ - -	k a r n - -	
Walloon		p j a - - - -	ʧ ɔː - - - -	
Friulian		p j ɛ - l - -	c aː r - - -	
Romanian		p j e - l e -	k a ɾ n e -	

	Blood	Bone	FatNoun	FatNoun-Crassia
Latin	s a n gʷ - i n e m	- - o s s u m	a d e p e m	
French	s q̃ - - - - - - -	- - ɔ - s - -		ɡ ʁ ɛ s -
Spanish	s a ŋ g - - ɾ e -	- w e - s o -		ɡ ɾ a s a
Italian	s a n g w e - - -	- - ɔ s s o -	a d i p e -	
PortugueseBrazil	s ẽ - g - i - - -	- - o - s u -		ɡ ɾ a ʃ ɐ
Portuguese	s ẽ - g - ɨ - - -	- - o - s u -		ɡ ɾ a ʃ ɐ
Catalan	s a ŋ - - - - -	- - ɔ - s - -		ɡ ɾ e ʃ -
Walloon	s õː - g - - - - -	- - ɔ - ʃ - -		k ʁ ɔː ç -
Friulian	s a ŋ k - - - - -	v w ɛ - s - -		
Romanian	s ɨ n ʤ - e - - -	- - o - s - -		

	Egg	Horn	Tail	Feather
Latin	- oː w u m	k - o r n uː	k a d a	p l uː m a
French	- œ f - -	k - ɔ ʁ n -	k ø - -	p l y m -
Spanish	w e b o -	k w e ɾ n o	k o l a	p l u m a
Italian	w ɔ v o -	k - ɔ r n o	k o d a	p j u m a
PortugueseBrazil	- o v u -	k - o ʁ n u	k a d ɐ	
Portuguese	- o v u -	k - o ɾ n u	k a d ɐ	
Catalan	- ɔ w - -	k - ɔ r n -	k u - a	p l o m ə
Walloon	- uː - - -	k w ɛ - n -	k ɔ w -	p l ɔ m -
Friulian	- uː f - -	k w aː r - -	k ɔ d ɛ	p l u m ɛ
Romanian	- o w - -	k - o r n -	c o̯a d ə	

	Feather-Penna	Hair	Hair-Capillus	Head
Latin	p e n n a	p - i l u s	k a p i l l u s	k a p i - t i a
French	p ɛ - n -	p w a l - -	ʃ ə v ø - - - -	ʃ ə v ɛ - - - -
Spanish	p e - ɲ a	p - e l o -	k a b e - ʝ o -	k a β e - θ - a
Italian	p e n n a	p - e l o -	k a p e l l o -	k a v e t t s a
PortugueseBrazil	p e - n ɐ	p - e l u -	k a b e - l u -	k a b e - s - ɐ
Portuguese	p e - n ɐ	p - ɨ l u -	k ɐ β e - l u -	k ɐ β e - s - ɐ
Catalan	p ɛ - ɲ ə	p - ɛ l - -	k ə b ɛ - ʎ - -	k a p - - - - -
Walloon	p e - n -		ʧ i v j - - a -	
Friulian	p ɛ - n e	p - eː l - -	c a v ej - - - -	c aː f - - - - -
Romanian	p a - n ə	p - ə ɾ - -		k a p - - - - -

Appendix 3 - Concepts Used

	Head-Testa	Ear	Eye	Nose
Latin	t e s t a	oː r i - k l a	- o - k u l u s	n aː s u s
French	t ɛ - t -	o ʁ ej - - - -	- œ - j - - - -	n e - - -
Spanish		o ɾ e - x - a	- o - x - o - -	n a s o -
Italian	t ɛ s t a	o r e k k j a	- ɔ k k - j o -	n aː s o -
PortugueseBrazil	t ɛ s t ɐ	o ɾ e - - ʎ ɐ	- o - - - ʎ u -	
Portuguese	t ɛ ʃ t ɐ	o ɾ ɐj - - ʎ ɐ	- o - - - ʎ u -	
Catalan	t e s t ə	u ɾ ɛ - - ʎ ə		n a s - -
Walloon	ʧ ɛ s - -	ɔ ʁ aj - - - -	- uː - j - - - -	n e - - -
Friulian	t ɛ s t e	o r e - - l e	v o - - l i - -	n aː s - -
Romanian	ʦ e̯a s t ə	u r e - k - e	- o - kʲ - - - -	n a s - -

	Nose-Nares	Mouth	Mouth-Gula	Tooth
Latin		b u k k a	g u l a	d - e n t e m
French		b u - ʃ -	g œ l -	d - ɑ̃ - - - -
Spanish	n a ɾ i θ -	b o - k a	g o l a	d j e n t e -
Italian	n a r i ʧ e	b o k k a	g o l a	d - ɛ n t e -
PortugueseBrazil	n a ɾ i s -	b o - k ɐ		d - ẽ - ʧ i -
Portuguese	n ɐ ɾ i ʃ -	b o - k ɐ		d - ẽ - t ɨ -
Catalan	n aː r ɪ s -	b o - k ə	g o l ə	
Walloon		b ɔ k - -	g øː j -	d - ẽ - - - -
Friulian		b ɔ - c ɛ	g ɔ l e	d - i n t - -
Romanian		b u - k ə	g u ɾ ə	d - i n t e -

	Fingernail	Foot	Leg-Gamba	Leg-Perna
Latin	u n g - u l a	p - e - d e m	g a m b a	p - e r n a
French	õ - g - - l -	p j e - - - -	ʒ ɑ̃ - b -	
Spanish	u ɲ - - - - a	p j e - - - -	g a m b a	p j e ɾ n a
Italian	u n g j - - a	p j ɛː - d e -	g a m b a	p - ɛ r n o
PortugueseBrazil	u ɲ - - - - ɐ	p - ɛ - - - -		p - ɛ ʁ n ɐ
Portuguese	u ɲ - - - - ɐ	p - ɛ - - - -		p - ɛ ɾ n ɐ
Catalan		p - ɛ w - - -	k a m b ə	p - ɛ r n ə
Walloon	õ - g - - - -	p - iː - - - -	ʤ ã - p -	
Friulian	ɔ ŋ g - u l ɛ	p - iː - t - -	ɟ a m b e	
Romanian	u n g j - - e	p i e - z - -	g a m b ə	

	Leg-Petiolus	Knee-Genuculum	Hand	Wing
Latin	p e - t i o l u s	g - e n i - k u l u n	m a n u m	aː l a
French		ʒ - ə n u - - - - -	m ẽ - - -	e l -
Spanish	p e - θ i o l o -	- - i n o - x o - -	m a n o -	a l a
Italian	p i t ʧ - ɔ l o -	ʤ - i n ɔ k k - j o	m aː n o -	a l a
PortugueseBrazil		ʒ u e - - - - - ʎ u	m ẽ - - - w̃	a - -
Portuguese		ʒ w ɐ - - - - - ʎ u	m ẽ - - - w̃	a - -
Catalan		ʒ - ə n o - - - ʎ -		a l ə
Walloon		ʤ - i n ɔ - - - - -	m ẽ - - -	e l -
Friulian	p ɛ - k - o l - -	ʤ - e n o - - - l i	m a ŋ - -	a l e
Romanian	p i - ʧ j o r - -	ʤ - e n u n kʲ - - -	m ɨ n ə -	

Appendix 3 - Concepts Used

	Belly	Belly-Pantex	Guts	Neck
Latin	w - e n t r e m	p a n t i k e m	i n t e r a: n e a	k - o l l u m
French	v - d̃ - t ʁ - -	p d̃ - s - - - -	d̃ - t - ʁ a - j -	k - u - - - -
Spanish	b j e n t ɾ e -	p a n θ - - - a	e n t - ɾ a ɲ - a	k w e - ʝ o -
Italian		p a n ʧ - - a -		k - o l l o -
PortugueseBrazil		p ẽ - s - - ɐ -	ĩ - t - ɾ ɐ̃ ɲ - ɐ	k - ɔ - l u -
Portuguese		p ẽ - s - - ɐ -	ẽ - t - ɾ ɐ ɲ - ɐ	k - ɔ - l u -
Catalan	b - e n t ɾ ə -	p a ɲ ʃ - - ə -	ə n t - ɾ a ɲ - ə	k - ɔ - ʎ - -
Walloon	v - ɛ̃ - t - - -	p ã - s - - - -		
Friulian	v - i n t r i -	p a n ʦ - - e -		k w ɛ - l - -
Romanian	v - i n t r e -	p ɨ n t e ʧ e -		

	Back	Back-Spatula	Breast	Breast-Pectus
Latin	d - o r s u m	- s p a t u l a	s i n u s	p - e k t u s
French	d - o - - - -	e - p o - - l -	s ẽ - - -	p - i - - - -
Spanish		e s p a l - d a	s e n o -	p - e - ʧ o -
Italian	d - ɔ s s o -	- s p a l - l a	s e n o -	p - ɛ t t o -
PortugueseBrazil		i ʃ p a d w - ɐ	s ej - u -	p - ej - t u -
Portuguese		i ʃ p a d w - ɐ	s ɐj - u -	p - ɐj - t u -
Catalan	d - o - s - -	ə s p a ʎ - ʎ ə	s i - - -	p - i - t - -
Walloon	d - ɔ - - - -	- s p a - - l -		
Friulian	d w e - s - -	- s p a - - l ɛ	s e n - -	p - ɛ - t - -
Romanian	d - o - - - -	- s p a t - - e	s a n - -	p j e p t - -

	Heart	Heart-Anima	Liver	Sun
Latin	k - o r -	a n i m a	f - i: k a: t u m	s o: l e m
French	k - œ ʁ -	ɑ - - m -	f w ɑ - - - - -	
Spanish		a l - m a	- - i ɣ a ð o -	s o l - -
Italian	k w ɔ r e	a l - m a	f - e ɡ a t o -	s o l e -
PortugueseBrazil	k - ɔ ʁ -	a w - m ɐ	f - i ɡ ɐ d u -	s ɔ w - -
Portuguese	k - o ɾ -	a l - m ɐ	f - i ɣ ɐ ð u -	s ɔ ɬ - -
Catalan	k - ɔ r -		f - e ʤ ə - - -	s ɔ l - -
Walloon	k - u: ʁ -	ɔ: - - m -	f - ø: - - t - -	s ɔ l ɔ -
Friulian	k - u: r -	a n i m e	f - i j a: t - -	
Romanian		i n i m ə	f - i k a t - -	s o̯a ɾ e -

