

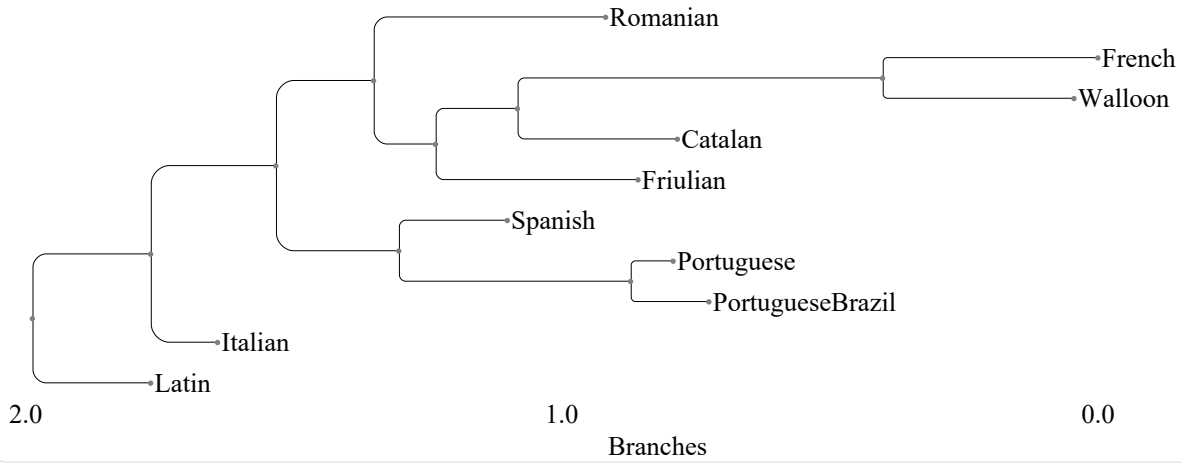
Understanding Language Evolution Using an Event-Based Model

