

Interactions between defectiveness and syncretism

Gregory Stump
University of Kentucky
gstump@uky.edu

(*Defective Paradigms: Missing forms and what they tell us, The British Academy, April 10-11, 2008*)

1. Interactions of defectiveness with syncretism

TABLE 1. A hypothetical pattern of syncretism

	A	B	C
D	v	w	x
E	y	v	z

Domain of syncretism: {A, D}, {B, E}

TABLE 2. A hypothetical pattern of defectiveness

	A	B	C
D	v	w	x
E	--	--	--

Domain of defectiveness: {A, E}, {B, E}, {C, E}

- (1) Three canonical interactions between defectiveness and syncretism
- Where P_1, P_2 are paradigms belonging to the same inflection class: DEFECTIVENESS OVERRIDES SYNCRETISM in P_2 if two cells belonging to a domain of syncretism in P_1 correspond to two cells in P_2 one of which belongs to a domain of defectiveness.
 - SYNCRETISM OVERRIDES DEFECTIVENESS in a paradigm P if one or more syncretic forms are the only realizations in a morphosyntactically coherent set of cells in P .
 - SYNCRETISM DEFINES A DOMAIN OF DEFECTIVENESS in a paradigm P if the cells constituting a domain of defectiveness in P are identical to the cells constituting a domain of syncretism in another paradigm belonging to the same inflection class.

TABLE 3. Three canonical interactions between defectiveness and syncretism

	A	B	C
D	v	w	x
E	--	--	--

(a) Defectiveness overrides syncretism

	A	B	C
D	v	w	x
E	--	v	z

(b) Syncretism overrides defectiveness

	A	B	C
D	v	w	x
E	v	w	x

(c) Syncretism defines a domain of defectiveness

	A	B	C
D	--	w	x
E	y	--	z

2. Interactions between syncretism and defectiveness in early Indic declensional paradigms

2.1. The pronoun ENA in Vedic: Defectiveness overrides and is overridden by syncretism

TABLE 4. Forms of the relative pronoun YA in Vedic
(Whitney 1889: §509; Macdonell 1910: §398)

	Singular			Dual			Plural		
	Masc	Neut	Fem	Masc	Neut	Fem	Masc	Neut	Fem
Nominative	yas	yat	yā	yau ^a	ye		ye	yāni ^a	yās
Accusative	yam		yām				yān		
Instrumental	yena ^b		yayā	yābhyām			yebhis, yais		yābhis
Dative	yasmai		yasyai				yebhyas		yābhyas
Ablative	yasmāt		yasyās						
Genitive	yasya						yos, yayos		yeṣām
Locative	yasmin		yasyām			yeṣu	yāsu		
a. sometimes yā			b. sometimes yēnā						

TABLE 5. Forms of the pronoun ENA ‘he/she/it’ in Vedic
(Whitney 1889: §500; Macdonell 1910: §395)

	Singular			Dual			Plural		
	Masc	Neut	Fem	Masc	Neut	Fem	Masc	Neut	Fem
Nom		Ⓢ		Ⓢ	Ⓢ			Ⓢ	Ⓢ
Acc	enam	enat	enām	enau	ene		enān	enāni	enās
Ins	enena		enayā	enos, enayos					
Dat									
Abl									
Gen									
Loc									
Ⓢ: Syncretism with the cell immediately below is overridden.									

The defectiveness of this paradigm cannot be plausibly seen as the effect of any independent principle:

- One cannot, for example, say that ENA lacks instrumental dual forms because it is semantically incompatible with the instrumental dual, since it has both instrumental and dual forms.
- Nor can one say that ENA lacks certain forms because it lacks the stem on which those forms are based, since paradigms in the pronominal declension are in general built on a single stem in *a* (e.g. *ya-*, *ena-*).
- Vedic has other clitic pronouns that lack nominative forms. Even so, one cannot say that ENA lacks nominative forms because this is a general feature of clitic pronouns in Vedic; the clitic pronoun TVA ‘one, many a one’, for instance, does have nominative forms (Macdonell 1910: §396).
- Finally, Vedic has clitic pronouns that seem to be unaccented alternants of nonclitic pronouns. But the forms of ENA are semantically different from other third person pronouns: they are used anaphorically but not deictically, while those of (e.g.) ETAT and IDAM may be used either anaphorically or deictically.

