Patterns of suppletion
and the temporal nature of constraints on linguistic diversity

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I. Universals: Timeless laws and/or laws of change?

(1) Relationship of typology and diachrony: Who is in charge? Are limitations of linguistic diversity due to **timeless laws** or **laws of change**?

   (i) Universals impose limits on variation across languages (= mental lexicons-and-grammars) at any and all times; through constraints on what are possible lexicons-and-grammars regardless of historical contingencies (primary linguistic data encountered by language learners) change is constrained insofar as languages cannot change so as to end up violating a timeless (genetic or functional) law, or at any rate not without subsequent changes redressing the balance one way or another. (Possibly: There are no laws of change.)

   (ii) Universals constrain change: particular sources (forms, categories, constructions, paradigms, rules, constraints, etc.) can only yield particular targets (forms, etc.) through particular mechanisms of change (reanalysis); through constraints on reanalyses (source > result) limits are imposed on how languages can differ: they can only be what they could become. (Possibly: There are no timeless laws. Or: Concomitant or consecutive changes are superintended by timeless laws.)

(2) Timeless law: For all languages at any and all times, there can be no **dual** without a **plural**.
   Law of change: No innovation of a dual, from whatever source and in whatever way, without a plural being distinguished from a singular (or such a number distinction being innovated simultaneously), and no loss of a plural, with whatever result and in whatever way, as long as a dual is being distinguished (or such a number distinction is being lost simultaneously). (Plank & Schellinger 2000)

(3) Sometimes/often, 'ɔ' can be read as '<'. For example (Plank 2003, Lahiri & Plank 2008):
   Timeless law: For all languages at any and all times, **infixes** imply **adfixes**. (There can no infixes in a language without there also being adfixes.)
        Motivation: Instantiation of a general dispreference of discontinuous constructions, which in real time are harder to construct and process than continuous constructions.
   Law of change: Infixes can only ever originate from adfixes through metathesis or entrapment.
        Motivation: Adfixes are internalised in order to optimise prosodic structures (syllables, feet, "troughs") or (rarely) get trapped inside an outer adfix reanalysed as part of the stem.

(4) Another example:
   Timeless law: For all languages at any and all times, Adp NP implies VO and N Gen, NP Adp implies OV and Gen N.
        Motivation: Harmonic serialisation of HEAD–DEP, and/or uniform branchingness direction.

Law of change: Adpositions only ever derive from object-taking verbs or from genitive-taking head nouns through grammaticalisation (which is always order-preserving).
Motivation: Adpositions are inherently relational, and where would you get them from, if you need any, if not from other relational expressions.

(5)   For more examples browse THE UNIVERSALS ARCHIVE at:
http://typo.uni-konstanz.de/archive/intro/

(6)   The issue here: How can suppletive stems can be distributed over inflectional paradigms? (Paradigm structures here modelled through geometric arrangements; features would also do, but often don't transparently define the natural classes required. Hence "morphomes".)
Do their distributions have to respect paradigm structures or can they be random?
In particular, are crossover distributions disallowed and what would be the temporal nature of a **crossover** constraint?

	SG	PL
NOM	x	y
ACC	y	y
GEN	y	x

II.   Some suppletion basics

(7)   Suppletion can be distinguished as being **strong(er)** vs. **weak(er)**, depending on the phonological similarity/dissimilarity between the suppletes
– which is **synchrony**, but which has no implications for how to deal with suppletion in synchronic grammar/lexicon: all suppletes require listing.

   a.   It. *Napoli/Partenop-*; E. *Liverpool/Scous-er* 'PLACE/someone from PLACE';
Fr. *all-/v-/ir-* 'go-';

   b.   E. *Liverpool/Liverpudl-ian* [puːl]/[pʌdl], *Birming-ham/Brumm-ie* [bɚˑm]/[brʌm] 'PLACE/someone from PLACE';
G. *geh-/gVng-* 'go-PRES/go-PRET, PRTCPII' (*ging, ge-gang-en*);

   c.   E. *say* [sei]/*say-* [sɛ] 'say-' (as in *say-s* 'say-3SG.IND.PRES', *sai-d* 'say-PRET'), with the alternation [ei] and [ɛ] for such inflectional categories being unique for English verbs (cf. *lay, lay-s, lai-d*; *pay, pay-s, pai-d*; *stray, stray-s, stray-ed*; *neigh, neigh-s, neigh-ed*; etc. – all with [ei] unaltered).