1. Experimental Runs
2. Character Assignments
3. Partition Assignments

Appendix 1 - Experimental Runs

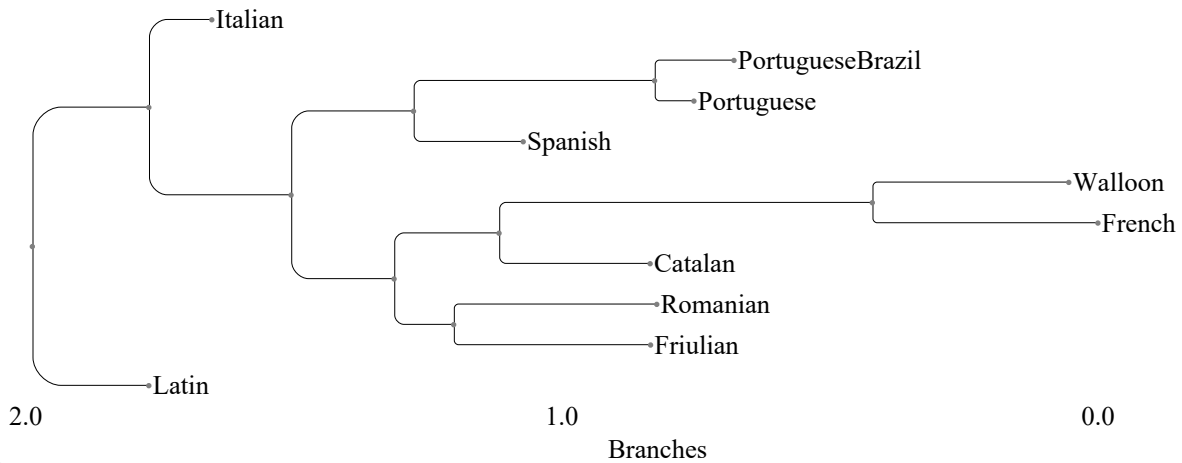
All words

100,000 generations



All words

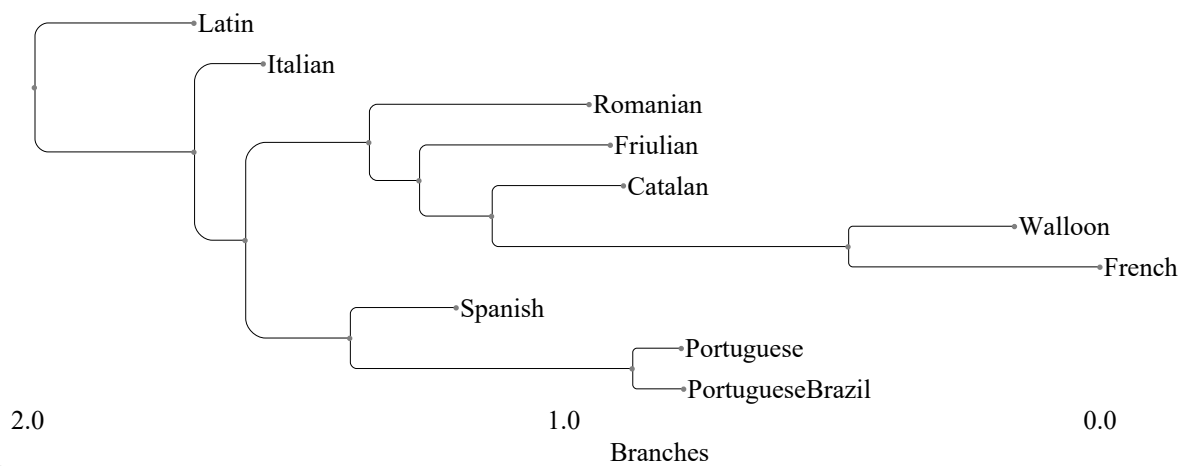
300,000 generations



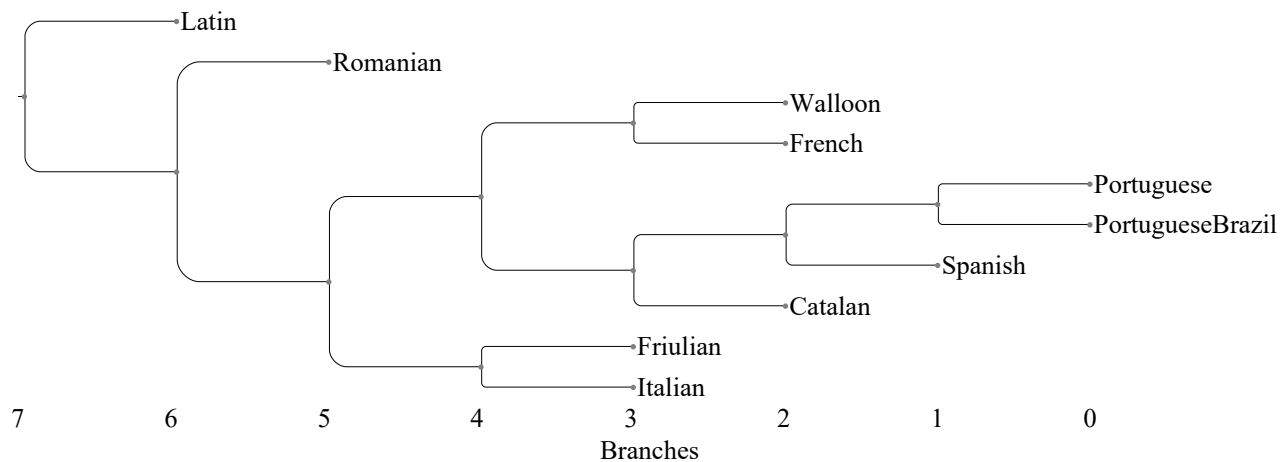
Appendix 1 - Experimental Runs

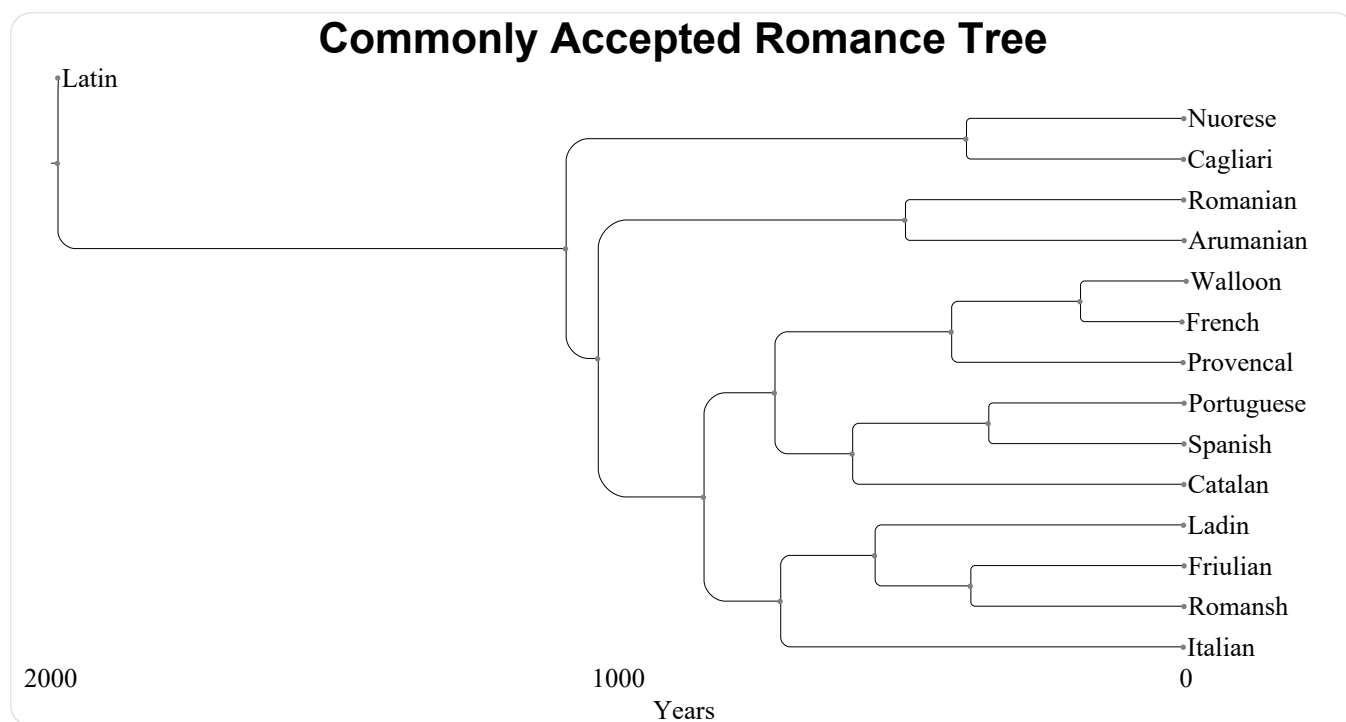
No verbs

300,000 generations



Prior





Appendix 2 - Character Assignments

Each segment gets a different number

1	f	2	e:	3	m	4	i	5	n	6	a	7	e	8	b	9	r	10	ɐ	11	j	12	œ	13	ɛ	14	u
15	l	16	r	17	x	18	o	19	ʎ	20	ɣ	21	i:	22	d	23	ɲ	24	ɔ	25	ə	26	ɔa	27	t		
28	ã	29	ĩ	30	ẽ	31	ʈʂ	32	ɨ	33	ẽj	34	s	35	p	36	z	37	ʃ	38	ð	39	o:	40	k		