TABLE 6. Independent and clitic forms of first- and second-person pronouns in Vedic

		Singular		Dual		Plural	
		Indep.	Clitic	Indep.	Clitic	Indep.	Clitic
First person	Nom	aham		āvām		vayam	
	Acc	mām	mā	āvām	nau	asmān	nas
	Ins	mayā		āvābhyām		asmābhiḥ	
	Dat	mahyam	me	āvābhyām	nau	asmabhyam	nas
	Abl	mat		āvābhyām		asmat	
	Gen	mama	me	āvayoḥ	nau	asmākam	nas
	Loc	mayi		āvayoḥ		asmāsu	
Second person	Nom	tvam		yuvām		yūyam	
	Acc	tvām	tvā	yuvām	vām	yuṣmān	vas
	Ins	tvayā		yuvābhyām		yuṣmābhiḥ	
	Dat	tubhyam	te	yuvābhyām	vām	yuṣmabhyam	vas
	Abl	tvat		yuvābhyām		yuṣmat	
	Gen	tava	te	yuvayoḥ	vām	yuṣmākam	vas
	Loc	tvayi		yuvayoḥ		yuṣmāsu	

- (2) Nominative/accusative syncretism in the Vedic pronominal declension
- neut nom sg = neut acc sg
 - masc nom du = masc acc du
 - neut/fem nom du = neut/fem acc du
 - neut nom pl = neut acc pl
 - fem nom pl = fem acc pl

2.2. A follow-up on the pronoun ENA in post-Vedic Sanskrit

In post-Vedic Sanskrit, the neuter accusative singular form *enat* also begins to be used in the nominative, as in (3) and (4).

- (3) **brahmaṇe svāheti,** **tad enat** **prīṇāti.**
 holy.power: = svāhā + iti **thus it:** **please:**
 NEUT.DAT.SG hail! DIRECT DISCOURSE NEUT.ACC.SG 3SG.PRES.IND.ACT
 MARKER

“To the holy power hail”; thus he delights it [the holy power].

- tad enat** **prītaṃ** **kṣatrād** **gopāyati.**
 thus it: pleased: lordly.power: guard:
 NEUT.NOM.SG. NEUT.NOM.SG NEUT.ABL.SG 3SG.PRES.IND.ACT

Thus, delighted, it guards (him) from the lordly power.

[*Aitareya Brāhmaṇa* 7.22.4; cf. Keith 1920: 74, 311]

- (4) **yā vai sā mūrtir ajāyata annaṃ vai tat.**
 REL.PRON: indeed that: form: be.born: food: indeed that:
 FEM.NOM.SG FEM.NOM.SG FEM.NOM.SG 3SG.IMP.F.MID NEUT.NOM.SG NEUT.NOM.SG
 The form that was born was indeed food.

tad enat sṛṣṭaṃ parān-atyajigāmsat.
 then it: created: directed.away-escape.DESID:
 NEUT.NOM.SG NEUT.NOM.SG 3SG.IMP.F.ACT
 It [= the food], when created, sought to go away.

[*Aitareya Āraṇyaka* 2.4.3; cf. Keith 1909: 229]

The masculine accusative dual form *enau* also takes on nominative uses, as in (5) and (6).

- (5) **athainau dadhi-madhu samaśnuto**
 = atha + enau sour.milk-honey: obtain:
 then they: MASC.NOM.DU NEUT.ACC.SG 3DU.PRES.IND.ACT
 Then those two [bride & groom] obtain sour milk and honey

yad vā haviṣyaṃ syāt.
 REL.PRON: or fit.for.sacrifice: be:
 NEUT.NOM.SG NEUT.NOM.SG 3SG.OPT.ACT
 or whatever might be suitable for sacrifice.