(8)   Suppletion can **come about** in two very different ways:
   (i)   through the **combination** of distinct stems in single paradigms (filling in paradigmatic gaps or replacing non-optimal stem forms, or out of sheer playfulness);
   (ii)   through phonological **dissimilation** of (irrecoverable) single stems (in the course of regular/irregular sound change or analogical sound substitution)
 – which is **diachrony**, and which distinction doesn't matter for synchronic grammar/lexicon either.

(i) **combination**

a. Fr. *all-/v-/i-* 'go-': combining the stems Lat. *ambul-*, *vad-*, *i-*;

b. G. *geh-/gVng-* PRES vs. PRET/PRTCPII: combining the irregular short-form verb OHG *gā-* and etymologically unrelated strong verb OHG *gang-*;

c. E. *Liverpool/Liverpudl-ian*: with second part of place name, from OE *lifer-pōl* 'pool with muddy water', playfully-derogatively replaced by stem of similar form and meaning, *puddle*;

d. Archi (Nakh-Daghestanian) *bič'ni/boždo* 'corner of a sack' SG vs. PL: SG/PL themselves being cumulated with these two stems, which are not cognate despite a certain phonological similarity;

e. Languages of Papua New Guinea where suppletive stems for verb 'give' originate from reanalyses of recipient cross-reference affixes as stems (Comrie 2003), with the stem itself being originally zero, as in Amele (Roberts 1987):

ut-ec	3SG-INF	'to give to him/her'
ih-ec	2SG-INF	'to give to you SG'
it-ec	1SG-INF	'to give to me'
al-ec	2/3DU-INF	'to give to you/them two'
il-ec	1DU-INF	'to give to us two'
ad-ec	2/3PL-INF	'to give to you/them PL'
ig-ec	1PL-INF	'to give to us PL'

(ii) **dissimilation**

a. It. *ess-/son-/se-/si-/s-/Ø-* (or *e-*) copula 'be' (*ess-ere* INF, *son-o* 1SG, *se-i* 2SG, *si-ete* 2PL, *s-iamo* 1PL, *Ø-e* bzw. *e-Ø* 3SG), or also, simpler, Lat. *sum-/es-* 1SG/1PL/3PL vs. 2SG/3SG/2PL.IND.PRES: phonologically regular accent-dependent stem-alternation *H_1és-/*H_1s-* in IE and different reductions depending on accent (plus further analogical changes in Italian);

b. Lat. *(fer-/)tul-/lat-* 'carry' (PRES vs.) PERF vs. SUPINUM: with *lat-* < verbal adjective *tul-át-*, whose unstressed first syllable got reduced (vowel, consonant cluster);

c. Grk. *énas/éna/mía* cardinal numeral '1' MASC/NEUT/FEM: all deriving, by regular sound change of analogy, from IE stem *sem-* zurückgehend: *sem-s > hens > ..., *sem > hen > ..., *sm-iH_2 > m(h)ia);

d. E. *Birmingham/Brumm-ie*: attested for a long time with /r/ metatheses back and forth and variable vowel (place name since 1086 in the form *Beormingeham* 'homestead of the descendants of Beorma', then *Bromwichham*, *Brummagem*, *Brumm* etc., hence demonym *Brumm-ie*);

e. E. *say-* [seɪ]/[sɛ]: alternation the result of idiosyncratic (high-frequency word) monophthongisation or laxing before consonantal inflectional suffix.

(9) No strict implications between strength and kinds of origin of suppletion:
strong and combinatory: e.g., 7a/8ia
strong and dissimilatory: e.g., 8iib, 8iic
weak and combinatory: e.g., 8ib, 7b/6ic
weak and dissimilatory: e.g., 7c/8iie

III. Universals/preferences sometimes assumed to rein in suppletion

(10) morphological type:
flexive   >   agglutinative
(exponents cumulative, variant, etc.)   (exponents separative, invariant, etc.)