	Sun-Soliculus	Moon	Star	Water
Latin	s o l i k u l u s	l u: n a	- s t - e: l l a	a - kʷ - a
French	s ɔ l ɛj - - - - -	l y n -	e - t w a - l -	o - - - -
Spanish		l u n a	e s t ɾ e - ʝ a	a - ɣ w a
Italian		l u n a	- s t - e l l a	a k k w a
PortugueseBrazil		l u - ɐ	i s t ɾ e - l ɐ	a - ɡ w ɐ
Portuguese		l u - ɐ	ɨ ʃ t ɾ e - l ɐ	a - ɡ w ɐ
Catalan		ʎ u n ə	ə s t - ɛ - l -	aj - ɣ w ə
Walloon		l ø n -	- s t - ø: - l -	ɛ: - - w -
Friulian	s o r e - - l i -	l u n e	- s t - ɛ - l e	a - ɡ - e
Romanian		l u n ə	- s t - e̯a - - -	a - p - ə

Appendix 3 - Concepts Used

	Rain	River	River-Rivus	River-Riparia
Latin	p l u - w i a	f l uː m e n	r iː w u s	r iː p - aː r i a
French	p l ɥ - - i -		ʁ y - - -	ʁ i v j e ʁ - -
Spanish	ɟ - u - b j a		r i - o -	
Italian	p j o d ʤ - a	f j u m e -	r i - o -	
PortugueseBrazil	ʃ - u - v - ɐ	f l u m i -	ʁ i - w -	
Portuguese	ʃ - u - v - ɐ	f l u m ɨ -	ʁ i - u -	
Catalan	p l u - ʒ - ə		r i - w -	
Walloon	p l uː - ʁ - -			r i v iː - ʁ - -
Friulian	p l o - - j e	f l u m - -		
Romanian	p l o̯a - - j e		r ɨ - w -	

	Lake	Sea	Salt	Stone
Latin	l a k u m	m a r e	s aː l e m	s a k s u m
French	l a k - -	m ɛ ʁ -	s ɛ l - -	
Spanish	l a ɡ o -	m a ɾ -	s a l - -	
Italian	l a ɡ o -	m a r e	s a l e -	s a s s o -
PortugueseBrazil	l a ɡ u -	m a ʁ -	s a w - -	s ej - ʃ u -
Portuguese	l a ɣ u -	m a ɾ -	s a l - -	s ɐj - ʃ u -
Catalan	ʎ a k - -	m a r -	s a l - -	
Walloon	l a k - -	m e ʁ -	s e - - -	
Friulian	l aː t - -	m aː r -	s aː l - -	
Romanian	l a k - -	m a r e	s a r e -	

	Stone-Petra	Stone-Lapidem	Sand	Sand-Sabulum
Latin	p - e t r a	l a p i d e m	h a r eː n ɑ	s a b u l u m
French	p j e - ʁ -			s a b - l - -
Spanish	p j e ð ɾ a	l a u - d e -	- a ɾ e n a	
Italian	p j eː t r a	l a p i d e -		
PortugueseBrazil	p - e d ɾ ɐ		- a ɾ ej - ɐ	s aj β - ɾ u -
Portuguese	p - ɛ ð ɾ ɐ		- ɐ ɾ ɐj - ɐ	s aj β - ɾ u -
Catalan	p - e ð ɾ ə		- ə ɾ e n ə	s o - - r ə -
Walloon	p - iː - ʁ -			s oː v - j õ -
Friulian	p j eː - r e			s a v a l ɔ n
Romanian	p j a t ɾ ə		- a r i n ə	

	Sand-Sabula	Dust	Dust-Pulwus	Earth
Latin	s a - b u l a	p u l w e r e m	p u l w u s	t - e r r a
French		p u d - - ʁ - -		t - e - ʁ -
Spanish			p o l b o -	t j e - r a
Italian	s a b b - j a	p o l v e r e -		t - ɛ r r a
PortugueseBrazil			p ɔ - - - - -	t - e - ʁ ɐ
Portuguese			p ɔ - - - -	t - ɛ - ʁ ɐ
Catalan			p o l - - s	t - ɛ - r ə
Walloon				t - ɛː - ʁ -
Friulian		p ɔ l v a r - -		t j ɛ - r e
Romanian		p u l b e r e -		ʦ - a - r ə

Appendix 3 - Concepts Used

	Cloud	Cloud-Nubilus	Fog	Fog-Nebula
Latin	n uː b eː s	n uː b i l u s	k aː l iː g i n e m	n - e - b u l a
French	n y - - -			n j ɔ - - - l y
Spanish	n u b e -	n u b - l o -	k a l i - - n a -	n j e - b - l a
Italian	n u b e -	n u v o l a -	k a l i ʤ i n e -	n - e b b - j a
PortugueseBrazil	n u v ẽj -		k a l i ʒ ẽj - - -	n - ɛ - v w - ɐ
Portuguese	n u v ɐ̃j -		k ɐ l i ʒ ɐ̃j - - -	n - ɛ - v w - ɐ
Catalan		n u v o l - -		n - e - - w l ə
Walloon				
Friulian		n uː - - l - -		
Romanian		n o - - r - -		n e g u r ə - -

	Fog-Tenebrae	Fog-Tenebras	Fog-Fumata	Fog-Caecia
Latin	t e n eː b r aj	t - e n - eː b r aː s	f uː m aː t a	k aj k i a
French		t - e n - ɛ b ʁ - -	f y m e - -	
Spanish		t - i n j e b l a s	f u m a t a	
Italian	t ɛː n e b r e	t - ɛː n - e b r e -	f u m aː t a	
PortugueseBrazil		t ɾ - - - ɛ v - ɐ s	f u m a s ɐ	
Portuguese		t ɾ - - - ɛ v - ɐ ʃ	f u m a s ɐ	
Catalan		t - ə n - e b ɾ ə s		
Walloon				
Friulian			f u m a t e	
Romanian				ʧ e̯a ʧ - ə

	Sky	Wind	Snow	Ice
Latin	k - aj l u m	w - e n t u m	n - i w e m	g e l uː
French	s j ɛ l - -	v - ɑ̃ - - - -		ʒ ɛ l -
Spanish	θ j e l o -	b j e n t o -	n j e b e -	ʝ e l o
Italian	ʧ - ɛ l o -	v - ɛ n t o -	n - e v e -	ʤ ɛ l o
PortugueseBrazil	s - ɛ w - -	v - ẽ - t u -	n - ɛ v i -	
Portuguese	s - ɛ w - -	v - ẽ - t u -	n - ɛ v ɨ -	
Catalan	s - ɛ l - -	b - e n - - -	n - e w - -	ʒ ɛ ɬ -
Walloon	s - iː ʁ - -	v - ẽ - - - -	n - iː f - -	
Friulian	ʧ - iː l - -	v - i n t - -	n - eː f - -	
Romanian	ʧ - e ɾ - -	v - ɨ n t - -	n - e̯a - - -	ʤ e r -

	Ice-Glacies	Smoke	Fire-Focus	Ash
Latin		f uː m u s	f - o k u m	k i n e - r e m
French	g l a - s -		f - ø - - -	s ɑ̃ - - d ʁ - -
Spanish		- u m o -	f w e g o -	
Italian	g j a t ʧ a	f u m o -	f w ɔ k o -	ʧ e n e - r e -
PortugueseBrazil		f u m u -	f - o g u -	
Portuguese		f u m u -	f - o ɣ u -	
Catalan	g l a - s -	f u m - -	f - ɔ k - -	s ɛ n - d r ə -
Walloon	g l ɛ - s -		f - øː - - -	s ẽː - - d - - -
Friulian	g l a - ʧ e	f u m - -	f - uː k - -	
Romanian	g - e̯a - ʦ ə	f u m - -	f - o k - -	

Appendix 3 - Concepts Used

	Ash-Cinisia	Road	Road-Strata	Road-Camminus
Latin		w i a	- s t r aː t a	k a m m iː n u m
French		v w a		ʃ ə - m ɛ̃ - - -
Spanish	θ e n i θ a	b i a	e s t ɾ a d a	k a - m i n o -
Italian		v i a	- s t r a d a	k a m m i n o -
PortugueseBrazil	s ĩ - - z ɐ	v i ɐ	i s t ɾ a d ɐ	k a - m ĩ ɲ u -
Portuguese	s ĩ - - z ɐ	v i ɐ	i ʃ t ɾ a ð ɐ	k ɐ - m i ɲ u -
Catalan		b i ə		k ə - m i - - -
Walloon				
Friulian	ʧ i n i z ɛ			
Romanian	ʧ e n u ʃ ə			

	Mountain	Mountain-Montanea	Night	Day
Latin	m o n t e m	m o n t aː - n e a	n - o c t e m	d i eː s
French	m ɔ̃ - - - -	m õ - t a - ɲ - -	n ɥ i - - - -	
Spanish	m o n t e -	m o n t a - ɲ - a	n - o - ʧ e -	d i a -
Italian	m o n t e -	m o n t a ɲ ɲ - a	n - ɔ t t e -	d i - -
PortugueseBrazil	m õ - ʧ i -	m õ - t ɐ̃ - ɲ - ɐ	n - oj - t ɨ -	d i ɐ -
Portuguese	m õ - t ɨ -	m õ - t ɐ - ɲ - ɐ	n - oj - t ɨ -	d i ɐ -
Catalan	m u n - - -	m u n t a - ɲ - ə	n - i - t - -	d i ə -
Walloon		m õ - t a - ɲ - -	n - y - t - -	ʤ - uː -
Friulian	m ɔ n t - -	m ɔ n t a - ɲ e -	ɲ - ɔ - t - -	d i - -
Romanian	m u n t ɛ -		n - o̯a p t e -	z i - -

	Day-Diurnus	Day-Diurna	Day-Diurnata	Year
Latin	d i u r n u m		d i u r n aː t a	a n n u m
French	ʒ - u ʁ - - -		ʒ - u ʁ n e - -	ɑ̃ - - - -
Spanish	d j u ɾ n o -		x - o ɾ n a d a	a - ɲ o -
Italian	ʤ - o r n o -		ʤ - o r n a t a	a n n o -
PortugueseBrazil		ʒ ɔ ʁ n a		ɐ - n u -
Portuguese		ʒ ɔ ʁ n a		ɐ - n u -
Catalan	ʒ - o ɾ n - -			a - ɲ - -
Walloon	ʤ - uː - - - -			ɑ̃ - - - -
Friulian			ʣ - o r n a d e	a - ŋ - -
Romanian				a n - - -

