

Failing one's obligations: Defectiveness in Rumantsch reflexes of DEBERE

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Defective Paradigms:
Missing Forms and What they Tell Us
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1. “Rhaeto-Rumantsch”:

Swiss Rumantsch		Dolomitic Ladin	Friulian
Engadine	Central	Western	
Puter	Surmiran	Sursilvan	Gardena
Vallader	(Bergün)		Gadera
(Val Müstair)	(Obervaz)		Fassa
	Sutsilvan		Livinallongo
			Ampezzo

2. *cantar* ‘sing’ (Pres. Indic.):

1sg	(ia) cant	[kant]
2sg	(te) cantas	[ˈkantəs]
3sg	(el) canta	[ˈkantə]
1pl	(nous) cantagn	[kənˈtəŋ]
2pl	(vous) cantez	[kənˈtɛts]
3pl	(els) cantan	[ˈkantən]

3. Other verbal forms

- (a) Present Subjunctive *canta* [ˈkantə], *cantas* [ˈkantəs], *canta* [ˈkantə], *cantan* [ˈkantən], *cantas* [ˈkantəs], *cantan* [ˈkantən]
- (b) Other tenses: Imperfect (*ia cantava* [kənˈtavə]); Future (*ia cantaro* [kəntəˈro]); Imperfect Subjunctive/Conditional (*ia cantess* [kənˈtɛs])
- (c) Non-finite forms: Gerund *cantond* [kənˈtɔnd]; Past participle *canto*, *cantada* [kənˈto, kənˈtadə]

4. *dueir* ‘must, should’

- (a) Present indicative: 1pl. *duagn* [dʊˈaŋ], 2pl. *duetz* [dʊˈɛts]; all singular forms and 3pl replaced by forms of *stueir* (suppletive: *ia stò*, *te stast*, *el stò*; *els ston*)
- (b) Present Subjunctive: missing
- (c) Imperfect (*ia dueva* [dʊˈɛvə]); Future *duaro* [dʊəˈro]; Imperfect Subjunctive/Conditional *duess* [dʊˈɛs]
- (d) Gerund *duond* [dʊˈɔnd]; Past participle *duia*, *dueida* [dʊˈiə, dʊˈejdə]

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5. Six conjugational classes in Surmiran:

Inf.	Example	1pl. Pres.	1sg. Subj.	1sg Imperf.	1sg Fut.	1sg Cond.	PPpl.
-ar [-ar]	cantar 'sing'	-agn	-a	-ava	-aro	-ess	-o/ada
-er [-er]	lascher 'leave'	-agn	-a	-eva	-aro	-ess	-ea/eda
-ier [-iər]	spitgier 'expect'	-agn	-a	-iva	-aro	-ess	-ia/eida
-eir [-ejr]	tameir 'fear'	-agn	-a	-eva	-aro	-ess	-ia/eida
-er [-ər]	tanscher 'reach'	-agn	-a	-eva	-aro	-ess	-ia/eida
-eir [-ejr]	parteir 'depart'	-ign	-a	-iva	-iro	-iss	-ia/eida

6. Some (of the many) irregular verbs:

	eir 'go'	neir 'come'	(vu)leir 'want'	deir 'say'	star 'stay, live'	saveir 'know'
1sg	vign	vign	vi	dei	stung	sa
2sg	vast	vignst	vot	deist	stast	sast
3sg	vo	vign	vot	dei	stat	so
1pl	giagn	nign	lagn	schagn	stagn	savagn
2pl	gez	niz	lez	schez	stez	savez
3pl	von	vignan	vottan	deian	stattan	son

7. "Alternating" verbs:

	ludar 'praise'	durmeir 'sleep'	lavar 'get up'	fittar 'finish'
1sg	lod	dorm	lev	fet
2sg	lodas	dormas	levas	fettas
3sg	loda	dorma	leva	fetta
1pl	ludagn	durmign	lavagn	fittagn
2pl	ludez	durmiz	lavez	fittez
3pl	lodan	dorman	levan	fettan

8. Forms (apparently) based on the singular Pres. Indicative stem:

Pres. Subjunctive	ludar 'praise'	durmeir 'sleep'	lavar 'get up'	fittar 'finish'
1sg	loda	dorma	leva	fetta
2sg	lodas	dormas	levas	fettas
3sg	loda	dorma	leva	fetta
1pl	lodan	dorman	levan	fettan
2pl	lodas	dormas	levas	fettas
3pl	lodan	dorman	levan	fettan
2sg Imperative	loda!	dorma!	leva!	fetta!