[*Mānavagrhyasūtra* 1.12.5; cf. Dresden 1941: 63]

- (6) **tasmād enau prathamau śasyete svargyau**
 therefore they: first: recite: heavenly:
 MASC.NOM.DU MASC.NOM.DU 3DU.PRES.IND.PASS MASC.NOM.DU
 Therefore these two are recited first as being heavenly.

[*Kauṣītaki-Brāhmaṇa* 22.1.21; Keith 1920: 74, 467]

TABLE 7. Forms of the pronoun ENA 'he/she/it'
 in post-Vedic Sanskrit

	Singular			Dual			Plural		
	Masc	Neut	Fem	Masc	Neut	Fem	Masc	Neut	Fem
Nom		enat		enau	Ⓢ			Ⓢ	Ⓢ
Acc	enam		enām		ene		enān	enāni	enās
Ins	enena		eneyā						
Dat									
Abl									
Gen				enos, enayos					
Loc									

Ⓢ: Syncretism with the cell immediately below is overridden.

2.3. Defective neuter an-stems in Classical Sanskrit: Syncretism defines a domain of defectiveness

TABLE 8. The paradigm of the neuter noun YAKAN ‘liver’ in Classical Sanskrit

	Singular	Dual	Plural
Nom			
Voc			
Acc			
Ins	yaknā	yakabhyām	yakabhis
Dat	yakne		yakabhyas
Abl	yaknas	yaknos	yaknām
Gen			yakasu
Loc	yakni, yakani		

TABLE 9. The paradigm of the neuter noun YAKṚT ‘liver’ in Classical Sanskrit

	Singular	Dual	Plural
Nom			
Voc	yakṛt	yakṛtī	yakṛnti
Acc			
Ins	yakṛtā	yakṛdbhyām	yakṛdbhis
Dat	yakṛte		yakṛdbhyas
Abl	yakṛtas	yakṛtos	yakṛtām
Gen			yakṛtsu
Loc	yakṛti		

- (7) ASAN ‘blood’ (nominative, vocative, and accusative forms supplied by the full paradigm of ASṚJ)
 ŚAKAN ‘ordure’ (... by the full paradigm of ŚAKṚT)
 ĀSAN ‘mouth’ (... by the full paradigm of ĀSYA)
 UDAN ‘water’ (... by the full paradigm of UDAKA)
 DOṢAN ‘forearm’ (... by the full paradigm of DOS)
 YŪṢAN ‘broth’ (... by the full paradigm of YŪṢA)

TABLE 10. The paradigm of the neuter noun NĀMAN ‘name’ in Classical Sanskrit

	Singular	Dual	Plural
Nom			
Voc	nāma*	nāmnī, nāmanī	nāmāni
Acc			
Ins	nāmnā	nāmabhyām	nāmabhis
Dat	nāmne		nāmabhyas
Abl	nāmnas	nāmnos	nāmnām
Gen			nāmasu
Loc	nāmnī, nāmanī		

* voc. sg. sometimes *nāman*

2.4. The pronoun ढA in Prākṛit: A complex interaction between defectiveness and syncretism

In Middle Indic, the pronoun ENA becomes more defective than ever: thus, in the Māhārāṣṭrī, Śaurasenī and Māgadhī Prākṛits, its use becomes restricted to a single accusative singular form *eṇam* for all three genders (Pischel 1981:§431).

But alongside the pronoun ENA, the Prākṛits exhibit a distinct pronoun ढA which, like ENA, is enclitic in form and anaphoric in interpretation.

TABLE 11. Forms of the Prākṛit pronoun ढA ‘he/she/it’ according to Hemacandra III.70,77 (Pischel 1877-80, vol. I: 87f; 1981: §431)

	Singular			Plural		
	Masc	Neut	Fem	Masc	Neut	Fem
Nom		Ⓢ		Ⓢ		
Acc	ṇam			ṇe		
Ins	ṇena		ṇāe	ṇehim		ṇāhim
Abl						
Dat						
Gen						
Loc						

Ⓢ: Syncretism with the cell immediately below is overridden.