	Name-Nomen	Name-Nominem	Tongue	ToDrink
Latin	n oː m e n	n oː m i n - e m	l i n gʷ - a	b - i b e r e
French	n ɔ̃ - - -		l ɑ̃ - g - -	b w ɑ - - ʁ -
Spanish		n o m - b ɾ e -	l e ŋ g w a	b - e b e ɾ -
Italian	n oː m e -		l i n g w a	b - e - - ɾ e
PortugueseBrazil	n o m i -		l ĩ - g w ɐ	b - e b e ʁ -
Portuguese	n o m ɨ -		l ĩ - g w ɐ	b - ɨ β e ɾ -
Catalan	n ɔ m - -			b - ɛ w - ɾ ə
Walloon	n õ - - -		l ẽ - - - - -	b øː - - ʁ - -
Friulian	n ɔ ŋ - -		l ɛ n g - ɛ	b - e v i - -
Romanian	n u m e -		l i m b - ə	b - e̯a - - - -

Appendix 3 - Concepts Used

	ToEat	ToEat-Manducare	ToBite	ToBite-Morsicare
Latin	k o m e d e r e	m a n d u k a: r e	m - o r d e: r e	m o r s i k a: r e
French		m ɑ̃ - ʒ - - e - -	m - o ʁ d - ʁ -	
Spanish	k o m e - - ɾ -	m a n d u k a ɾ -	m - o ɾ ð e ɾ -	m o - s - k a ɾ -
Italian		m a n ʤ - - a ɾ e	m - ɔ r d e r e	m o r s i k a ɾ e
PortugueseBrazil	k o m e - - - -	m ẽ - ʒ - - a ʁ -	m - o ʁ d e ʁ -	m u - s ə g a - -
Portuguese	k u m - - e ɾ -	m ẽ - ʒ - - a ɾ -	m - u ɾ ð e ɾ -	m u - s ə g a r -
Catalan		m ə ɲ ʒ - - a - -		m u - s ə ɣ a - -
Walloon		m a ɲ - - - i: - -		
Friulian		m a ŋ ɟ - - a: - -	m w a r d i - -	
Romanian		m ɨ n - - k a - -		m u r s e k a - -

	ToSuck	ToSpit	ToSpit-Exconspuere	ToSpit-Sputare
Latin	s u: g e r e	k o n s p u e r e		- s p u t e r e
French	s y s e - -	k ɔ̃ - s p y e - -		
Spanish			e s k u - p i ɾ	e s p u t a ɾ -
Italian				- s p u t a ɾ e
PortugueseBrazil	s u g a ʁ -	k u - s p i ʁ - -		
Portuguese	s u g a ɾ -	k u - ʃ p i ɾ - -		
Catalan			ə s k u - p i -	
Walloon	s y s i: - -			
Friulian	c u c a: - -			- s p u d a: - -
Romanian	s u ʤ e - -		- s k u j p a -	

	ToVomit	ToBlow	ToBreathe	ToLaugh
Latin	w o m e r e	s u f f l a: r e	r e s p i: r a: r e	r i: - d e: r e
French	v o m i ʁ -	s u - f l e - -		ʁ i - - - ʁ -
Spanish			r e s p i ɾ a ɾ -	r e - - i ɾ -
Italian	v ɔ m e r e	s o f f j a r e	r e s p i r a ɾ e	r i: - d e ɾ e
PortugueseBrazil			ʁ e s p i ɾ a ɾ -	ʁ i - - - ʁ -
Portuguese			ʁ ɨ ʃ p i ɾ a ɾ -	ʁ i - - - ɾ -
Catalan			r ə s p i ɾ a - -	r i w - - ɾ ə
Walloon	v o: m i - -	s u - f l e - -		ʁ i: - - - ʁ -
Friulian		s o - f l a: - -	r e s p i r a: - -	r i - d i - -
Romanian	v o̯a m e - -	s u - f l a - -		ɾ i - d e - -

	ToSee	ToHear	ToKnow	ToKnow-Sapere
Latin	w - i d e: r e	a - d i: r e u̯	s k i: r e	s a p - e r e
French	v w a - - ʁ -	w - - i ʁ -		s a v w a ʁ -
Spanish	b - - - e ɾ -	o - - i ɾ -		s a b - e ɾ -
Italian	v - e d e ɾ e	u - d i ɾ e		s a p - e r e
PortugueseBrazil	v - - - e ʁ -	o w v i ʁ -		s a b - e ʁ -
Portuguese	v - - - e ɾ -	o w v i ɾ -		s ɐ b - e ɾ -
Catalan	b - ɛ w - ɾ ə	u - - i - -		s ə β - ɛ - -
Walloon	v - i: - - ʁ -	õ - - ʁ - -		s a v - ø: ʁ -
Friulian	v j o d i - -	u l d i: - -		s a v - e: - -
Romanian	v - e d e̯a - -	a - z i - - u̯	ʃ t i - -	

Appendix 3 - Concepts Used

	ToKnow-Cognoscere	ToThink	ToThink-Pensare	ToSmell-Sentire
Latin	k o g n oː s k e r e	k - oː g i t aː r e	p eː n s aː r e	s e n t iː r e
French	k ɔ - n ɛ - t - ʁ -	k ɥ - - i d e - -	p ɑ̃ - s e - -	s ɑ̃ - t i ʁ -
Spanish	k o - n o θ - e ɾ -	k w - - i d a ɾ -	p e n s a ɾ -	s e n t i ɾ -
Italian	k o - n o ʃ ʃ e r e	k - o ʤ i t a r e	p e n s a ɾ e	s e n t i r e
PortugueseBrazil	k o - ɲ e s - e ʁ -	k - u ʒ i t a ʁ -	p ẽ - s a ʁ -	s ẽ - ʧ i ʁ -
Portuguese	k u - ɲ i s - e ɾ -	k - u ʒ i t a ɾ -	p ẽ - s a ɾ -	s ẽ - t i ɾ -
Catalan	k u - n ɛ ʃ - ə - -	k - u - j d a - -	p ə n s a - -	s ə n t i - -
Walloon	k i - n ɔ h - - - -		p ɛ̃ - s e - -	s ɛ̃ - t i - -
Friulian	k o - ɲ o s - i - -		p e ŋ s aː - -	s i n t iː - -
Romanian	k u - n o̯a ʃ t e - -	k - u ʤ e t a - -	p ə - s a - -	s i m ʦ i - -

	ToSmell-Olere	ToSmell-Odorare	ToSmell-Fragrare	ToFear
Latin	o l eː r e	o d oː r aː r e	f r aː g r aː r e	t i m eː r e
French			f l ɛ - ʁ e - -	
Spanish	o l e ɾ -			t e m e ɾ -
Italian	o l i r e	o d o r a r e	f r a g r a r e	t e m e r e
PortugueseBrazil			ʃ - ɐj - ɾ a ʁ -	t e m e ʁ -
Portuguese			ʃ - ɐj - ɾ a ɾ -	t i m e ɾ -
Catalan	u l u ɾ a		f l ə j ɾ a - -	t e m ə - -
Walloon				
Friulian				t e m i - -
Romanian				t e m e - -

	ToFear-Tremere	ToSleep	ToLive	ToDie
Latin	t r e m - e r e	d - o r m iː r e	w iː w e r e	
French	k ʁ ɛ̃ - d - ʁ -	d - ɔ ʁ m i ʁ -	v i v - ʁ -	m u ʁ i ʁ -
Spanish	t ɾ e m - e ɾ -	d - o ɾ m i ɾ -	b i b i ɾ -	m o ɾ i ɾ -
Italian	t r e m - a r e	d - o r m i r e	v i v e r e	m o r i r e
PortugueseBrazil	t ɾ e m - e ʁ -	d - o ʁ m i ʁ -	v i v e ʁ -	m o ʁ e ʁ -
Portuguese	t ɾ i m - e ɾ -	d - u ɾ m i ɾ -	v i v e ɾ -	m u ʁ e ɾ -
Catalan		d - u r m i - -	b i w - ɾ ə	m u ɾ i - -
Walloon		d w a ʁ m i - -		m ɔ ʁ i - -
Friulian	t r i m - aː - -	d - u r m iː - -	v i v i - -	m u r iː - -
Romanian		d - o r m i - -	v i - a - -	m u r i - -

	ToKill	ToKill-Adnecare	ToKill-Tutari	ToKill-Mactare
Latin	n - e k aː r e		t uː - t aː r i	m a k t aː r e
French	n w aj - e - -		t - ɥ - e - -	m a - t e - -
Spanish		a - n e g a ɾ -		m a - t a ɾ -
Italian		a n n e g a r e		
PortugueseBrazil				m a - t a ʁ -
Portuguese				m ɐ - t a ɾ -
Catalan	n - ə g a - -			m ə - t a - -
Walloon			t u w - e - -	
Friulian				m a - ʧ aː - -
Romanian	n - e k a - -			

Appendix 3 - Concepts Used

	ToKill-Occidere	ToFight	ToFight-Battuere	ToHunt-Captiare
Latin	o k k iː d e r e	p u g n aː r e	b a t t u e r e	k a p t i aː r e
French	ɔ k s i - - ʁ -		b a - t - - ʁ -	ʃ a - s - e - -
Spanish		p u - ɲ a ɾ -	b a - t - i ɾ -	k a - θ - a ɾ -
Italian	u t ʧ i d e ɾ e	p u ɲ ɲ a r e	b a t t - e r e	k a t ʧ - a r e
PortugueseBrazil			b a - t - e ʁ -	k a - s - a ʁ -
Portuguese			b ɐ - t - e ɾ -	k ɐ - s - a ɾ -
Catalan	u k s i - - - -	p u - ɲ a - -	b a - t - - ɾ ə	k ə - s - a - -
Walloon			b a - t - e - -	ʧ ɛ - s - iː - -
Friulian			b a - t - i - -	c a - ʧ - aː - -
Romanian	u - ʧ i d e - -		b a - t - e - -	

	ToHit	ToCut	ToCut-Curtare	ToCut-Excurtare
Latin	p u l s aː r e	s - e k aː r e	k u r t aː r e	e k s k u r t aː r e
French	p u - s e - -	s j e - - - -		e - - k u ʁ t e - -
Spanish	p u - x a ɾ -	s - e ɡ a ɾ -	k o ɾ t a ɾ -	
Italian	p u l s a r e	s - e ɡ a r e		- - s k o r t a r e
PortugueseBrazil	p u - ʃ a ʁ -	s - e ɡ a ʁ -	k o ʁ t a ʁ -	
Portuguese	p u - ʃ a ɾ -	s - i ɣ a ɾ -	k u ɾ t a ɾ -	
Catalan		s - ə ɣ a - -		
Walloon				
Friulian	p u l s aː - -	s - e - aː - -		- - s k u r t aː - -
Romanian	p u l s a - -			- - s k u r t a - -