41	ts	42	a:	43	ẽj	44	aj	45	θ	46	ej	47	ɐj	48	w	49	õ	50	h	51	õ	52	v				
53	au	54	ẽ	55	ẽw	56	c	57	ij	58	ẽ	59	β	60	ɫ	61	ɑ	62	u:	63	ɥ	64	y				
65	g	66	iw	67	ɔj	68	dʒ	69	j	70	dʒ	71	oj	72	g ^w	73	ŋ	74	ø	75	ɛa	76	ɾ				
77	ɛj	78	k ^j	79	ɪ	80	ʒ	81	ʃ	82	ɣ	83	k ^w	84	ũ	85	ɭ	86	ʝ	87	œ	88	ø:	89	ʊ		

Model: “Linguistically Informed”

1) e	e: e
2) i	i i:
3) a	a a:
4) u	u u:
5) o	o o:
6) ε	ε
7) ø	ø ø:
8) Nasal Vowel	ã ĩ ẽ ėj ẽj ỹ õ ẽ ẽw ẽ ù œ
9) Vowel	ɐ œ ɔ ə ɔa ɪ aj ej ɐj au ij ɑ y iw ɔj oj ɛa ej ɪ ʊ
10) Nasal Consonant	m n ɲ ŋ
11) Non Syllabic Sonorant	j l r w
12) Consonant	f b ɾ x ʎ ɸ d t ʈ s p z ʃ ʈ k ts θ h v c β ɭ ɥ g dz ʝ dʒ g ^w ʀ k ^j ʒ ʝ k ^w ɭ