(11) kind of morphology:
derivation > inflection (> cliticisation)

(12) meaning, form, and frequency of stems,
across word classes (a-e) and specific to particular word classes (f-i):
a.   frequent   >   rare   (subsuming much else; a **law of change**:
                                         rarely occurring irregularities will be regularised)
b.   short   >   long
c.   general   >   particular meaning
d.   colourless   >   colourful
e.   EGO-proximal >   EGO-distal
f.   nouns: persons   > animals > things > abstract
g.   adjectives: GOOD/BAD > LARGE/SMALL > OLD/NEW > ...
h.   numerals: ONE > TWO > higher, with: round > unround
i.   verbs: BE > HAVE > DO > motion/posture > SEE, GIVE/SAY, HOLD, ...

(13) word class:
a.   verbs   >   nouns
b.   closed   >   open class
        aa.   auxiliary/light verbs > full verbs
        bb.   pronouns > nouns

(14) derivational category:
a.   verbs: Aktionsart/verbal number > causatiev > ...
b.   nouns: motion (gender-switch) > provenance (town > country) > ...
c.   numerals: ordinal > ...
d.   change of word class: deadjectival adverbialisation > ...

(15) inflectional category:
a.   verbs: aspect > tense > mood > polarity > number$_{agree}$ > person$_{agree}$ ...
                        > (*)diathesis
b.   nouns: number > ($^?$)case > (*)possessor > (*)state > (*)definiteness
c.   adjectives/adverbs: comparison > ... > (*)gender$_{agree}$
d.   general: inherent > contextually assigned categories
                        semantic > morphosyntactic categories

IV. Paradigmatic geometry of suppletion

(16) Inflectional paradigm structures represented through geometric arrangements
(following Rasmus Rask, Roman Jakobson, Louis Hjelmslev, et al., see Plank 1991):
a.   dominance among categories: horizontal dominant, vertical dominated
b.   markedness: unmarked top and left (i.e., first as you scan a page)
c.   relationships among terms that license
        aa.   non-distinction of exponents (syncretism)
        bb.   distinction of stems (suppletion):
        the closer, the more similar (Thesaurus Principle); **neighbourhood constraint**,
        in association with uniformity of order constraint and limitation of dimensions.

(17) **Possible** patterns of distributing suppletive stems across inflectional paradigms

(i) Stem distributions defined through single categories

(A)

	SG	PL		SG	PL
NOM	*x*	*y*		*x*	*x*
ACC	*x*	*y*		*y*	*y*
GEN	*x*	*y*		*y*	*y*

the simplest distribution: for numbers, stem *x* selected by SG, stem *y* by PL;
for cases, stem *x* selected by NOM, stem *y* by other cases.

(ii) Stem distributions defined through more than one/all categories

(Ba)

	SG	PL
NOM	*x*	*y*
ACC	*y*	*y*
GEN	*y*	*y*

(Bb)

	SG	PL
NOM	*u*	*v*
ACC	*w*	*x*
GEN	*y*	*z*

loners:
stem *x* selected by NOM.SG, *y* elsewhere

lonely crowd:
each stem selected by unique case.number
– complex pattern, but not in violation of
neighbourhood constraint

(Ca)

	SG	PL
NOM	*x*	*y*
ACC	*x*	*y*
GEN	*y*	*y*

(Cb)

	SG	PL
NOM	*x*	*x*
ACC	*x*	*y*
GEN	*y*	*y*

extension to horizontal **or** vertical neighbours
stem *y* selected by PL and GEN.SG, *y* elsewhere

... to horizontal **and** vertical neighbours
stem *x* selected by SG (except GEN) and
NOM.PL, *y* by PL (except NOM) and GEN.SG

(Cc)

	SG	PL
NOM	x	*y*
ACC	*y*	*y*
GEN	*y*	x

CROSSOVER!

violation of neighbourhood constraint

as long as as long as term ordering is uniform

stem *x* selected by NOM.SG and GEN.PL,
y elsewhere

(18) What are the **real** distributions of suppletive stems across inflectional paradigms?
Are any of the **possible** patterns unattested?