	ToCut-Taliare	ToSplit	ToSplit-Scindere	ToSplit-Findere
Latin	t aː - l i aː r e	d iː w i d e r e	s k i n d e r e	f i n d e r e
French	t ɑ j - - e - -		s - ɛ̃ - d e - -	f ɑ̃ - d - ʁ -
Spanish	t a - x - a ɾ -	d i b i d i ɾ -		- e n d e ɾ -
Italian	t a - ʎ ʎ aː r e	d i v i d e r e	ʃ - i n d e r e	f ɛ n d e r e
PortugueseBrazil	t a - ʎ - a ʁ -	ʤ i v i ʤ i ʁ -		f ẽ - d e ʁ -
Portuguese	t ɐ - ʎ - a ɾ -	d i v i ð i ɾ -		f ẽ - d e ɾ -
Catalan	t ə - ʎ - a - -	d i b i d i - -		f ɛ n d - ɾ ə
Walloon	t ɛ - - j iː - -			f ɛ̃ - t - - -
Friulian	t a - - j aː - -	d i v i d i - -		
Romanian	t ə - - j a - -	d i v i d e - -		

	ToSplit-Partire	ToSplit-Separare	ToStab	ToStab-Iugulare
Latin	p a r t iː r e	s eː p a r aː r e	p - u n ɡ e r e	j u ɡ u l aː r e
French	p a ʁ t i ʁ -	s ə v - - - ʁ e	p w ɛ̃ - d - ʁ -	ʒ y ɡ y l e - -
Spanish	p a ɾ t i ɾ -	s e p a ɾ a ɾ -		
Italian	p a r t i r e	s e p a r a r e	p - u n ʤ e r e	j u ɡ u l aː r e
PortugueseBrazil	p a ʁ ʧ i ʁ -	s e p a ɾ a ʁ -	p - ũ - ʒ i ʁ -	
Portuguese	p ɐ ɾ t i ɾ -	s i p ɐ ɾ a ɾ -	p - ũ - ʒ i ɾ -	
Catalan	p ə r t i - -	s ə p ə ɾ a - -	p - u ɲ - i - -	
Walloon	p ɔː ʁ t i - -			
Friulian	p a r t iː - -	s e p a r aː - -		
Romanian		s e p a r a - -	p - u n ʤ e - -	

Appendix 3 - Concepts Used

	ToScratch	ToScratch-Rasare	ToScratch-Rasicare	ToScratch-Coctiare
Latin	r a: d e r e			
French		ʁ ɑ z e - -		
Spanish	r a - e ɾ -	r a s a ɾ -	r a s k a ɾ	
Italian	r a d e r e	r a s a r e		
PortugueseBrazil	ʁ a - e ʁ -	ʁ a z a ʁ -	ʁ a ʃ k a ʁ	k o s a ɻ
Portuguese	ʁ ɐ - e ɾ -	ʁ ɐ z a ɾ -	ʁ ɐ ʃ k a ɾ	k u s a ɾ
Catalan	r a w - ɾ ə	r ə z a - -	r ə s k a -	
Walloon				
Friulian	r a d a: - -	r a s a: - -		
Romanian	r a d e - -			

	ToDig	ToDig-Cavare	ToDig-Excavare	ToSwim
Latin	f - o d e r e	k a w a: r e	e k s k a w a: r e	n - a t a: r e
French	f w i - - ʁ -	ʃ ə v e - -		
Spanish		k a b a ɾ -	e s k a b a ɾ - -	n - a d a ɾ -
Italian		k a v a r e	- s k a v a r e -	n w o t a ɾ e
PortugueseBrazil		k ɐ v a ʁ -	i - ʃ k ɐ v a ʁ -	n - a d a ʁ -
Portuguese		k ɐ v a ɾ -	i - ʃ k ɐ v a ɾ -	n - ɐ ð a ɾ -
Catalan		k ə b a - -		n - ə d a - -
Walloon				
Friulian		ɟ a v a: - -	- - z ɟ a v a: - -	n - a d a: - -
Romanian				

	ToSwim-Navigare	ToFly	ToFly-Exvolare	ToWalk
Latin	n a v i g a: r e	w o l a: r e		
French	n a - - ʒ e - -	v o l e - -		ʃ ə - m i n e - -
Spanish	n a b e g a ɾ -	b o l a ɾ -		k a - m i n a ɾ -
Italian	n a v i g a r e	v o l a ɾ e	z v o l a ɾ e	k a m m i n a ɾ e
PortugueseBrazil	n a v ɨ ɣ a ʁ -	v o - a ʁ -		k ɐ - m i ɲ a ʁ -
Portuguese	n ɐ v ɨ ɣ a ɾ -	v w - a ɾ -		k ɐ - m i ɲ a ɾ -
Catalan	n ə b ə g a - -	b u l a - -		k ə - m i n a - -
Walloon	n ɛ - - ʤ i: - -	v ɔ l e - -		ʧ i - m i n e - -
Friulian	n a v i g a: - -		z v o l a: - -	c a - m i n a: - -
Romanian	n a v i g a - -		z b u ɾ a - -	

	ToWalk-Marcher	ToWalk-Mergere	ToWalk-Ambitare	ToCome
Latin		m e r g e r e	a m b i t a: r e	w e n i: r e
French	m a ʁ ʃ e			v ə n i ʁ -
Spanish			a n d - - a ɾ -	b e n i ɾ -
Italian		m ɛ r ʤ e r e	a n d - - a r e	v e n i ɾ e
PortugueseBrazil			ẽ - d - - a ʁ -	v - - i ʁ -
Portuguese			ẽ - d - - a ɾ -	v - - i ɾ -
Catalan				b ə n i - -
Walloon	m a: ʁ ʧ i:			v i n i - -
Friulian				v i ɲ i: - -
Romanian		m e r ʤ e - -		v e n i - -

Appendix 3 - Concepts Used

	ToLieAsInABed	ToLieAsInABed-Iacere	ToSit	ToSit-Sedentare
Latin	e k s t e n d e r e	j a - k eː r e	s - e d eː r e	s e d e n t aː r e
French	e - - t ɑ̃ - d - ʁ -	ʒ e - z i ʁ -	s w a - - ʁ -	
Spanish	e k s t e n d e ɾ -	ɟ a - θ e ɾ -	s - e - - ɾ -	s e - - n t a ɾ -
Italian	e - s t ɛ n d e r e	ʤ a - ʧ eː ɾ e	s - e d e r e	
PortugueseBrazil	i - s t ẽ - d e ʁ -	ʒ ɐ - z e ʁ -	s - e - - ʁ -	s ẽ - - - t a ɾ -
Portuguese	i - ʃ t ẽ - d e ɾ -	ʒ ɐ - z e ɾ -	s - e - - ɾ -	s ẽ - - - t a ɾ -
Catalan	ə - s t e n d - ɾ ə	ʒ a w - - ɾ ə		
Walloon		ʤ e - - - r e		
Friulian		j e - s i - -		s e - - n t aː - -
Romanian	e k s t i n d e - -	z ə - ʧ e̯a - -	ʃ - e d e̯a - -	

	ToStand	ToStand-Levare	ToStand-Altiare	ToTurnIntransitive
Latin	- s t aː r e	l e v aː r e		t o r n aː r e
French	ɛ - t - ʁ -	l ə v e - -	- o - s e - -	t u ʁ n e - -
Spanish	e s t a ɾ -	ɟ e b a ɾ -	- a l θ a ɾ -	t o ɾ n a ɾ -
Italian	- s t a r e	l e v a r e	- a l ʦ a r e	t o r n a r e
PortugueseBrazil	ɨ ʃ t a ɾ -	l e v a ʁ -	- a ɬ s a - -	t o ʁ n a ʁ -
Portuguese	ɨ ʃ t a ɾ -	l ɨ v a ɾ -	- a ɬ s a ɾ -	t u ɾ n a ɾ -
Catalan	ə s t a - -	ʎ ə b a - -	- ə l s a - -	t u r n a - -
Walloon	ɛ s - - - -	l ə v e - -	h ɔː - s iː - -	t uː r n e - -
Friulian	- s t aː - -	l e v aː - -	- a l ʧ aː - -	t o r n aː - -
Romanian	- s t a - -	l - u a - -		t u r n a - -

	ToTurnIntransitive-Gyrare	ToTurnIntransitive-AncestralClass3	ToTurnIntransitive-Torquere	ToFall
Latin	g y r aː r e		t o r kʷ eː r e	k - a d e r e
French	ʒ i ʁ e - -	v i ʁ e - -	t ɔ ʁ d - ʁ -	ʃ w a - - ʁ -
Spanish	x i ɾ a ɾ -	b i ɾ a ɾ -	t o ɾ θ e ɾ -	k - a - e ɾ -
Italian	ʤ i r a ɾ e	v i r a ɾ e	t ɔ r ʧ e r e	k - a d e ɾ e
PortugueseBrazil	ʒ i ɾ a ɾ -	v i ɾ a ɾ -	t u r s e r -	k - ɐ - i ɾ -
Portuguese	ʒ i ɾ a ɾ -	ʒ i ɾ a ɾ -	t u r s e r -	k - ɐ - i ɾ -
Catalan	ʒ i ɾ a - -	b i ɾ a - -	t ɔ r s ə - -	k - a w - r ə
Walloon		v i ʁ e - -		ʧ - ɛː - - ʁ -
Friulian	ʤ i r aː - -	ʤ i r aː - -		ʧ j a d e - -
Romanian			t o̯a r ʧ e - -	k ə d e̯a - - -

	ToFall-Tumbare	ToGive	ToGive-Donare	ToHold
Latin		d a r e	d o n aː r e	t e n - eː r e
French	t õ - b e -		d ɔ n e - -	t ə n - i ʁ -
Spanish	t u m b a ɾ	d a ɾ -	d o n a ɾ -	t e n - e ɾ -
Italian		d a r e	d o n a r e	t e n - e ɾ e
PortugueseBrazil	t õ - b a ʁ	d a ʁ -	d o - a - -	t e - - - ʁ -
Portuguese	t õ - b a ɾ	d a ɾ -	d u - a ɾ -	t e - - - ɾ -
Catalan	t u m b a -	d a r -	d u n a - -	t ə n - i - -
Walloon	t u m - e -		d i n e - -	t i n - i - -
Friulian		d aː - -	d o n aː - -	t i n j i - -
Romanian		d a - -		ʦ i n - e - -