(8) Some instances of syncretism in the Prākṛit pronominal declension

Nominative/accusative syncretism

- a. neut nom sg = neut acc sg
- b. masc nom pl = masc acc pl
- c. neut nom pl = neut acc pl
- d. fem nom pl = fem acc pl

Masculine/neuter/feminine syncretism

- e. masc acc sg = neut acc sg = fem acc sg

3. A theoretical conception of interactions between syncretism and defectiveness

3.1. Content paradigms and form paradigms

Following Stump (2002) and Stewart & Stump (2007), I assume that a language’s inflectional morphology is defined by reference to two types of paradigm.

A CONTENT PARADIGM is a set of pairs of the form $\langle L, \sigma \rangle$, where L is a lexeme and σ is a set of morphosyntactic properties with which L may be associated in syntactic structure. In particular, the content paradigm of a lexeme L is the set containing every pairing of L with a morphosyntactic property set with which it may be syntactically associated. Each such pairing is called a CONTENT CELL. A content paradigm expresses the range of syntactic uses to which a lexeme may be put.

A FORM PARADIGM is a set of pairs of the form $\langle R, \sigma \rangle$, where R is a lexeme’s root form and σ is a set of morphosyntactic properties for which R may inflect. In particular, the form paradigm of a root R is the set containing every pairing of R with a morphosyntactic property set for which R may inflect. Each such pairing is called a FORM CELL. A form paradigm expresses the range of inflectional realizations to which a root may give rise.

One might expect that the content cells in the content paradigm of a lexeme L will stand in a one-to-one correspondence to the form cells in the form paradigm of L's root form. Very often, however, this is not the case. The content paradigm of the Vedic relative pronoun YA has 63 cells, each consisting of the pairing of YA with one of the morphosyntactic property sets in Table 12.

TABLE 12. The morphosyntactic property sets defining the content paradigm of a Vedic pronoun

{G:masc, C:nom, N:sg}	{G:neut, C:nom, N:sg}	{G:fem, C:nom, N:sg}
{G:masc, C:acc, N:sg}	{G:neut, C:acc, N:sg}	{G:fem, C:acc, N:sg}
{G:masc, C:ins, N:sg}	{G:neut, C:ins, N:sg}	{G:fem, C:ins, N:sg}
{G:masc, C:dat, N:sg}	{G:neut, C:dat, N:sg}	{G:fem, C:dat, N:sg}
{G:masc, C:abl, N:sg}	{G:neut, C:abl, N:sg}	{G:fem, C:abl, N:sg}
{G:masc, C:gen, N:sg}	{G:neut, C:gen, N:sg}	{G:fem, C:gen, N:sg}
{G:masc, C:loc, N:sg}	{G:neut, C:loc, N:sg}	{G:fem, C:loc, N:sg}
{G:masc, C:nom, N:du}	{G:neut, C:nom, N:du}	{G:fem, C:nom, N:du}
{G:masc, C:acc, N:du}	{G:neut, C:acc, N:du}	{G:fem, C:acc, N:du}
{G:masc, C:ins, N:du}	{G:neut, C:ins, N:du}	{G:fem, C:ins, N:du}
{G:masc, C:dat, N:du}	{G:neut, C:dat, N:du}	{G:fem, C:dat, N:du}
{G:masc, C:abl, N:du}	{G:neut, C:abl, N:du}	{G:fem, C:abl, N:du}
{G:masc, C:gen, N:du}	{G:neut, C:gen, N:du}	{G:fem, C:gen, N:du}
{G:masc, C:loc, N:du}	{G:neut, C:loc, N:du}	{G:fem, C:loc, N:du}
{G:masc, C:nom, N:pl}	{G:neut, C:nom, N:pl}	{G:fem, C:nom, N:pl}
{G:masc, C:acc, N:pl}	{G:neut, C:acc, N:pl}	{G:fem, C:acc, N:pl}
{G:masc, C:ins, N:pl}	{G:neut, C:ins, N:pl}	{G:fem, C:ins, N:pl}
{G:masc, C:dat, N:pl}	{G:neut, C:dat, N:pl}	{G:fem, C:dat, N:pl}
{G:masc, C:abl, N:pl}	{G:neut, C:abl, N:pl}	{G:fem, C:abl, N:pl}
{G:masc, C:gen, N:pl}	{G:neut, C:gen, N:pl}	{G:fem, C:gen, N:pl}
{G:masc, C:loc, N:pl}	{G:neut, C:loc, N:pl}	{G:fem, C:loc, N:pl}