9. Forms (apparently) based on the 1,2 pl. Pres. Indicative stem:

infinitive:	ludar	durmeir	lavar	fittar
1pl Pres.	ludagn	durmign	lavagn	fittagn
1sg Imperf.	ludeva	durmiva	laveva	fitteva
1sg Fut.	ludaro	durmiro	lavaro	fittaro
1sg Condit.	ludess	durmiss	lavess	fitte
2pl Imper.	lude!	durmi!	lave!	fitte!
Pres. Ppl.	ludond	durmond	lavond	fittond

10. "Fifth conjugation" verbs (infinitive in [-ər]): e.g. *discorrer* [dɪʃ'korər] 'speak'; 1sg Present *discor*; 1pl Present *discurrign*

11. Conclusion: The choice of stem is not determined by Morphosyntactic features (as for genuinely suppletive irregular verbs, like 6). Instead, one stem is used when main stress falls on the desinence (as in 1pl, 2pl present indicative and the other forms in 8) while the other is used when main stress falls on the stem itself (as in 9).

12. Stress (approximately): Main stress falls on the penult if the rhyme of the final syllable consists of [ə], possibly followed by [r], [l] [n] or [s]. If the final syllable contains a full (non-ə) vowel, or ə followed by some other consonant, it takes the main stress.
13. Build a quantity-sensitive trochee at the right edge of the word.
14. Secondary stress falls on initial syllables separated by at least one syllable from the main stress; parts of compounds are stressed separately with main stress on the stress center of the final element. Other secondary stresses appear to be the result of cyclic word formation, although the principles at work have not yet been fully worked out.
15. Vowel reduction (approximately): Stressed syllables can contain a variety of vowels and diphthongs. Unstressed syllables contain only short [ə] (written *a* or *e*), [ɪ] (*i*) or [ʊ] (*u*). Could the stem alternation just be phonological vowel reduction?

16. Unstressed [ə] in a stem can alternate with any of several vowels:

Stressed V	Infinitive	3sg Pres. Indic.	gloss
[a]	l[ə]var	l <u>a</u> va	'wash'
[aɪ]	[ə]ntrar	<u>a</u> intra	'enter'
[ɛ]	t[ə]dlar	t <u>e</u> dla	'listen'
[e]	l[ə]var	l <u>e</u> va	'get up'
[ɛɪ]	p[ə]sar	p <u>e</u> isa	'weigh'
[ɛɪ]	antsch[ə]dar	antsch <u>e</u> ida	'start yeast'
[i]	surv[ə]gneir	surv <u>i</u> gn	'receive'
[o]	cl[ə]mar	cl <u>o</u> ma	'call'

17. The same is true for unstressed stem i]:

Stressed V	Infinitive	3sg Pres. Indic.	gloss
[a]	(sa) tɣil[ɪ]ttar	tɣil <u>a</u> ttar	'sit down (scornfully, as of a cat)'
[aɪ]	spisg[ɪ]ntar	spisg <u>i</u> ainta	'feed'
[ɛ]	p[ɪ]glier	p <u>e</u> glia	'take'
[e]	f[ɪ]mar	f <u>e</u> ma	'smoke'
[ɛɪ]	anv[ɪ]dar	anv <u>e</u> ida	'invite'
[i]	tɣ[ɪ]rar	tɣ <u>i</u> ra	'guard'
[iə]	s[ɪ]var	s <u>i</u> eva	'sweat'
[o]	dum[ɪ]gnar	dum <u>o</u> gna	'dominate'

18. And also for unstressed stem [u]:

Stressed V	Infinitive	3sg Pres. Indic.	gloss
[a]	v[ʊ]rdar	v <u>a</u> rda	'watch'
[ə]	d[ʊ]rmeir	d <u>o</u> rma	'sleep'
[o]	cr[ʊ]dar	cr <u>o</u> da	'fall'
[o:]	p[ʊ]ssar	p <u>o</u> ssa	'rest'
[oɪ]	l[ʊ]ier	l <u>o</u> ia	'arrange'
[ou]	ram[ʊ]rar	ram <u>o</u> ura	'roll, surge'
[u]	p[ʊ]gnier	p <u>u</u> gna	'fight, box'

19. The data in 16, 17 and 18 also show that the correspondence between particular stressed vowels and their unstressed counterparts is non-unique. The same stressed vowel can correspond to more than one unstressed vowel (for [a] and [o], to all three). There is no stressed vowel whose unstressed correspondent is unique. Conclusion: **stem alternation cannot be reduced to the effects of a phonological rule of vowel reduction.**

20. Complex phonological developments over time (cf. Lutta 1923, pp. 120–136, Grisch 1939, pp. 76–94, Haiman & Benincà 1992, pp. 56–63), plus the influx of German words with vowels other than [ə, i, u] in unstressed syllables have made the original vowel reduction regularity opaque. Stem alternation is the morphologized remnant of that process.