Appendix 3 - Concepts Used

	ToHold-Segurar	ToSqueeze	ToSqueeze-Serrere	ToSqueeze-Serare
Latin		e k s p r i m - e r e	s e r r e r e	s e - r a r e
French		e - - p ʁ ɛ̃ - d - ʁ	-	s e - ʁ e - -
Spanish	s e g u ɾ a ɾ	e k s p ɾ e m - i ɾ	s e - r a ɾ -	θ e - r a ɾ -
Italian		- - s p r ɛ m - e r e		s e r r a r e
PortugueseBrazil	s i g u ɾ a ʁ	i - ʃ p r ə m - e ʁ	s e - ʁ a - -	s i - ʁ a ɾ -
Portuguese	s i ɣ u ɾ a ɾ	i - ʃ p r ə m - e r	s ə - ʁ a ɾ -	s i - ʁ a ɾ -
Catalan		ə - s p ɾ e m - ə -	s ə - r a - -	
Walloon				s ɛ - ʁ e - -
Friulian		e - s p r i m - i - -		
Romanian		- s k - r e m e - - -		

	ToSqueeze-Appectorare	ToSqueeze-Stringere	ToRub	ToRub-Exfricare
Latin	a p p e k t o r a: r e	- s t r i n g e r e	f r i k a: r e	
French		e - t ʁ ɛ̃ - d - ʁ -	f ʁ ɛj e - - -	
Spanish	a - p - - ɾ e t a ɾ	e s t ɾ e ɲ - i ɾ -	f ɾ e g a ɾ -	
Italian		- s t r i n ʤ e r e	f r e g a r e	
PortugueseBrazil	ɐ - p i - ɾ - t a ɾ	ə ʃ t r ĩ - ʒ i r -		i ʃ f ɾ i g a ɾ
Portuguese	ɐ - p i - ɾ - t a ɾ	ə ʃ t r ĩ - ʒ i r -		i ʃ f ɾ i ɣ a ɾ
Catalan		ə s t ɾ ɛ ɲ - ə - -	f ɾ ə g a - -	
Walloon		- s t r i n g e - -	f r oj - - - -	
Friulian		- s t r ɛ n g i: - -	f r e - a - -	
Romanian		- s t r i n ʤ e - -	f r e k a - -	

	ToRub-Frictare	ToRub-Frictiare	ToWash	ToWipe
Latin	f r i k t a: r e		l a w a: r e	t e r g e r e
French	f ʁ o - t e - -		l a v e - -	
Spanish	f ɾ o - t a ɾ -	f r i s a ɾ	l a β a ɾ -	
Italian	f r e t t a r e		l a v a r e	t ɛ r ʤ e r e
PortugueseBrazil			l ɐ v a ɾ -	
Portuguese			l ɐ v a ɾ -	
Catalan		f ɾ ə s a -	ʎ ə b a - -	
Walloon	f ʁ o - t e - -		l a v e - -	
Friulian			l a v a: - -	
Romanian			l a - - - -	

	ToWipe-Extergere	ToWipe-Exsucare	ToWipe-Limpidare	ToPull
Latin	e k s t e r g e r e	e k s - u: k - a: r e	l i m p i d a: r e	t i r a: r e
French		e - s ɥ i - j e - -		t i ʁ e - -
Spanish	e - s t a ɾ s i ɾ -		l i m p j - a ɾ -	t i ɾ a ɾ -
Italian		a ʃ ʃ - u g - a r e		t i r a r e
PortugueseBrazil		ẽ - ʃ - u g - a ɾ -	l ĩ - p - - a ɾ -	ʧ i ɾ a - -
Portuguese		ẽ - ʃ - u ɣ - a ɾ -	l ĩ - p - - a ɾ -	t i ɾ a ɾ -
Catalan	ə - s t ə r ʒ i - -	ə - ʃ - u g - a - -		t i ɾ a - -
Walloon		- - s - u - w e - -		t i r e - -
Friulian		- - s - u - j a: - -		t i r a: - -
Romanian	- - ʃ t e r ʤ e - -	u - s - - k - a - -		

Appendix 3 - Concepts Used

	ToPull-Pulsare	ToPull-Trahere	ToPush	ToThrow
Latin	p u l s aː r e	t r a h e r e	i m p i n ɡ e r e	j a k t aː r e
French	p u - s e - -	t ʁ - - ɛ ʁ -		ʒ ə - t e - -
Spanish	p u - x a ɾ -			- e - ʧ a ɾ -
Italian	p u l s a r e	t r a r - r e	i m p i n ʤ e r e	ʤ e t t a r e
PortugueseBrazil	p u - ʃ a ɾ -	t ɾ a z e - -		ʒ ej - t a ɾ -
Portuguese	p u - ʃ a ɾ -	t ɾ ɐ z e ɾ -		ʒ ej - t a ɾ -
Catalan		t ɾ ɛ w - ɾ ə	ə m p ɛ ɲ - ə - -	x i - t a - -
Walloon	p uː s iː - - -			ʤ ɛ - t e - -
Friulian	p u l s aː - -	t r aj - - - -		
Romanian	p u l s a - -	t r a ʤ e - -	i̯ m p i n ʤ e - -	

	ToThrow-Lanceare	ToThrow-Eruncare	ToTie	ToTie-Aptare
Latin	l a n k e aː r e	eː - r u n k aː r e	l i ɡ aː r e	a p t aː r e
French	l ɑ̃ - s - e - -		l i - e - -	
Spanish	l a n θ - a ɾ -	a - r a n k a ɾ -	l e ɡ a ɾ -	a - t a ɾ -
Italian	l a n ʧ - a r e	a r r o n ʧ a r e	l e ɡ a r e	
PortugueseBrazil	l ɐ̃ - s - a - -			ɐ - t a ɾ -
Portuguese	l ɐ̃ - s - a ɾ -			ɐ - t a ɾ -
Catalan	ʎ ə n s - a - -		ʎ i ɣ a - -	
Walloon	l a n c - iː - -		l ɔj iː - - -	
Friulian	l a n ʧ - aː - -		l e - aː - -	
Romanian		a - ɾ u ŋ k a - -	l e ɡ a - -	

	ToSew	ToCount	ToCount-Numerare	ToSay
Latin	k oː n - s u e r e	k o m p u t aː r e	n u m - e r aː r e	d iː k e r e
French	k u - d - - - ʁ -	k õ - - - t e - -	n ɔ̃ - b - ʁ e - -	d i - - ʁ -
Spanish	k o - - s - e ɾ -	k o n - - t a ɾ -		d e θ i ɾ -
Italian	k u - - ʧ - i r e	k o n - - t a r e	n o v - e r a r e	d i - - r e
PortugueseBrazil	k u - - z - e ɾ -	k õ - - - t a ɾ -		d i z e ɾ -
Portuguese	k u - - z - e ɾ -	k õ - - - t a ɾ -		d i z e ɾ -
Catalan	k u - - z - i - -	k u m - - t a - -	n u m - e ɾ a - -	d i - - - -
Walloon	k øː - - z - - - -	k õ - - - t e - -		d iː - - ʁ -
Friulian	k u - - z - i - -	k o n - - t aː - -	n u m - e r aː - -	d iː - - - -
Romanian	c o̯a - - s - e - -		n u m - a r a - -	z i ʧ e - -

	ToSay-Exponere	ToSing-AncestralClass	ToPlay-Ludere	ToPlay-Jiocare
Latin	e k s p oː n e r e	k a n t aː r e	l uː d e r e	j o - k aː r e
French		ʃ ɑ̃ - t e - -		ʒ - w - e - -
Spanish		k a n t a ɾ -	l u d i ɾ -	x u - ɡ a ɾ -
Italian	- - s p o r - r e	k a n t a r e		ʤ o - k a r e
PortugueseBrazil		k ɐ̃ - t a ɾ -		ʒ o - ɡ a ʁ -
Portuguese		k ɐ̃ - t a ɾ -		ʒ u - ɣ a ɾ -
Catalan		k ə n t a - -		ʒ u - ɡ a - -
Walloon		ʧ ɑ̃ - t e - -		ʤ u w - e - -
Friulian		c a n t aː - -		ʤ u j - aː - -
Romanian	- - s p u n e - -	k i̯ n t a - -		ʒ u - k a - -

Appendix 3 - Concepts Used

	ToFloat	ToFloat-Fluitare	ToFlow	ToFlow-Colare
Latin	f l uː k t u aː r e	f l u i t aː r e	f l u e r e	k oː l aː r e
French	f l y k t ɥ e - -		f l y e - -	k u l e - -
Spanish	f l u g t w a ɾ -		f l u i ɾ -	k o l a ɾ -
Italian	f l u t t u a r e	f l u i t a r e	f l u i r e	k o l a r e
PortugueseBrazil	f l u - t u a ʁ -		f l w i ʁ -	k o - a ʁ -
Portuguese	f l u - t u a ɾ -		f l w i ɾ -	k u - a ɾ -
Catalan	f l u k t u a - -		f l u i - -	k u ɫ a - -
Walloon				k ɔ l e - -
Friulian				
Romanian	f l u c t u a - -			

	ToFlow-Excurrere	ToFlow-Currere	ToFreeze	ToFreeze-Glaciare
Latin	e k s k u r r e r e	k u r r e r e	ɡ e l aː r e	ɡ l a - k i aː r e
French		k u - ʁ i ʁ -	ʒ ə l e - -	ɡ l a - s - e - -
Spanish	e - s k u - r i ɾ -	k o - r e ɾ -	- e l a ɾ -	
Italian	- - s k o r r e r e	k o r r e r e	ʤ e l a r e	ɡ j a t ʧ j a r e
PortugueseBrazil	i - ʃ k o - ʁ e ʁ -	k o - ʁ e ʁ -	ʒ i l a ɾ -	
Portuguese	i - ʃ k u - ʁ e ɾ -	k u - ʁ e ɾ -	ʒ i l a ɾ -	
Catalan	ə - s k o - r ə - -	k o - r ə - -	ʒ ə l a - -	ɡ l ə - s - a - -
Walloon		k ɔ - ʁ i - -	ʤ a l e - -	
Friulian	- - s k o - r iː - -	k o - r i - -		ɡ l a - ʧ - aː - -
Romanian	- - s k u ɾ ʤ e - -	k u ɾ ʤ e - -		