TABLE 4. Forms of the relative pronoun YA in Vedic (Whitney 1889: §509; Macdonell 1910: §398)

	Singular			Dual			Plural		
	Masc	Neut	Fem	Masc	Neut	Fem	Masc	Neut	Fem
Nominative	yas	yat	yā	yau ^a	ye		ye	yāni ^a	yās
Accusative	yam		yām				yān		
Instrumental	yena ^b		yayā	yābhyām			yebhis, yais		yābhis
Dative	yasmai	yasyai	yebhyas				yābhyas		
Ablative	yasmāt	yasyās	yebhis, yais				yābhis		
Genitive	yasya			yos, yayos			yeṣām		yāsām
Locative	yasmin		yasyām				yeṣu		yāsu
a. sometimes yā			b. sometimes yenā						

(9) A SYNCRETIC form cell: ⟨ya, [{G:neut, C:nom, N:sg} ∨ {G:neut, C:acc, N:sg}]}⟩

The notation $[\sigma \vee \tau]$ represents the disjunction of property sets σ and τ ; thus, the realization *yat* of this form cell realizes neuter gender, singular number, and either nominative or accusative case.

TABLE 13. The morphosyntactic property specifications defining the form paradigm of a root belonging to the Vedic pronominal declension

(N.B.: {G:masc, C:acc, N:sg} is abbreviated as {m-acc-s}, etc.)

{m-nom-s}	[{\n-nom-s} ∨ {\n-acc-s}]	{f-nom-s}
{m-acc-s}		{f-acc-s}
[{\m-ins-s} ∨ {\n-ins-s}]		{f-ins-s}
[{\m-dat-s} ∨ {\n-dat-s}]		{f-dat-s}
[{\m-abl-s} ∨ {\n-abl-s}]		[{\f-abl-s} ∨ {\f-gen-s}]
[{\m-gen-s} ∨ {\n-gen-s}]		
[{\m-loc-s} ∨ {\n-loc-s}]		{f-loc-s}
[{\m-nom-d} ∨ {\m-acc-d}]		[{\n-nom-d} ∨ {\n-acc-d} ∨ {\f-nom-d} ∨ {\f-acc-d}]
[{\m-ins-d} ∨ {\m-dat-d} ∨ {\m-abl-d} ∨ {\n-ins-d} ∨ {\n-dat-d} ∨ {\n-abl-d} ∨ {\f-ins-d} ∨ {\f-dat-d} ∨ {\f-abl-d}]		
[{\m-gen-d} ∨ {\m-loc-d} ∨ {\n-gen-d} ∨ {\n-loc-d} ∨ {\f-gen-d} ∨ {\f-loc-d}]		
{m-nom-p}	[{\n-nom-p} ∨ {\n-acc-p}]	{f-nom-p} ∨ {\f-acc-p}
{m-acc-p}		
[{\m-ins-p} ∨ {\n-ins-p}]		{f-ins-p}
[{\m-dat-p} ∨ {\m-abl-p} ∨ {\n-dat-p} ∨ {\n-abl-p}]		[{\f-dat-p} ∨ {\f-abl-p}]
[{\m-gen-p} ∨ {\n-gen-p}]		{f-gen-p}
[{\m-loc-p} ∨ {\n-loc-p}]		{f-loc-p}

3.2. Some definitions

(10) Instantiation

Where F is an inflectional category to which property p belongs, F:p is a well-formed INSTANTIATION of F.

Example. C:dat, C:abl, and C:ins are some well-formed instantiations of the inflectional category C (= CASE).

