

Language variation and change

Historical linguistics: Applying the Comparative Method

Gerhard Jäger
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Steps of Reconstruction

- 1) Assemble cognates
- 2) Establish sound correspondences
- 3) Reconstruct proto-sound
- 4) Determine the status of similar (partially overlapping) correspondence sets
- 5) Check the plausibility of the reconstructed sound from the perspective of the overall phonological inventory of the proto-language
- 6) Check the plausibility of the reconstructed sound from the perspective of linguistic universals and typological expectations
- 7) Reconstruct individual morphemes

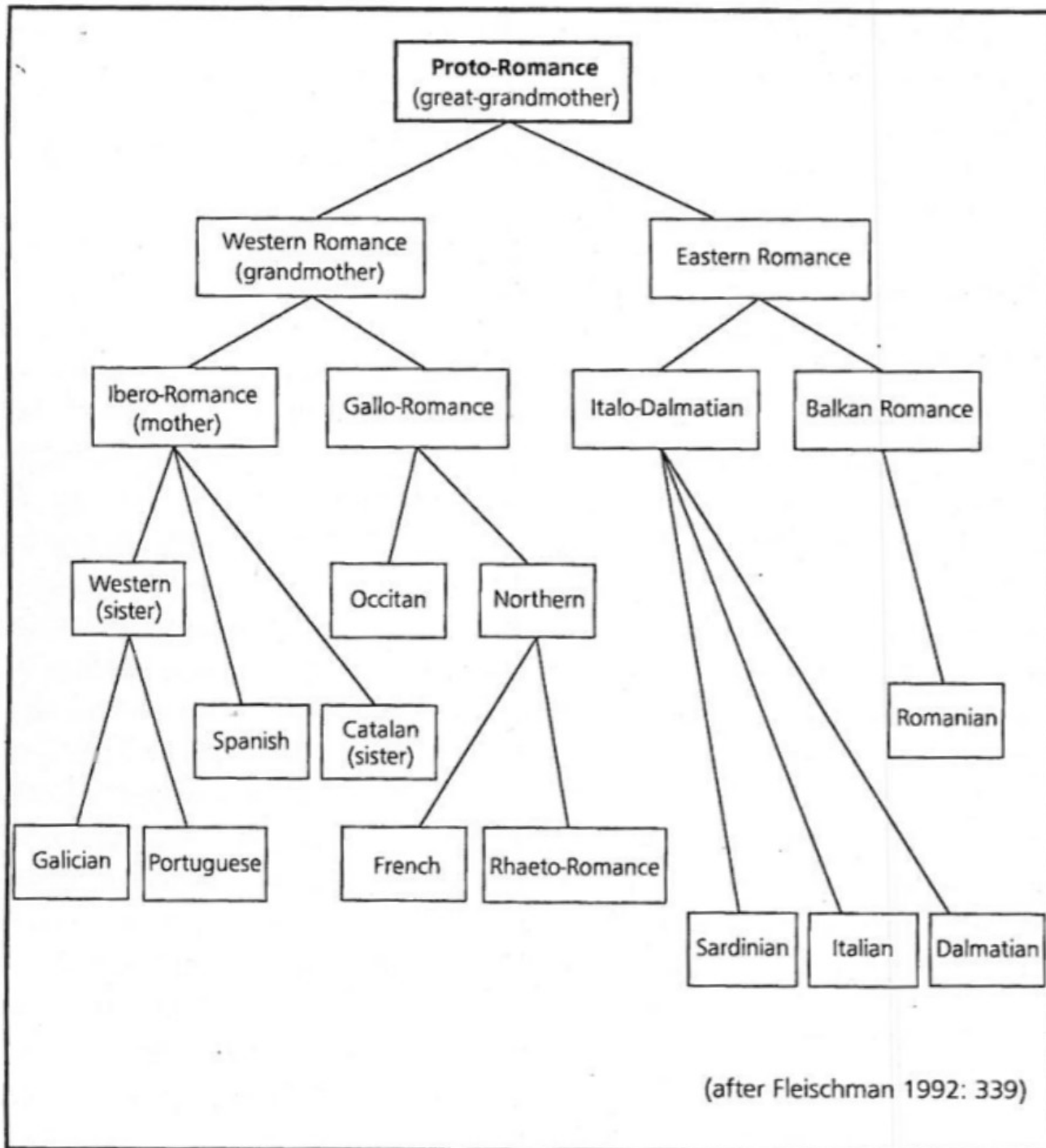


FIGURE 5.1: Proto-Romance family tree (and genealogy of Spanish)

Example: Romance

TABLE 5.1: Some Romance cognate sets

<i>Italian</i>	<i>Spanish</i>	<i>Portuguese</i>	<i>French</i>	<i>(Latin)</i>	<i>English gloss</i>
1. capra /kapra/	cabra /kabra/	cabra /kabra/	chèvre /ʃɛvr(ə)/	capra	'goat'
2. caro /karo/	caro /karo/	caro /karu/	cher /ʃɛr/	caru	'dear'
3. capo /kapo/ 'main, chief'	cabo /kabo/ 'extremity'	cabo /kabu/ 'extremity'	chef /ʃɛf/ 'main, chief'	caput	'head, top'
4. carne /karne/	carne /karne/	carne /karne/	chair /ʃɛr/ (cf. Old French charn/čarn/	carō/carn-	'meat, flesh'
5. cane /kane/	can (archaic) /kan/	cão /kãw/	chien /ʃjɛ̃/	canis	'dog'