	ToFreeze-Inglaciare	ToSwell	ToSwell-Conflare	ToSwell-Intumescere
Latin	i n ɡ l a k i aː r e	i n f l aː r e	- k - o n f l aː r e	i n t u m eː s k e r e
French		ɑ̃ - f l e - -	- ɡ - õ - f l e - -	
Spanish		i n ʧ - a ɾ -		e n t u m e θ - e ɾ -
Italian		e n f i a r e	- ɡ - o n f j a r e	
PortugueseBrazil		ĩ - ʃ - a ɾ -		ĩ - t u m e s - e ɾ -
Portuguese		ĩ - ʃ - a ɾ -		ĩ - t u m e s - e ɾ -
Catalan		i m f l a - -		
Walloon		ẽ - f l e - -	- ɡ - õ - f l e - -	
Friulian		e n f l aː - -	z ɡ l o ŋ f - aː - -	
Romanian	ɨ n ɡ - e ʦ - a - -	u m f l a - -		

	ToSwell-Crescere	ToBurn-Cremare	ToBurn-Flammare	ToBurn-Ardere
Latin	k r - eː s k eː r e	k r e m aː r e	f l a m m aː r e	a r d eː r e
French	k ʁ w a - t - ʁ -	k ʁ a m e - -	f l a - m e - -	a ʁ d - ʁ -
Spanish	k ɾ - e θ - e ɾ -	k - e m a ɾ -		a ɾ d e ɾ -
Italian	k r - e ʃ ʃ e r e	k r e m a r e	f j a m m a r e	a r d e r e
PortugueseBrazil	k ɾ - e s - e ʁ -	k - ɐj m a ɾ e		a ʁ d e ʁ -
Portuguese	k ɾ - ɨ ʃ s e ɾ -	k - ej m a ʁ e		ɐ ɾ d e ɾ -
Catalan	k ɾ - e - ʃ ə - -	k r ə m a - -	f ɫ a - m a - -	
Walloon				
Friulian			f l a - m aː - -	
Romanian	k ɾ - e ʃ t e - -			a ɾ d e - -

Appendix 3 - Concepts Used

	ToBurn-Flagrare	ToBurn-Incendere	ToBurn-Ustulare	All
Latin	f l a g r aː r e	i n k e n d - e r e	u s t u l aː r e	o m n i s
French	f l a g ʁ e - -	ɛ̃ - s ɑ̃ - d j e - -		
Spanish	f l a g ɾ a ɾ -	e n θ e n d - e ɾ -		
Italian	f l a g r a r e	i n ʧ ɛ n d j a r e	u s t o l a r e	o ɲ ɲ i -
PortugueseBrazil	f l a g ʁ a ʁ -	ĩ - s e n ʤ ɪ a ɾ -		
Portuguese	f l a g ɾ a ɾ -	ĩ - s ẽ - d j a ɾ -		
Catalan		ə n s e n d - - ɾ ə		
Walloon				
Friulian				
Romanian		ɨ n ʧ i n d ʒ e - -	u s t u r a - -	

	All-Totus	Many	Many-Tantus	Some
Latin	t oː - t u s	m u l t u s	t a n t u s	
French	t u - - - -	m u - - - -		o - k œ̃ - -
Spanish	t o - d o -	m u - ʧ o -	t a n t o -	a l g u n o
Italian	t u t t o -	m o l t o -	t a n t o -	a l k u n o
PortugueseBrazil	t o - d u -	m ũ ĵ - t u	t ẽ - t u -	a w g ŭ - -
Portuguese	t o - ð u -	m ũ ĵ - t u	t ẽ - t u -	a ɫ g ŭ - -
Catalan	t o - t - -	m o l - - -	t a n t - -	ə l g u - -
Walloon	t ɔ - - - -			
Friulian	d u - t - -	m o l c - -	t a n c - -	
Romanian	t o - t - -	m u l t - -		

	Few	Other	Other-Alius	Big
Latin	p a k u s u̯	a l t e r -	a l i u s	m a g n u s
French	p ø - - -	o - t - ʁ -		
Spanish	p o k o -	o - t - ɾ o		m a - ɲ o -
Italian	p ɔ k o -	a l t - r o		m a ɲ ɲ o -
PortugueseBrazil	p o w k u	o w t - ɾ u	a w - - -	
Portuguese	p o w k u	o w t - ɾ u	a ɫ - - -	
Catalan	p ɔ k - -	a l t - ɾ ə		
Walloon	p õ - - -	õ - t - - -		
Friulian	p oː k - -	a l t - r i		
Romanian		a l t - - -		

	Big-Grandem	Big-Majjorem	Long-Longum	Long-Largum
Latin	g r a n d e m	m aj j oː r e m	l o - n g u s	l a r g u s
French	g ʁ ɑ̃ - - - - -		l ɔ̃ - - - - -	l a ʁ ʒ - -
Spanish	g ɾ a n d e -		l o - n g o -	l a ɾ ɣ o -
Italian	g r a n d e -		l u - n g o -	l a r g o -
PortugueseBrazil	g ɾ ẽ - ʤ i -		l õ - g u - -	l a ʁ g u -
Portuguese	g ɾ ẽ - d ɨ -		l õ - g u - -	l a ɾ g u -
Catalan	g r a n - - -		ʎ o - ŋ - - -	ʎ a ɾ k - -
Walloon	g ʁ ɑ̃ - - - -		l õ - - - - -	
Friulian	g r a n t - -		l u n k - - -	l a r k - -
Romanian		m a - - - ɾ e	l u n g - - -	l a r g - -

Appendix 3 - Concepts Used

	Wide	Wide-Amplum	Thick	Thick-Spissum
Latin	l aː t u s	a m p l u s	k r a s s u s	- s p i s s u s
French	l e - - -	ɑ̃ - p l - -	ɡ ʁ ɑ - - - -	e - p e - - - -
Spanish	l a t o -	a n ʧ - o -	ɡ ɾ a - s o -	e s p e s o - -
Italian	l a t o -	a m p j o -	ɡ r a s s o -	- s p e s s o -
PortugueseBrazil	l a t u -	ɐ̃ - ʃ - u -		i s p ɛ - s u -
Portuguese	l a t u -	ɐ̃ - ʃ - u -	ɡ ɾ a - ʃ u -	i ʃ p e - s u -
Catalan		a m p l ə -	ɡ ɾ a - s - -	ə s p ɛ - s - -
Walloon				- s p ɛ - - - -
Friulian			ɡ r a s - - -	
Romanian	l a t - -		ɡ r a s - - -	

	Thick-Gurdum	Thick-Grossus	Heavy	Heavy-Lurdus
Latin	ɡ u r d u s	ɡ r o - s s u s	ɡ r a - - w i s	l u r d u s
French		ɡ ʁ o - - - - -	ɡ ʁ i j ɛ f - -	l u ʁ - - -
Spanish	ɡ o ɾ d o -		ɡ ɾ a - - b e -	l e ɾ d o -
Italian		ɡ r ɔ - s s o -	ɡ r ɛ - - v e -	l o r d o -
PortugueseBrazil		ɡ ɾ o - - s u -	ɡ ɾ a - - v i -	l e ɾ d o -
Portuguese		ɡ ɾ o - - s u -	ɡ ɾ a - - v ɨ -	l e ɾ d o -
Catalan		ɡ ɾ ɔ - - s - -	ɡ ɾ e - - w - -	
Walloon			ɡ r a - - v - -	
Friulian		ɡ r w ɛ s - - -	ɡ r ɛ - - v i -	
Romanian		ɡ r o - s - - -	ɡ ɾ e - - w - -	

	Small	Small-Pittinus	Small-Pitulus	Short
Latin	p i t t i t u s	p i t t i n u s	p i - t u l u s	k u r t u s
French	p ə - t i - - -			k u ʁ - - -
Spanish		p e - k e ɲ o -		k o ɾ t o -
Italian		p i t ʧ i n o -	p i k k o l o -	k o r t o -
PortugueseBrazil		p e - k e n u -		k u ʁ t u -
Portuguese		p ɨ - k e n u -		k u ɾ t u -
Catalan	p ə - t i t - -			k u ɾ t - -
Walloon	p i - t i - - -			k uː ʁ - - -
Friulian			p i - ʧ u l - -	k u r t - -
Romanian		p u - ʦ i n - -		

	Short-Brevis	Narrow	Narrow-Strictus	Thin
Latin	b r e w i s	a n ɡ u s t u s	- s t r - i - k t u s	m i n uː - t u s
French	b ʁ ɛ f - -		e - t ʁ w a - - - -	m ə n y - - - -
Spanish	b ɾ e b e -	a n ɡ o s t o -	e s t ɾ - e - - ʧ o	m e n u - d o -
Italian	b r ɛ v e -	a n ɡ u s t o -	- s t r - e - t t o	m i n u - t o -
PortugueseBrazil	b ɾ ɛ v i -		i s t ɾ - ej - - t u	m i - u - d u -
Portuguese	b ɾ ɛ v ɨ -		ɨ ʃ t ɾ - ɐj - - t u	m i - u - ð u -
Catalan	b ɾ e w - -		ə s t ɾ - ɛ - - t -	m ə n u - t - -
Walloon	b ʁ e f - -		- s t ʁ - øː - - - -	m i n u - - - -
Friulian			- s t r - ɛ - - t -	m i n uː - t - -
Romanian		ɨ ŋ ɡ u s t - -	- s t r - ɨ m - t -	m ə r u n t - -

Appendix 3 - Concepts Used

	Thin-Delicatus	Thin-Subtilis	Warm	Cold
Latin	d eː l i k aː t u s	s u b t iː l e m	k a l i d u s	f r – iː g i d u s
French	d uː – – ʒ eː – – –		ʃ o – – – – –	f ʁ w a – – – – –
Spanish	d e l – ɣ a ð o –	s u – t i l – –	k a l – d o –	f ɾ – i – – – o –
Italian	d e l i k a t o –	s o t t i l e –	k a l – d o –	f r – e d – d o –
PortugueseBrazil	d e w – g a d u –	s u – ʧ i w – –	k a w – d u –	f ɾ – i – – – u –
Portuguese	d ɛ ɫ – ɣ a ð u –	s u – ʧ i w – –	k a l – d u –	f ɾ – i – – – u –
Catalan	d ə l i k a t – –	s u p t i l – –	k a ɫ – – – –	f ɾ – ɛ – – t – –
Walloon		s uː – t i – – –	ʧ õ – – – – –	f ʁ w ɛ – – – – –
Friulian		s u – t iː l – –	c a l – t – –	f r – eː – – t – –
Romanian		s u b ʦ i r e –	k a l – d – –	