(11) Well-formed morphosyntactic property specifications

- a. Where σ is a set of compatible instantiations appropriate to some syntactic category C, σ is a well-formed SIMPLE MORPHOSYNTACTIC PROPERTY SPECIFICATION for C. A simple morphosyntactic property specification for some C that is not a proper subset of any other simple morphosyntactic property specification for C is COMPLETE.
- b. Where $\sigma_1, \dots, \sigma_n$ are well-formed simple morphosyntactic property specifications for some C, $[\sigma_1 \vee \dots \vee \sigma_n]$ is a well-formed DISJUNCTIVE MORPHOSYNTACTIC PROPERTY SPECIFICATION for C. In those instances in which $\sigma_1, \dots, \sigma_n$ are complete, $[\sigma_1 \vee \dots \vee \sigma_n]$ is likewise COMPLETE.

Example. (12a) is a simple morphosyntactic property specification for N and (12b) is a disjunctive morphosyntactic specification for N.

- (12) a. {G:neut, C:nom, N:sg}
- b. [{G:neut, C:nom, N:sg} ∨ {G:neut, C:acc, N:sg}]

(13) The ENCOMPASS relation

- a. A simple morphosyntactic property specification encompasses each of its subsets.
- b. A disjunctive morphosyntactic property specification encompasses what each of its disjuncts encompasses.

TABLE 14. Examples of the encompass relation

Morphosyntactic property specification	Encompassed morphosyntactic property specifications
{m-nom-s}	{m-nom-s}, {m-nom}, {m-s}, {nom-s}, {m}, {nom}, {s}, {}
[(n-nom-s) \vee (n-acc-s)]	{n-nom-s}, {n-acc-s}, {n-nom}, {n-acc}, {n-s}, {nom-s}, {acc-s}, {n}, {nom}, {acc}, {s}, {}

- (14) Morphosyntactic property specifications in content cells and form cells
 In a content cell $\langle L, \sigma \rangle$, the morphosyntactic property specification σ is simple and complete; in a form cell $\langle R, \tau \rangle$, the morphosyntactic property specification τ is complete, and may be simple or disjunctive.

Example. The morphosyntactic property set τ in a form cell $\langle R, \tau \rangle$ can be either a simple morphosyntactic property specification such as (12a) or a disjunctive specification such as (12b); but the morphosyntactic property set σ in a content cell $\langle L, \sigma \rangle$ can only be a simple specification (e.g. (12a) but not (12b)).

3.3. Paradigm functions and rules of paradigm linkage

A PARADIGM FUNCTION PF applies to a cell to yield its realization:

content cell $\langle L, \tau \rangle$
 $PF(\langle L, \tau \rangle) = \text{realization of } \langle L, \tau \rangle$

form cell $\langle R, \sigma \rangle$
 $PF(\langle R, \sigma \rangle) = \text{realization of } \langle R, \sigma \rangle$

In general, the realization $PF(\langle R, \sigma \rangle)$ of a form cell $\langle R, \sigma \rangle$ is defined as the result of applying a particular sequence of realization rules. (See Stump 2001 for extensive discussion.)

The realization of a content cell may be equated with that of a particular form cell. Where the realization of content cell $\langle L, \tau \rangle$ is equated with that of form cell $\langle R, \sigma \rangle$, this form cell is the FORM CORRESPONDENT of $\langle L, \tau \rangle$.

The pairing of content cells with their form correspondents is accomplished by RULES OF PARADIGM LINKAGE.

Often, a content cell and its form correspondent share the same morphosyntactic property specification. This relation is expressed by the rule of paradigm linkage in (15).

- (15) A rule of paradigm linkage: Where R is L's root, $PF(\langle L, \sigma \rangle) = PF(\langle R, \sigma \rangle)$.