(19) Pattern A is surely real, and is the most frequent.

a.   noun *čelovek-* (2nd decl., masc.)/*ljud-* (3rd decl., fem.) 'man, people' in Russian (Slavonic, IE) – number dominant over case?

	SG	PL
NOM	*čelovek*	*ljud-i*
ACC	*čelovek*	*ljud-i*
GEN	*čelovek-a*	*ljud-ej*
LOC	*čelovek-e*	*ljud-jax*
DAT	*čelovek-u*	*ljud-jam*
INS	*čelovek-om*	*ljud-´mi*

b.   proximal demonstrative pronoun *es(e)-/am(V)-* 'this' in Georgian (South Caucasian; Hewitt 1995: 77-78) – case dominant over number?

	SG	COLLECTIVE	PL	
NOM	*es*	*ese-eb-i*	*ese-n-i*	(direct case)
ERG	*ama-n*	*ame-eb-ma*		(oblique cases)
GEN	*am-is(a)*	*ame-eb-is(a)*		
DAT	*ama-s(a)*	*ame-eb-s(a)*	*ama-t(a)*	
INS	*am-it(a)*	*ame-eb-it(a)*		
ADV	*ama-d(a)*	*ame-eb-ad(a)*		

c.   adjective *bon-/mel-/opt-* 'good' in Latin (Italic, IE) – gradation dominant

POSITIVE

	SG			PL		
	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	*bon-us*	*bon-um*	*bon-a*	*bon-i*	*bon-a*	*bon-ae*
ACC	*bon-um*	*bon-um*	*bon-am*	*bon-os*	*bon-a*	*bon-as*
GEN	*bon-i*	*bon-i*	*bon-ae*	*bon-orum*	*bon-orum*	*bon-arum*
...						

COMPARATIVE

	SG			PL		
	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	*mel-ior*	*mel-ior*	*mel-ior*	*mel-ior-es*	*mel-ior-a*	*mel-ior-es*
ACC	*mel-ior-em*	*mel-ior*	*mel-ior-em*	*mel-ior-es*	*mel-ior-a*	*mel-ior-es*
GEN	*mel-ior-is*	*mel-ior-is*	*mel-ior-is*	*mel-ior-um*	*mel-ior-um*	*mel-ior-um*
...						

SUPERLATIVE

	SG			PL		
	MASC	NEUT	FEM	MASC	NEUT	FEM
NOM	*opt-im-us*	*opt-im-um*	*opt-im-a*	*opt-im-i*	*opt-im-a*	*opt-im-ae*
ACC	*opt-im-um*	*opt-im-um*	*opt-im-am*	*opt-im-os*	*opt-im-a*	*opt-im-as*
GEN	*opt-im-i*	*opt-im-i*	*opt-im-ae*	*opt-im-orum*	*opt-im-orum*	*opt-im-arum*
...						

d.   Papantla Totonacan (isolate; Corbett 2009: 30, pc Paulette Levi) INCOMPLETIVE of verb *a':n(a:)/pin(a:)* 'go' (same pattern in other aspects, COMPLETIVE und PERFECTIVE, and equally with verbs 'lie' and 'come') – person dominant over number?

		SG	PL
1	EXCL	*k-an*	*(k-)aná:*
	INCL		*aná:(-w)*
3		*an*	*t-a':n*
2		*pín-a*	*piná:-tit*

e.   Murle (Nilo-Saharan; Arensen 1982: 60, 72, Veselinova 2006: 101-102)
– number dominant over person?

IMPERFECT		regular verb 'climb'		suppletive verb 'go'	
		SG	PL	SG	PL
1	EXCL	*ka-tood-i*	*ka-tɔɔt*	*ka-kɔ*	*ka-vɔ*
	INCL		*ka-toodd-a*		*ka-vɔy-a*
2		*a-tood-i*	*a-toodd-u*	*a-kɔy-i*	*a-vɔy-u*
3		*a-tɔɔt*	*a-tɔɔt*	*a-kɔ*	*a-vɔ*

where:

ka-	1	*-i*	1/2SG
a-	2/3	*-a*	1PL.INCL
		-Ø	1PL.EXCL/3
		-u	2PL

f.   cardinal numeral *hen-/m-* '1' (equally when negated: *oud-en-/oude-m-*, *mēd-en-/mēde-m-* 'nobody') in Ancient Greek (Hellenic, IE; Kieckers 1926: 75-79) [!!!]