Example: Romance

TABLE 5.3: Some additional Romance cognate sets

<i>Italian</i>	<i>Spanish</i>	<i>Portuguese</i>	<i>French</i>	<i>(Latin)</i>	<i>English gloss</i>
6. colore /kolore/	color /kolor/	côr /kor/	couleur /kulœr/	colōre	'colour'
7. correre /korere/	correr /koñer/	correr /korer/	courir /kuri(r)/	currere	'to run'
8. costare /kostare/	costar /kostar/	costar /kostar/	coûter /kuter/	co(n)stāre ['stand firm']	'to cost'
9. cura /kura/	cura /kura/	cura /kura/	cure /kyr/	cūra ['care']	'cure'

Assemble cognates

- Already done in the example

Establish sound correspondences

Sound correspondence 1:

Italian *k-* : Spanish *k-* : Portuguese *k-* : French *f-*

Sound correspondence 2:

Spanish *b* : Portuguese *b* : French *v* : Italian *p*

Sound correspondence 3:

Italian *a* : Spanish *a* : Portuguese *a* : French *ɛ*.

Sound correspondence 4:

Italian *r* : Spanish *r* : Portuguese *r* : French *r*

Sound correspondence 5:

Italian *o* : Spanish *o* : Portuguese *u* : French \emptyset .

Sound correspondence 6:

Italian *k* : Spanish *k* : Portuguese *k* : French *k*

Reconstruct proto-sounds

- Heuristics:
 - Majority wins
 - Take directional biases into account
 - Factor in features held in common
 - Economy

Sound correspondence 1

Sound correspondence 1:

Italian *k-* : Spanish *k-* : Portuguese *k-* : French *f-*

- **Majority wins:** *k
- **Directionality:** $k > f$ is common (palatalization),
 $f > k$ is basically unknown \rightarrow *k
- **Economy:** assuming one change $k > f$ is more economical than three changes $f > k$

Sound correspondence 2

Sound correspondence 2:

Spanish *b* : Portuguese *b* : French *v* : Italian *p*

- **Majority wins:** *b
- **Directionality:**
 - between voiced sounds,
p>b is more likely than b>p: *p
 - Stop > fricative more likely than fricative > voiced: *b or *p
- **Features held in common:**
 - Labial
 - Stop (majority wins)
 - Voiced (majority wins)
→ *b

Sound correspondence 2

- Here, directionality overrides other considerations: *p

Sound correspondence 3

Sound correspondence 3:

Italian *a* : Spanish *a* : Portuguese *a* : French *ε*.

- All criteria: ***a**

Sound correspondence 4

Sound correspondence 4:

Italian *r* : Spanish *r* : Portuguese *r* : French *r*

- All criteria: ***r**

Sound correspondence 5

Sound correspondence 5:

Italian *o* : Spanish *o* : Portuguese *u* : French \emptyset .

- **Majority wins:** **o*
- **Directionality:** loss of final vowel is common sound change: **o*/**u*
- **Features held in common:** non-low back vowel: **o*/**u*
- **Economy:** Spanish is closer to Portuguese than to Italian, so for **u* we would have to stipulate two changes: **o*

Sound correspondence 6

Sound correspondence 6:

Italian *k* : Spanish *k* : Portuguese *k* : French *k*

- **Majority wins:** *k
- **Directionality:** N/A
- **Features held in common:** *k
- **Economy:** *k
- But what about our reconstruction of *k for Sound Correspondence 1?

Sound correspondence 1:

Italian *k-* : Spanish *k-* : Portuguese *k-* : French *f-*

Overlapping correspondence sets

- Two possible solutions:
 - Proto-sounds are different; overlap is due to merger
 - Same proto-sound; difference is due to conditioned sound change
- Here: French underwent conditioned sound change:
 - *k > ʃ / _ ε

Overlapping correspondence sets

TABLE 5.4: Further Romance cognate sets

<i>Italian</i>	<i>Spanish</i>	<i>Portuguese</i>	<i>French</i>	<i>(Latin)</i>	<i>English gloss</i>
10. battere /battere/	batir /batir/	bater /bater/	battre /batr/	battuere	'to beat'
11. bolla /bolla/	bola /bola/	bola /bola/	boule /bul/	bullā	'ball, bubble'
12. bontà /bonta/	bondad /bondad/	bondade /bōdaʒi/	bonté /bōte/	bonitāte	'goodness'
13. bev- /bev-/	beber /beber/	beber /beber/	boire Old French beivre	bibere	'to drink'
14. venire /venire/	venir /benir/	vir /vir/	venir /vəɲir/	venīre	'to come'
15. valle /valle/	valle /balʲe/	vale /vale/	val /val/	valle	'valley'
16. vestire /vestire/	vestir /bestir/	vestir /vestir/	vêtir /vetir/	vestīre	'to dress'

Overlapping correspondence sets

- *Sound correspondence 7:*
Italian b : Spanish b : Portuguese b : French b
- *Sound correspondence 8:*
Italian v : Spanish b : Portuguese v : French v
- *b for sound correspondence 8: no evidence for conditioned sound change; uneconomical, violates majority rule
→ *v (Merger of *v/*b > b in Spanish)

Plausibility of inventory

- Suppose we have two competing reconstructions

*p	*t	*k
*b		*g
	*r	
	*l	

*p	*t	*k
*b	*d	*g
	*l	

- Second version is better:
 - Proto-language has dental stop and voiced stop
 - Therefore we expect it to have a /d/

Typological plausibility

TABLE 5.7: Nootkan correspondences involving nasals

	<i>Makah</i>	<i>Nitinat</i>	<i>Nootka</i>
1.	b	b	m
2.	d	d	n
3.	b'	b'	ṃ
4.	d'	d'	ṇ

- Majority rule favors *b, *d etc.
- However, almost all languages have nasals
→ *m, *n