21. In a number of verbs, *gn* ([ɲ]) or *ng* ([ŋ]) following the stressed vowel of the stressed alternant corresponds to *n* ([n]) in the unstressed alternant:

Infinitive	3sg Pres. Indic.	gloss
manar	magna	‘lead’
cuschinar	cuschigna	‘cook’
splanar	splanga	‘plane’
amplunar	amplunga	‘pile up’

22. Sometimes this is accompanied by vowel changes as well:

Infinitive	3sg Pres. Indic.	gloss
(sa) sđanar	(sa) sđegna	‘shrink from doing s.t.’
(s’)anclinar	(s’)anclegna	‘bend’
smarschanar	smarschunga	‘loaf’

23. But the alternation is not predictable:

Infinitive	3sg Pres. Indic.	gloss
smanar	smagna	‘swing’
anganar	angiona	‘swindle’
scanar	stgona/scana	‘stab’

Again, originally phonological rules have become opaque, leaving a morphologized residue.

24. More complex alternation patterns:

Alternation	Infinitive	3sg Pres. Indic.	gloss
a-ə~o-e	flammager	flommegia	‘blaze’
e-ə~ə-e	declarar	daclera	‘declare’
i-i~ə-e	angivinar	angiavegna	‘solve’
i-i~ə-ej̃	misirar	maseira	‘measure’
i-i~ə-i	ghisignier	gasigna	‘taunt’
u-ə~ə-o	murmagner	marmogna	‘murmur’
u-ə~ə-oj̃	suarar	savoira	‘smell’
u-ə~ə-u	ruschanar	raschunga	‘speak’
u-∅~ə-ou	luvrar	lavoura	‘work’

25. Apparent metathesis (really V/∅ with subsequent epenthesis):

Infinitive	3sg Pres. Indic.	gloss
bargeir	bragia	‘cry’
patarger	patratga	‘think’
sgartar	sgratta	‘scratch’
cresch[ə]r	ipl carschagn	‘be brought up’
sgarmar	sgroma	‘de-cream (milk)’
glisnarger	glisnaregia	‘simulate’

26. Vowel alternation is just part of a more comprehensive system of stem alternations which are idiosyncratically associated with particular lexical items. Each such item has two listed stems, one used when stress falls on it, and the other when stress falls on an ending.

27. Similar stem alternations appear in derivationally related forms:

e _i ~ə	neiv	‘snow’	navada	‘much snow’
e _i ~i	stgeir	‘dark (adj.)’	stgirantar	‘get dark’
ou~u	pour	‘farmer’	puraglia	‘peasantry’
o~u	fora	‘opening’	furela	‘entrance’
e~i	fem	‘smoke’	fimera	‘dense smoke’

28. Typically, when a verb has “stressed” and “unstressed” stems, derivationally related forms will be built on one or the other, depending on where stress falls in the derived form.

ludar/loda ‘to praise’:

(igl) lod ‘praise (n.)’ ludevel ‘praiseworthy’

clamar/cloma ‘to call’:

(igl) clom ‘call (n.)’ (la) clamada ‘calling (n.)’

gartager/gartegia ‘to succeed’:

(igl) gartetg ‘success’ malgartagea ‘ill brought up’

stimar/stema ‘attend to, value’:

(la) stema ‘worth’ (la) stimadeira ‘valuation’

29. But in a significant number of forms, the “stressed” stem appears in a form where it does not take the stress.

'sfend[ər]/sfandagn	‘(to) split’	sfandia	‘cracked (adj)’	sfendibel	‘splittable’
durmeir/dorma	‘(to) sleep’	durmigliun	‘late riser’	dormulent	‘sleepy’
satger/setga	‘(to) dry [intr.]’	setg	‘dry (adj.)’	setgantar	‘(to) dry [trans.]’
accumadar/ accumoda	‘adjust’	accumodabel	‘adjustable’	accumodamaint	‘adjustment’
accumpagner/ accumpogna	‘accompany’	accumpagner	‘accompanist’	accumpognamaint	‘accompaniment’

These may result from cyclic application, with stem choice taking place on one cycle and further morphology (and alteration of stress pattern) taking place on a later cycle (cf. Kamprath 1987 for discussion of motivations for cyclic interaction in a closely related form of Rumantsch).