	MASC	NEUT	FEM
NOM	*heĩ-s*	*hén*	*m-ía*
ACC	*hén-a*	*hén*	*m-ían*
GEN	*hen-ós*	*hen-ós*	*m-iãs*
DAT	*hen-í*	*hen-í*	*m-iã*

(20)   Patterns B, loners, are common.

a.   copula *be* in English (Germanic, IE)

PRESENT

	INDICATIVE		SUBJUNCTIVE		IMPERATIVE	
	SG	PL	SG	PL	SG	PL
1	*am*	*are*	*be*	*be*		
3	*is*	*are*	*be*	*be*		
2	*are*	*are*	*be*	*be*	*be*	*be*

PRETERITE

	INDICATIVE		SUBJUNCTIVE	
	SG	PL	SG	PL
1	*was*	*were*	*was/were*	*were*
3	*was*	*were*	*was/were*	*were*
2	*were*	*were*	*were*	*were*

b.   adjective *lilla* (or dialectally *vesle*, being more strongly suppletive vis-à-vis *lit-* than *lilla*)/*små*/*lit-*/*min(d)-* 'little' in Norwegian (Germanic, IE; pc Allison Wetterlin)

				SG	PL
DEF	POS			*lille/vesle*	*små*
		COMP		*mind-re*	*mind-re*
		SUPER		*min-ste*	*min-ste*
INDEF	POS		MASC	*lit-en*	*små*
		(	FEM	*lit-a*)	
			NEUT	*lit-e*	
		COMP		*mind-re*	*mind-re*
		SUPER		*min-ste*	*min-ste*

c. personal pronoun 1st person in English (Germanic, IE): Lonely Crowd

	SG	PL (or ASSOCIATIVE)
SBJ	*I*	*we*
OBJ	*me*	*us*
POSS	*my*	*our*

(21) Pattern Ca, horizontal or vertical extensions to neighbouring cells, is common.

a. noun *člóvek-/ljud-* 'man, people' in Slovene (Slavonic, IE)

	SG	DU	PL
NOM	*člóvek*	*človẹ́k-a*	*ljud-ệ*
ACC	*človẹ́k-a*	*človẹ́k-a*	*ljud-î*
GEN	*človẹ́k-a*	*ljud-î*	*ljud-í*
LOC	*človẹ́k-u*	*ljud-ẹ́h*	*ljud-ẹ́h*
DAT	*človẹ́k-u*	*človẹ́k-oma*	*ljud-ệm*
INS	*človẹ́k-om*	*človẹ́k-oma*	*ljud-mí*

b. verb *a(i)ll-/v-/i-* 'go' in French (Italic, IE)
PRESENT

	INDICATIVE		SUBJUNCTIVE		IMPERATIVE	
	SG	PL	SG	PL	SG	PL
1	*v-ais*	*all-ons*	*aill-e*	*all-ions*		
2	*v-as*	*all-ez*	*aill-es*	*all-iez*	*v-a(s)*	*all-ez*
3	*v-a*	*v-ont*	*aill-e*	*aill-ent*		

IMPERFECT (etc.)