	Cold-Recens	Full	New	Old
Latin	r e k – e n t e m	p l eː n u s	n – o w u s	w – e t u l u s
French		p l ɛ̃ – – –	n – u v o –	v j ø – – – – –
Spanish	r e θ j e n t e –	– ʎ e n o –	n w e β o –	b j e x o – – –
Italian	r e ʧ – ɛ n t e –	p j ɛː n o –	n – ɔ v o –	v – ɛ k – k j o
PortugueseBrazil	ʁ e s – ẽ – ʧ i –	ʃ – ɐj – u –	n – o v u –	v – ɐj – – ʎ u –
Portuguese	ʁ e s – ẽ – ʧ i –	ʃ – ɐj – u –	n – o v u –	v – e – – ʎ u –
Catalan		p ɫ ɛ – – –	n – ɔ w – –	v – e – – ʎ – –
Walloon		p l ẽ – – –	n – ɔ v ɛ –	v iː – – – – – –
Friulian	r e ʦ – i n t – –	p l ɛ n – –	ɲ – uː f – –	v j e – – – i –
Romanian	r e ʧ – e – – – –	p l i n – –	n – o w – –	v – e kʲ – – – –

	Good	Bad	Rotten	Rotten-Putrem
Latin	b – o n u s	m a l u s	p u t r i d u s	p u t r e m
French	b – õ – – –	m a l – –		
Spanish	b w e n o –	m a l o –	p o ð ɾ i ð o –	p o ð ɾ e –
Italian	b w ɔː n o –	m a l o –	p u t r i d o –	
PortugueseBrazil	b – õ – – –	m a w – –		p o d ɾ i –
Portuguese	b – õ – – –	m a w – –		p o ð ɾ ɨ –
Catalan	b – ɔ n – –	m a l – –	p u ð ɾ i t – –	
Walloon	b – õ – – –	m ɔː – – –		
Friulian	b – ɔ n – –	m aː l – –		
Romanian	b – u n – –		p u t r e d – –	

	Dirty	Dirty-Spurcus	Straight	Round
Latin	s o r d i d u s	– s p u r c u s	d iː r – eː k t u s	r o t u n d u s
French			d – ʁ w a – – – –	ʁ õ – – – – – –
Spanish	s o ɾ d i d o –			r e d o n d o –
Italian	s ɔ r d i d o –	– s p ɔ r k o –	d – r – i t t o –	r i t o n d o –
PortugueseBrazil	s ɔ ɾ d i d u –	i s p u ɾ k u –	ʤ i ɾ – ej – t u –	ʁ e d õ – d u –
Portuguese	s ɔ ɾ d i d u –	i ʃ p u ɾ k u –	d i ɾ – ɐj – t u –	ʁ ɨ d õ – d u –
Catalan			d – ɾ – ɛ – t – –	r ə d o – – – –
Walloon			d – r – øː – – – –	r õ – – – – – –
Friulian		– s p ɔ r k – –	d – r – ɛ – t – –	t a r ɔ n t – –
Romanian		– s p u r k – –	d – r – e p t – –	r ə t u n d – –

Appendix 3 - Concepts Used

	SharpAsAKnife	DullAsAKnife	DullAsAKnife-Retusus	Smooth
Latin	a k uː t u s	h e b e t e m	r e t uː s u s	s u aː w e m
French				
Spanish	a ɣ u ð o -			
Italian		- ɛ b e t e -	r e t u z o -	s o a v e -
PortugueseBrazil				
Portuguese	ɐ ɣ u ð u -			
Catalan	ə ɡ u t - -			s u a w - -
Walloon				
Friulian				
Romanian				

	Smooth-Nitidus	Wet	Wet-Udus	Dry
Latin	n i t i d u s	uː m i d u s	uː d u s	s i k k u s
French	n ɛ t - - - -			s ɛ - k - -
Spanish	n i ð i - o -			s e - k o -
Italian	n e t - t o -	u m i d o -		s e k k o -
PortugueseBrazil	n ɛ ʤ u - - -			s e - k u -
Portuguese	n ɛ ʤ u - - -			s e - k u -
Catalan	n ɛ t - - - -			s ɛ k - - -
Walloon				s ɛ - ʧ - -
Friulian	n ɛ t - - - -	u m i d - -		s ɛ - k - -
Romanian	n e t e d - -	u m e d - -	u d - -	s e k - - -

	Correct	Near	Near-AdPrope	Near-Pressus
Latin	k o r r eː k t u s	p r o k s i - - m u s	a d p r o p r e	p r e s s u s
French				p ʁ e - - - -
Spanish		p ɾ o x - i - - m o -		
Italian	k o r r e t t o -	p r ɔ s s i - - m o -		p r ɛ s s o -
PortugueseBrazil		p ɾ o - s i - - m u -		
Portuguese		p ɾ o - s i - - m u -		
Catalan		p ɾ o - - - i z m e	ə - p ɾ ɔ p - -	
Walloon				p r ɛ - - - -
Friulian		p r o - s i - - m - -		
Romanian			a - p r o̯a p - e	

	Near-Vicinus	Near-Circa	Far	Right-Dextrem
Latin	w - iː k iː n u s	k i r k a		d - e k s t r u m
French	v w a z ɛ̃ - - -	θ e ɾ k a	l w ɛ̃ - t ɛ̃ - -	
Spanish	b - e θ i n o -			d j e - s t ɾ o -
Italian	v - i ʧ i n o -		l - o n t a n o	d - ɛ - s t r o -
PortugueseBrazil	v - i z i ɲ u -			d - ɛ - s t ɾ u -
Portuguese	v - i z i ɲ u -			d - ɛ - ʃ t ɾ u -
Catalan	b - ə - i - - -		ʎ - u n t a - -	d - e - s t ɾ ə -
Walloon	v - i ʒ ẽ - - -			
Friulian	v - i ʧ i n - -		l - o n t a n -	d j e - s t r i -
Romanian	v - e ʧ i n - -			

Appendix 3 - Concepts Used

	Left	Red	Red-Vermiculus	Red-Rubeus
Latin	s i n - i s t r u m	r u s s u s	v e r m i k u l u s	r u - b e u s
French	s ə n - ɛ s t ʁ - -	ʁ u - - - -	v ɛ ʁ m ɛj - - - - -	ʁ u - ʒ - - -
Spanish	s i n j e s t ɾ o -	r o - x o -	b e ɾ m e x o - - -	r u - b j o -
Italian	s i n - e s t r o -	r o s s o -	v e r m i ʎ - ʎ o -	r ɔ b b j o -
PortugueseBrazil	s - - - ɛ ʃ t ɾ u -	ʁ o - ʃ ʊ -	v e ʁ m e - - ʎ u -	r u - b e o -
Portuguese	s - - - ɛ ʃ t ɾ u -	ʁ o - ʃ u -	v i ɾ m ɐj - - ʎ u -	r u - b e o -
Catalan		r o - s - -	b ə r m ɛ - - ʎ - -	r u - ʤ e - -
Walloon				r ɔ - ʧ - - -
Friulian	s i ɲ - e s t r i -	r ɔ - s - -		
Romanian		ɾ o - ʃ u -		r oj - b - - -

	Green	Yellow	Yellow-Amarellus	Yellow-Croceus
Latin	w i r i d e m	g a l b i n u s	a m a r e l l u s	k r o k e u s
French	v e ʁ - - - -	ʒ o - - - n - -		
Spanish	b e ɾ - d e -		a m a ɾ i - ɟ o -	
Italian	v e r - d e -			k r o ʧ e o -
PortugueseBrazil	v e ɾ - d ɨ -		ɐ m a ɾ ɛ - l u -	
Portuguese	v e ɾ - d i -		ɐ m ɐ ɾ ɛ - l u -	
Catalan	v ɛ ɾ - t - -			g ɾ ɔ k - - -
Walloon	v ɛ ʁ - - - -	ʤ ɛ - - - n - -		
Friulian	v ɛ r - t - -			
Romanian	v e ɾ - d e -	g a l b e n - -		

	White	One	Two-Duos	Two-Duae
Latin	a l b u s	uː n u s	d u oː s	d u - aj
French		œ̃ - - -	d - ø -	
Spanish	a l b o -	u n o -	d - o s	
Italian	a l b o -	u n o -		d u - e
PortugueseBrazil	a w v u -	ũ - - -	d - oj s	
Portuguese	a l v u -	ũ - - -	d - oj ʃ	
Catalan	a l b - -	u n - -	d - o s	
Walloon		õ - - -	d - øː -	
Friulian		u ŋ - -	d - oj -	
Romanian	a l b - -	u n u -	d - oj -	d o w ə

	Two-Duas	Three	Four	Five
Latin	d u a s	t r - eː s	kʷ - a t t w o r -	kʷ iː n kʷ - e
French		t ʁ w ɑ -	k - a - t - - ʁ -	s ɛ̃ - k - -
Spanish		t ɾ - e s	k w a - t - - ɾ o	θ i n k - o
Italian		t r - e -	k w a t t - - r o	ʧ i ŋ k w e
PortugueseBrazil	d u ɐ s	t ɾ - e s	k w a - t - - ɾ u	s ĩ - k - u
Portuguese	d u ɐ ʃ	t ɾ - e ʃ	k w a - t - - ɾ u	s ĩ - k - u
Catalan		t r - ɛ s	k w a - t - - ɾ ə	s i ŋ k - -
Walloon		t r - øː -	k w a - t - - - -	s ẽ - k - -
Friulian		t r - eː -	k w a - t - - r i	ʧ i ŋ k - -
Romanian		t r - ej -	p - a - t - - r u	ʧ i n ʧ - -

Appendix 3 - Concepts Used

	Here	There	There-Ibi	There-AdIbi
Latin	e k k u m h iː k	i l l aː k	i b iː	
French		- - l a -		
Spanish	a - k - - - i -	a - ɟ a -		a i
Italian	- - k w - - i -	- - l a -	- v i	
PortugueseBrazil	a - k - - - i -	- - l a -		a i
Portuguese	ɐ - k - - - i -	- - l a -		ɐ i
Catalan	a - k - - - i -	ə - ʎ a -		
Walloon		- - l a -		
Friulian	a - k - - - i -			
Romanian		- - l a -		