Figure 1. Deponency

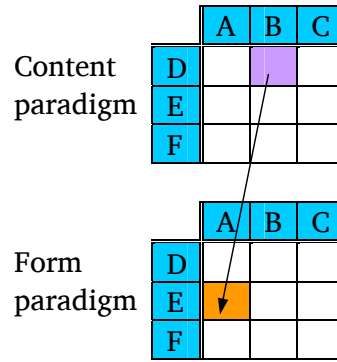


Figure 2. Heteroclasia

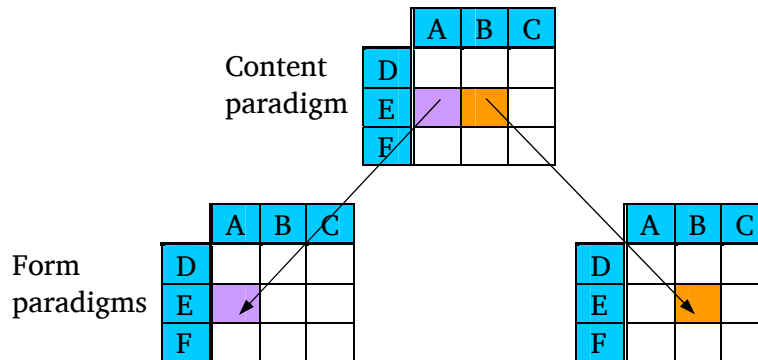
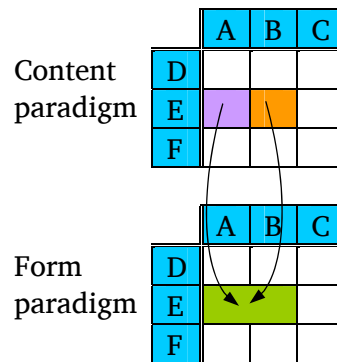
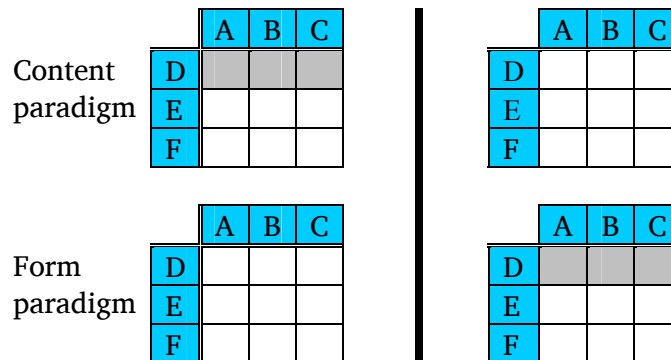


Figure 3. Syncretism



Syncretism is a property of form paradigms.

Figure 4. Two types of defectiveness



Defectiveness can be a property of both content paradigms and form paradigms.

A lexeme's inflection exhibits **syncretism** if two of its content cells have the same form correspondent.

A lexeme's inflection exhibits **defectiveness** if the realization of one of its content cells is not definable as the realization of a form cell.

(16) Rule of paradigm linkage for verbs in Early Indic:

Where R is L's root, $PF(\langle L, \tau \rangle) = PF(\langle R, \sigma \rangle)$ if and only if

(a) σ encompasses τ

and

(b) $PF(\langle L, \tau \rangle)$ is definable as $PF(\langle R, \sigma \rangle)$
(i.e. $\langle L, \tau \rangle$ is not defective)

(17) An instance of paradigm linkage in which σ encompasses τ but $\sigma \neq \tau$:

$PF(\langle YA, \{n\text{-nom-s}\} \rangle) = PF(\langle ya, [\{n\text{-nom-s}\} \vee \{n\text{-acc-s}\}] \rangle)$

(18) An instance of paradigm linkage which is blocked because $PF(\langle L, \tau \rangle)$ is not definable as $PF(\langle R, \sigma \rangle)$:

Content cell: $\langle ENA, \{n\text{-nom-s}\} \rangle$

Form cell: $\langle ena, [\{n\text{-nom-s}\} \vee \{n\text{-acc-s}\}] \rangle$

3.4. A formal analysis of interactions between syncretism and defectiveness

Given a lexeme L with root R, whether $PF(\langle L, \tau \rangle)$ is definable as $PF(\langle R, \sigma \rangle)$ may depend on the value of σ , that of τ , or those of both σ and τ . In other words, defectiveness can be defined by reference to content cells, to form cells, or to both.

The different types of interaction between defectiveness and syncretism stem from these different types of definition.