	SG	PL
1	*all-ais*	*all-ions*
2	*all-ais*	*all-iez*
3	*all-ait*	*all-aient*

FUTURE (and CONDITIONAL)

	SG	PL
1	*i-r-ai*	*i-r-ons*
2	*i-r-as*	*i-r-ez*
3	*i-r-a*	*i-r-ont*

c. verb 'come, go' in Georgian (South Caucasian; Hewitt 1995: 448-452)
– non-canonical according to Hippisley et al. 2004, but fine geometry:
four compact blocks

stem *-di-*:	present, imperfect, present subjunctive
stem *-vid-*:	conditional, future subjunctive, aorist, aorist subjunctive
stem *-va(l)-*:	future
stem *-(s)vl-*:	perfect, pluperfect, third subjunctive, non-finite

plus one orderly extension: *-di-* also in 2SG/PL imperative

d. verb 'beat' in Dusur (Skou, New Guinea; Donohue 2004: Chap. 7.2.4)

A \ P	1SG	2SG	3SG.NF	3SG.F	1PL	2PL	3PL	3PL.NF	3PL.F
2SG	*bá*	–	*bá*	*páng*	*jí*	–	*jí*	*jí*	*jí*
3SG.F	*wá*	*wá*	*wá*	*wáng*	*jí*	*jí*	*jí*	*jí*	*jí*
3SG.NF	*ká*	*ká*	*ká*	*láng*	*jí*	*jí*	*jí*	*jí*	*jí*
1SG	–	*ká*	*ká*	*láng*	–	*jí*	*jí*	*jí*	*jí*
2PL	*ká*	–	*ká*	*láng*	*jí*	–	*jí*	*jí*	*jí*
1PL	–	*ká*	*ká*	*táng*	–	*jí*	*jí*	*jí*	*jí*
3PL	*já*	*já*	*já*	*jáng*	*jí*	*jí*	*jí*	*jí*	*jí*

Columns distinguish person, number, gender of patient, lines those of agent; thus, e.g., *bá* 'thou beatest me', *jí* 'thou beatest us'. NF is non-feminine.

(22) Pattern Cb, extensions to horizontal and vertical neighbours, is also common.

a. copula *esse* 'be' in Latin (Italic, IE), indicative present active

	SG	PL
1	*su-m*	*su-mus*
3	*es-t*	*su-nt*
2	*es*	*es-tis*

b. verb *mett-ere* 'put' and many others in Italian (Italic, IE), 2nd conj., PASSATO REMOTO

	SG	PL
2	*mett-esti*	*mett-este*
1	*mis-i*	*mett-emmo*
3	*mis-e*	*mis-ero*

c. verb *f(a)-are* 'do' in Italian (Italic, IE) – neighbourhood constraint only satisfied with different term orders in different subparadigms!

PASSATO REMOTO, suppletive stems /fatʃ-/, /fetʃ-/

	SG	PL
2	*fac-esti*	*fac-este*
1	*fec-i*	*fac-emmo*
3	*fec-e*	*fec-ero*

indicative present, suppletive stems /fatʃtʃ-/, /f(a)-/

	SG	PL	
1	*facc-io*	*facc-iamo*	(Regionally 1SG also *f-o*, with *facc-* 1PL
2	*fa-i*	*f-ate*	as loner.)
3	*f-a*	*f-anno*	

(23) Alas, pattern Cc, CROSSOVER, also occurs, if infrequently.

a. verb *ven-ire* 'come' in Italian (Italic, IE), 3rd conj.; indicative present suppletive stems /vɛŋ/, /ven, vien/ (assuming this last alternation is accent-dependent morphophonology rather than suppletion; if not, in line with neighbourhood constraint)

	SG	PL
1	*veng-o*	*ven-iamo*
2	*vien-i*	*ven-ite*
3	*vien-e*	*veng-ono*

a'. with alternative term orders

	SG	PL			SG	PL
2	*vien-i*	*ven-ite*		1	*veng-o*	*ven-iamo*
1	*veng-o*	*ven-iamo*		3	*vien-e*	*veng-ono*
3	*vien-e*	*veng-ono*		2	*vien-i*	*ven-ite*

a". with non-uniform term orders across subparadigms

	SG		PL
1	*veng-o*	3	*veng-ono*
2	*vien-i*	2	*ven-ite*
3	*vien-e*	1	*ven-iamo*

b. other than *ven-ire*, a handful 2nd and 3rd conjugation verbs in Italian with stem-final /n, l/: *sal-ire* 'mount', *dol-ére* 'hurt', *ten-ére* 'hold', *val-ére* 'be worth/valid', *riman-ére* 'remain', *por-re/pon-ére* 'put', and, with an added complication at 1PL, *vol-ére* 'wish'. (Phonological history: analogical addition of velar after model of verbs in /ng, lg/; then regular palatalisation /ɲ, ʎ/, then analogical levelling.)