30. A great many verbs in the ‘productive’ [-ar] and [-ejr] conjugations form their “stressed” stem with the extension *-esch*:

luschardar ([luʒər'dar]) ‘strut’:

1sg	luschardesch
2sg	luschardeschas
3sg	luschardescha
1pl	luschardagn
2pl	luschardez
3pl	luschardeschan

As a result, of course, no other stem alternation occurs in these verbs.

31. Verbs in *-esch* include many recent borrowings; verbs listed as alternating in Sonder & Grisch 1970 often appear in Signorell 1999 with *-esch*; when speakers cannot recall the correct alternation pattern for a given verb, they sometimes produce an *esch* form instead. Essentially, the *-esch* form is avoided when a correct alternation pattern is known.

32. Candidates for 3sg. pres. of *luschardar*: **luscharda*, **luscheirda*, **luschorda*, **laschurda*, **laschorda*, etc.

33. The “stressed” stem in *-esch* never shows up except in verbal inflection. Verbs that take *-esch* in the stem-stressed forms always use the “unstressed” stem as the base for derivation (e.g., *fixar/fixescha* ‘fix, harden’; *fix* ‘fast, unmovable’, *fixaziun* ‘fixation’).

34. Some conclusions:

- (a) Although the stem alternations in Surmiran (and other Rumantsch languages) have their origin in strictly phonological processes, those have become opaque, and are now lost as phonological rules.
- (b) The residual allomorphy, however, is governed by a strictly phonological condition: one stem or the other is chosen depending on the location of main stress in the output form.
- (c) Unlike some instances of phonologically conditioned allomorphy, this pattern affects most content words in the language, not just a small set such as a few affixes, or the ‘mobile diphthongs’ of Italian (van der Veer & Booij to appear).
- (d) Since it is stems, not affixes that alternate, a sub-categorization solution (Paster to appear; Bye 2007) does not seem appropriate.
- (e) On the other hand, an approach that treats stem choice as purely optimization based on phonological conditions (as in Kager 2007, Rubach & Booij 2001) could have trouble with the fact that the choice of the ‘wrong’ stem appears in some cases to result in a perfectly well-formed word (cf. *vurdar/vard*).
- (f) Views that supplement phonological constraints with a stipulated ranking of alternants (Bonet, Lloret & Mascaró 2007, Wolf to appear) may have trouble with the same issue.

35. Analysis:

- (a) Distinguish [a] *vs.* [ə], [i] *vs.* [ɪ], [u] *vs.* [ʊ]. The first member of each pair should only appear in stressed position, the second only in unstressed position.
- (b) Stems have two (listed) alternants. In one of these the last vowel is from the set [ə, ɪ, ʊ], and in the other the last vowel is a full vowel or diphthong.
- (c) The constraints that associate full vowels with stressed syllables and reduced vowels with unstressed ones also function to choose one stem or the other on the basis of the location of main stress.
- (d) In stems of the form $/X\sigma C_0VC_0/ \sim /X\sigma C_0\check{v}C_0/$ with no following suffix (e.g. [su'ter], *[s'utər], from *sutrar/sutera* ‘bury’), either stem would be well formed in terms of the relation between vowel quality and stress. For these cases, the alternant with a full vowel in the final syllable must be given priority. This might be stipulated, or it might follow from some aspect of the prosody.
- (e) **Rightmost:** The primary stressed syllable is at the right edge of the Prosodic Word.

36. (a) *cantar* ‘sing’, 3sg *canta*; *chintar* ‘calculate’, 3sg *chinta*; *cuntschier* ‘tinker’, 3sg. *cuntscha*
(b) {/kənt/, /kant/}; {/kɪnt/, /kint/}; and {/kuntʃ/, /kuntʃ/}

37. *pudeir* ‘can, be able to’:

1sg	ia	poss
2sg	te	post
3sg	el	pò
1pl	nous	pudagn
2pl	vous	pudez
3pl	els	pon

38. Stems: {/pɔs/, /pud/}

Listed: 2sg, 3sg and 3pl Present Indicative (/pɔst/, /pɔ/, /pɔn/)

39. Verbs in *-esch* only have an “unstressed” stem. The morphology includes a rule (limited to [-ar] and [-ejr] verbs)

$$/X/ \longrightarrow /X\varepsilon/ \left[\begin{array}{c} \overline{\text{+VERB}} \\ \text{+VERB} \end{array} \right]$$

whose application is always dispreferred (by higher ranking **Max** or **Dep**) *except* when it would result in a prosodically preferred form, by avoiding stress on an unstressable vowel.