(19) Interactions between defectiveness and syncretism

- Defectiveness overrides syncretism** when the domain of defectiveness is defined as excluding one or more content cells.
- Syncretism overrides defectiveness** when the domain of defectiveness is defined as excluding one or more syncretic form cells.
- Syncretism defines a domain of defectiveness** when the domain of defectiveness is defined as containing one or more syncretic form cells.

Figure 5. **Defectiveness overrides syncretism**

		A	B	C	
Content paradigm	D				$\langle L, \tau \rangle$ has a realization iff τ encompasses {B}
	E				
	F				
		A	B	C	
Form paradigm	D				
	E				
	F				

Figure 6. Syncretism overrides defectiveness

		A	B	C	
Content paradigm	D				
	E				
	F				

		A	B	C	
Form paradigm	D				
	E				
	F				

$\langle R, \sigma \rangle$ has a realization iff σ encompasses $\{B\}$

Figure 7. Syncretism defines a domain of defectiveness

		A	B	C	
Content paradigm	D				
	E				
	F				

		A	B	C	
Form paradigm	D	--			
	E				
	F				

$\langle R, \sigma \rangle$ has a realization unless σ encompasses $\{B, D\}$

TABLE 15. Content paradigm of Vedic *ena*

	Singular			Dual			Plural		
	m.	n.	f.	m.	n.	f.	m.	n.	f.
Nom									
Acc	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Ins	(b)	(b)	(b)						
Dat									
Abl									
Gen									
Loc									

TABLE 16. Form paradigm of Vedic *ena*

	Singular			Dual			Plural		
	m.	n.	f.	m.	n.	f.	m.	n.	f.

(c)

- (20) Defectiveness of *ena* in Vedic
 Where σ encompasses τ ,
 $PF(\langle ena, \tau \rangle)$ is definable as $PF(\langle ena, \sigma \rangle)$ only if
- (a) τ encompasses $\{C:acc\}$,
 - (b) σ (or τ) encompasses $\{C:ins, N:sg\}$,
- or
- (c) σ encompasses $\{C:gen, N:du\}$.

TABLE 17. Content paradigm
of Classical Sanskrit YAKAN

	Singular	Dual	Plural
Nom			
Voc			
Acc			
Ins			
Dat			
Abl			
Gen			
Loc			

TABLE 18. Form paradigm
of Classical Sanskrit *yakan*

Singular	Dual	Plural
(19)	(19)	(19)

- (21) Defectiveness of YAKAN in Classical Sanskrit
Where σ encompasses τ ,
PF(\langle YAKAN, τ \rangle) is definable as PF(\langle *yakan*, σ \rangle)
unless σ encompasses {C:nom}.

TABLE 19. Content paradigm
of Prākṛit ṆA

	Singular			Plural		
	m.	n.	f.	m.	n.	f.
Nom						
Acc	(bi)	(bi)	(bi)	(bi)		
Ins	(a)	(a)	(a)	(a)	(a)	(a)
Abl						
Dat						
Gen						
Loc						

TABLE 20. Form paradigm
of Prākṛit *ṇa*

Singular			Plural		
m.	n.	f.	m.	n.	f.
(bii)			(bii)		
(a)	(a)	(a)	(a)		

- (22) Defectiveness of ṆA in Prākṛit
Where σ encompasses τ ,
PF(\langle ṆA, τ \rangle) is definable as PF(\langle *ṇa*, σ \rangle) only if
(a) σ (or τ) encompasses {C:ins} or
(b) (i) τ encompasses {C:acc}
and
(ii) σ encompasses {G:masc}.

TABLE 21. Accusative instances of ENA in the *Ṛg Veda*

			Instances	Percentage
Singular	Masc.	enam	76	77.55
	Neut.	enat	0	0.0
	Fem.	enām	3	3.06
Dual	Masc.	enau	0	0.0
	Neut.	ene	0	0.0
	Fem.	ene	2	2.04
Plural	Masc.	enān	8	8.16
	Neut.	enāni	0	0.0
	Fem.	enās	9	9.18

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