e.g., *vol-ére* 'wish', 2nd conj.
suppletive stems /voʎ-/, /vuol-, vol-/, /vuo-/ in indicative present

	SG	PL			SG	PL
1	*vogli-o*	*vogl-iamo*		1	*vogli-o*	*vogl-iamo*
2	*vuo-i*	*vol-ete*		3	*vuol-e*	*vogli-ono*
3	*vuol-e*	*vogli-ono*		2	*vuo-i*	*vol-ete*

c. a few verbs of the 3rd conjugation in Italian with stem-final /r/:
mor-ire 'die', *appar-ire* 'appear'. (Phonological history: vocalisation of final /r/.)

e.g., *mor-ire* 'die', 3rd conj., indicative present

	SG	PL
1	*muoi-o*	*mor-iamo*
2	*muor-i*	*mor-ite*
3	*muor-e*	*muoi-ono*

(24) Crossover 1SG–3PL averted thanks to good neighbours

(i) 1SG = 1PL = 3PL

a. *pot-ére* 'be able to', 2nd conj.
suppletive stems /pot-/, /poss-/, /puo-/ in indicative present

	SG	PL	
1	*poss-o*	*poss-iamo*	(Old Italian 1PL *pot-emo*, like pattern (23a))
3	*puo*	*poss-ono*	
2	*puo-i*	*pot-ete*	

(ii) 1SG = 3SG = 3PL

a. PASSATO REMOTO of *ven-ire* 'come'; suppletive stems /ven/, /venn/

	SG	PL
2	*ven-esti*	*ven-iste*
1	*venn-i*	*ven-immo*
3	*venn-e*	*venn-ero*

b. imperative of *ven-ire* 'come'; suppletive stems /ven, vien/, /veŋ/

	SG	PL
2	*vien-i*	*ven-ite*
1	–	*ven-iamo*
3	*veng-a*	*veng-ano*

(iii)   1SG = 2SG = 3SG = 3PL

a. *dov-ére* 'must, should', 2nd conj.
suppletive stems /dov-/, /dev-, debb-/, /dobb-/ in indicative present

	SG	PL
1	*dev-o / debb-o*	*dobb-iamo*
2	*dev-i*	*dov-ete*
3	*dev-e*	*dev-ono / debb-ono*

b. *fin-ire* 'finish', 3rd conj., with stem extension *-isc-*

	SG	PL
1	*fin-isc-o*	*fin-iamo*
2	*fin-isc-i*	*fin-ite*
3	*fin-isc-e*	*fin-isc-ono*

V.   Is the paradigmatic distribution of suppletive stems subject to constraints, and of what temporal nature would they be?

(25)   There can be no (categorical) **timeless laws** regulating such distributions: in even a modest crosslinguistic sample, every conceivable pattern is attested, including the crossover pattern. Therefore, mental grammars are humanly possible where suppletive stems are distributed across paradigms in even the most complex pattern.

(26)   The different ways of origin of suppletion are synchronically irrelevant: they are not necessarily reflected in differences that would be recognisable by a language learner, such as differing strengths of suppletion.

(27)   However, these different ways of diachronically bringing about suppletion themselves can also be subject to constraints – and one kind of origin is, according to current evidence.
   a.   When suppletion is created through phonological dissimilation of once unitary stems, paradigm structures need not be respected: suppletive stems with this kind of origin can be distributed randomly across paradigms, following phonological rather than morphological guidelines.
   b.   But when suppletion is created through the combination of distinct stems in one paradigm, paradigm structures must be respected: in particular, such combinations must not result in crossover distributions.

(28)   Which goes to show that there are **laws of change**, constraining reanalyses (source > result), which are non-trivially distinct from **timeless laws,** constraining linguistic structures (= mental lexicons-and-grammars) at any and all times, regardless of their past and future.

(29)   But there are timeless laws, too, as non-trivially distinct from laws of change …