40. Back to *dueir* ‘must, should’ (cf. 4 above). Descriptive generalization: All and only the forms built on the “unstressed” stem exist, and these are constructed in completely regular fashion.
41. The only other verbs of the shape [C₀uejr] are completely irregular (e.g., *stueir* ‘must, should’). Superficially similar verbs that use the stem extension *-esch* in the stem-stressed forms (e.g. *cueir* ‘allow’; *flueir* ‘flow’; *prueir* ‘sprout’, etc.) differ in that they end in [-ɛjr], and thus (unlike *dueir*, *stueir*) fall in the conjugation class for which this stem extension is possible.
42. Generalization: *Dueir* is defective in having no “stressed” stem, and no valid model on which one can be constructed. That is, *dueir* only has a single stem (/dʊ/). Where stress would fall on this stem, the effectively synonymous verb *stueir* is substituted.
43. Perhaps the constraints associating Vowel quality with stress (or its absence) outrank something that requires forms from the same paradigm, as opposed to ones from a semantically similar one: **Faith(Lexicalization)**.
44. (Decurtins 1958:) Earlier Surmiran had a fuller paradigm for *daveir*. F. DaSale (*Fundamenti della lingua Retica*, 1729) has *dé*, *dest*, *de*, *dejen*, *deies*, *deien* for Pres. Indicative; Pres. Subjunctive —, *deiest*, *deia*, *deiegns*, *deies*, *deien*; Imperfect *daveva*. These show no stress alternations within a tense, but seem to have unstressed stem [dəv] and stressed stem [de]. A 1768 *Catechism* has 1pl. Pres. Indicative *deiagns*, surely with desinential stress.
45. Subsequently, the forms with stem stress were lost (or displaced by forms of *stueir*). The present indicative forms *duagn*, *duez* were presumably preserved because they had been rebuilt with stress on the endings.
46. Vallader (and Puter): *dovair*
- Pres. Indic:** *dess* [dɛs], *dessast* [ˈdɛsəst], *dess* [dɛs], *dessan* [ˈdɛsən], *dessat* [ˈdɛsət], *dessan* [ˈdɛsən]
- Pres. Subj.:** *dessa* [ˈdɛsə], *dessast* [ˈdɛsəst], *dessa* [ˈdɛsə], *dessan* [ˈdɛsən], *dessat* [ˈdɛsət], *dessan* [ˈdɛsən]
- All other forms (i.e., those with desinential stress) are lacking. The infinitive *dovair* [doˈvajr] is only used as a Noun meaning ‘duty, obligation’.
- Puter *dovair* is the same, except that the 1PL forms (Indicative and Subjunctive) are both *dessans* [ˈdɛsəns].
47. In Vallader and Puter, this verb only has a single stem /dɛs/ (historically an intrusion from the Conditional paradigm, but now used for the Present), which is necessarily stressed. Where stress would not fall on the stem, this form is impossible, and there is no other, *despite the presence in the lexicon of a related Noun which could provide /dɔv/ as an unstressed stem*.
48. Sutsilvan has a full paradigm for *duer*: Pres. Indicative *de*, *des*, *de*; *duagn*, *duez*, *den*; Pres. Subjunctive *degi*, *degias*, *degi*; *dueian*, *dueias*, *degian*, etc. with abundant stem alternations. Sursilvan (Eastern Rumantsch) also has a full paradigm. Defectiveness is thus limited to Surmiran and the Engadine dialects.
49. Rumantsch Grischun has eliminated the stress alternations in most verbs, generalizing desinential stress throughout the paradigm. There are thus no stem alternations in verbs apart from a very small set. Not surprisingly, RG *duair* has a fully regular paradigm.
50. This verb has competed unsuccessfully in many instances with semantically similar modals, in ways that are not always based on phonology. In the Dolomitic Ladin of the Val Gàdera, for example (cf. Kramer 1990), it survives only in the Present (formally a Conditional as in the Engadine dialects: *dess*, *desses*, *dess*, *dessun*, *desses*, *dess*), and the Imperfect Indicative (*dô*, *dôs*, *dô*, *dôn*, *dôs*, *dô*), with stem alternation. Elsewhere it is replaced by forms of *messëi* (from German *müssen*) or Northern Italian *cognèr*.
51. We might hypothesize that the morphologization of the vowel alternations in Swiss Rumantsch, combined with the reduced use of the verb due to competition with others such as *stueir*, led to the defectiveness of Surmiran *dueir*.

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