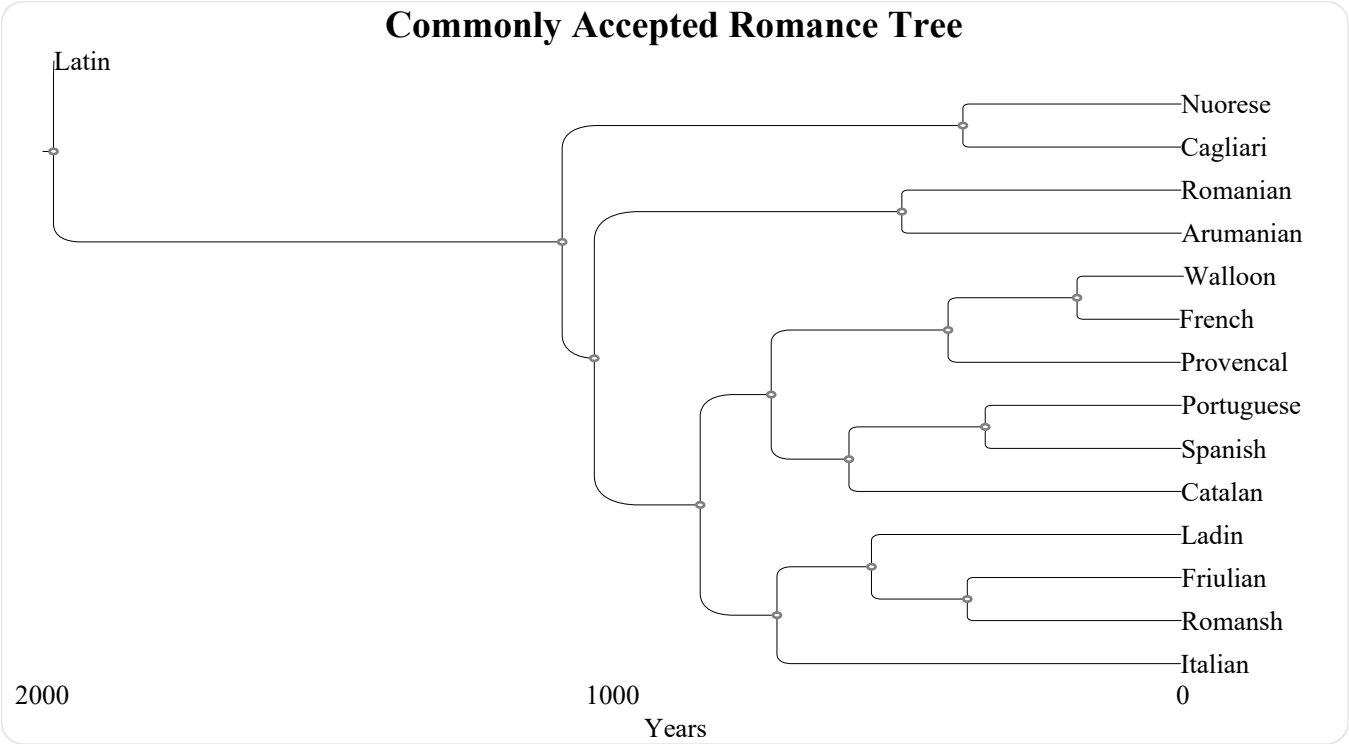
	Who-Qui	Who-Quem	What	When-Quando
Latin	kʷ - i s	kʷ - e m -	kʷ - i d	kʷ - a n d oː
French	k - i -		k w a -	k - ɑ̃ - - -
Spanish		k j e n -	k - e -	k w a n d o
Italian	k - i -		k - e -	k w a n d o
PortugueseBrazil		k - ẽj - -	k - i -	k w ẽ - d u
Portuguese		k - ɐ̃j - -	k - ɨ -	k w ẽ - d u
Catalan	k - i -		k - ɛ -	k w a n - -
Walloon	k - iː -		k w ɛː -	k w a n d -
Friulian	k w i -		ʧ - e -	k w a n t -
Romanian		ʧ - i n e	ʧ - e -	k - ɨ n d -

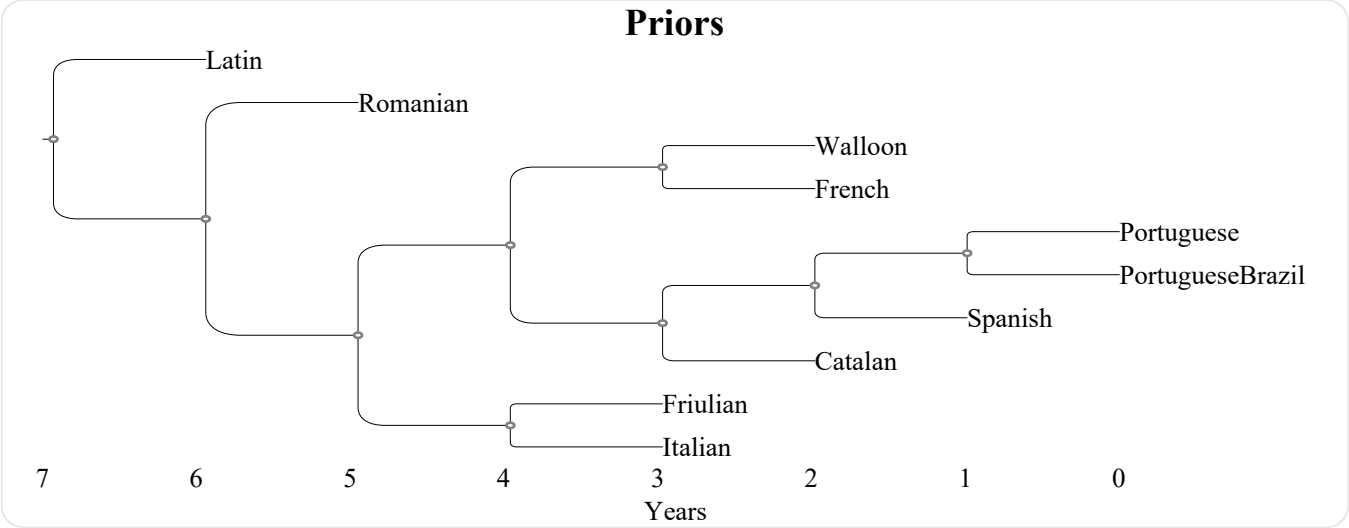
	How-Quomodo	Not	Not-Nec	At
Latin	kʷ oː m o d o	n oː n	n e k	a d
French	k ɔ m ɑ̃ - -	n ɔ̃ -	n i -	a -
Spanish	k o m o - -	n o -	n i -	a -
Italian	k o m e - -	n o n	n e -	a -
PortugueseBrazil	k o m u - -	n ẽ - w̃	n ẽj -	a -
Portuguese	k o m u - -	n ẽ - w̃	n ɐ̃j -	ɐ -
Catalan	k ɔ m - - -	n o -	n i -	a -
Walloon	k ɔ m ɛ̃ - -	n ɔ̃ -	n ẽ -	a -
Friulian	ʧ e m uː t -	n o -		a -
Romanian	k u m - - -	n u -		a -

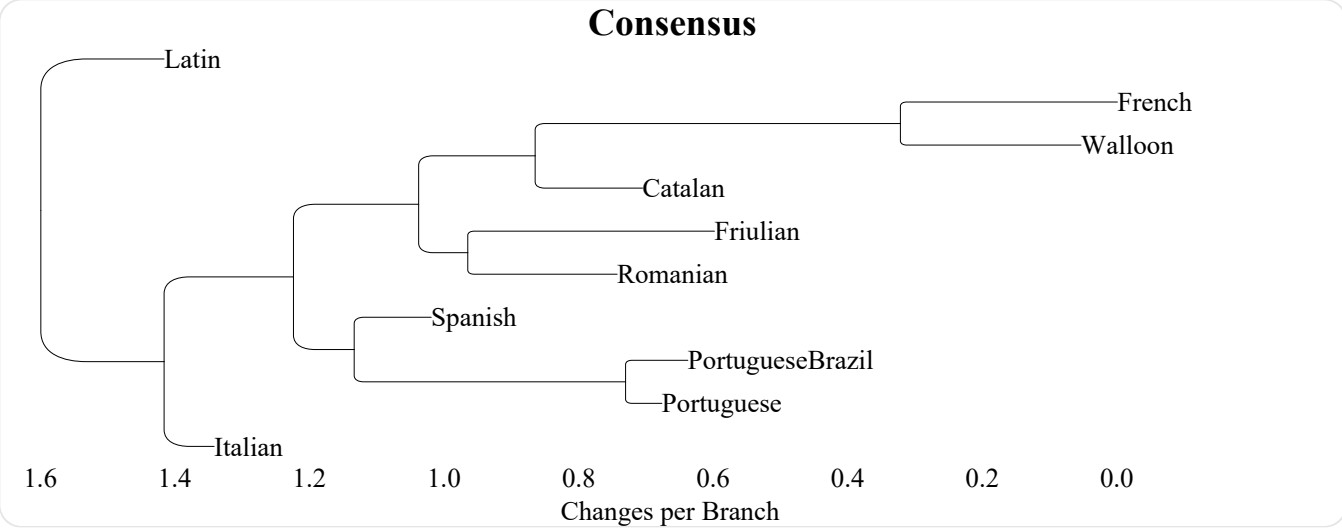
	In-In	In-Deintus	With-Cum	With-Abhoc
Latin	i n	d e i n t u s	k u m	a b h o c
French		d ɑ̃ - - - - -		a v - e k
Spanish	e n		k o n	
Italian	i n		k o n	
PortugueseBrazil	ẽj -		k õ -	
Portuguese	ɐ̃j -		k õ -	
Catalan	ə n	d i - n - - s		
Walloon				a v - u -
Friulian				
Romanian	ɨ n		k u -	

Appendix 3 - Concepts Used

	And-Et		And-Si			Because-Quod		
Latin	e	t	s	iː	k	k^w	o	d
French	e	-	s	i	-	k	ə	-
Spanish	i	-	s	i	-	k	e	-
Italian	e	-	s	i	-	k	e	-
PortugueseBrazil	i	-	s	ĩ	-	k	i	-
Portuguese	i	-	s	ĩ	-	k	ɨ	-
Catalan	i	-	s	i	-	k	ə	-
Walloon	ɛ	-	s	i	-	k	iː	-
Friulian	e	-	s	i	-	k	e	-
Romanian	e	-	ʃ	i	-	k	ə	-


Commonly Accepted Romance Tree
Latin
Nuorese
Cagliari
Romanian
Arumanian
Walloon
French
Provencal
Portuguese
Spanish
Catalan
Ladin
Friulian
Romansh
Italian
2000
1000
0
Years


Priors
Latin
Romanian
Walloon
French
Portuguese
PortugueseBrazil
Spanish
Catalan
Friulian
Italian
7
6
5
4
3
2
1
0
Years


Consensus
Latin
French
Walloon
Catalan
Friulian
Romanian
Spanish
PortugueseBrazil
Portuguese
Italian
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Changes per Branch