Defectiveness: typology and diachrony

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(1) A classic example: Latin 'change'

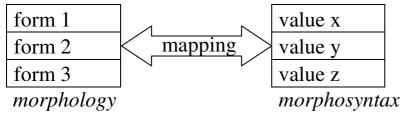
	singular	plural
NOM		vicēs
ACC	vicem	vicēs
GEN	vicis	
DAT		vicibus
ABL	vice	vicibus

Questions:

- What units are affected? > see Part A
- How do gaps arise? > see Part B
- How are they maintained/enforced/learned? \rightarrow rest of conference?

Part A: Synchronic typology

(2) Three components of an inflectional paradigm



1 Morphology

1.1 Stem

(3) 'Big' in Yir-Yoront (Alpher 1991).

	'fresh (water)'	'narrow'	'bad'	'who'	'big'
ABS	purrchuwr	yoyrr	warrch	wanh	
ERG	purrchpurr	yoyn-an	wirrchi-r	wotho-l	thowo-rr
DAT	purrchpurr-iy	yoyn-um	wirrchi-y	wotho-nn	thowo-nn

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1.2 Prosody

(4) Chiquihuitlan Mazatec 'carry' (Jamieson 1982: 166)

	neutral positive		neutral	negative
	singular	plural	singular	plural
1INCL		ča ³ nẽh ³¹		ča ² nẽh ²¹
1	ba ³ nẽh ³¹	ča ³ nĩh ³¹⁴	ba ² nẽh ²¹	ča ² nĩh ²¹⁴
2	ča ³ nĩh ³¹	ča ³ nũh ³¹	ča ² nĩh ²¹	ča ² nũh ²¹
3	ba ³ nĩh ³¹		ba ² nĩh ²¹	

	incompletive positive		incompleti	ve negative
	singular	plural	singular	plural
1INCL		ča ⁴ nẽh ⁴¹		
1	kua ³ nẽh ³¹	ča ⁴ nĩh ⁴¹⁴	kua ² nēh ²¹	
2	ča ⁴ nĩh ⁴¹	ča ⁴ nũh ⁴¹		
3	kua ⁴ nĩh ⁴¹			

Note: tones are indicated through superscript numerals, from '1' (high) to '4' (low).

(5) Alternations involving segmental material: no correspondence

	'prefixes'			endings			endings	
				(underlying)			(sur	face)
	singular	plural		singular	plural		singular	plural
1INCL		В			-ã	-		-ẽ
1	A	В		-a	-ĩ	-	-ẽ	-ĩ
2	В	В		-i	-ũ		-ĩ	-ũ
3	A		Ø			-ĩ		

(6) Tonal alternations in the incompletive

	incompleti	ve positive	incompletiv	ve negative	
	singular plural		singular	plural	
1INCL		4	.	1	
1	3	4	Expected: tone $3 \rightarrow \text{tone } 2$		
2	4	4	tone $3 \rightarrow \text{tone } 2$ tone $4 \rightarrow \text{tone } 4$		
3	4	••••			

1.3 Affixes

(7) Latin: some 3rd declension nouns lack genitive plural

	singular	plural	
NOM	fax	facēs	'tor
ACC	facem	facēs	
GEN	facis		
DAT	facī	facibus	
ABL	face	facibus	

ch'

3rd declension subtypes (masculine/feminine) (8)

	consonant-stem			i-stem		
	singular	plural		singular	plural	
NOM	-S	-ēs		-(i)s	-ēs	
ACC	-em	-ēs		-em, -im	-ēs, -īs	
GEN	-cis	-um		-is	-ium	
DAT	-1	-ibus		-1	-ibus	
ABL	-e	-ibus		-e, - 1	-ibus	

• Gap = discrepancy between consonant-stem and i-stem paradigms

1.4 Whole word form

(9) Tuvaluan demonstrative/relative pronoun/adjective

	singular	plural,	plural,
		locative	locative
near speaker	tee-nei	ko-nei	ki-nei
near addressee	tee-naa	ko-naa	ki-naa
neutral	tee-laa	ko-laa	

• Expected kilaa would be homophonous with kilaa 'hairless'. 'Attempts to elicit the missing form were invariably met with embarrassment or guffaws.' (Besnier 2000: 419)

2 Morphosyntax

(10) Macedonian siromav 'poor'

	defective adjective 'poor'		adjective 'beautiful'			masculine noun 'worm'	
	INDEF	DEF	INDEF	DEF		INDEF	DEF
M.SG	siromav	siromaviot	ubav	ubaviot		crv	crvot
F.SG			ubava	ubavata			
N.SG			ubavo	ubavoto			
PL	siromasi	siromasite	ubavi	ubavite		crvi	crvite

• *Siromav* has the morphosyntactic profile of a noun, but the syntax and morphology of an adjective.

3 Mapping between morphology & morphosyntax

3.1 Anti-syncretism

(11) Tamashek 'adjectival' verbs

	normal verbal affixes			adjectival verb
	pre	fix	suffix	'be black'
	V-init.	C-init.	Sullix	(perfective)
1sg	Q	Ď	-æy	kæwal-æy
1PL	n	_	Ø	
2sg			-æd	kæwal-æd
2PL.M	t-	Ø	-æm	kæwal-æm
2PL.F			-mæt	kæwal-mæt
3sg.m	Ø	i-	Ø	kæwal
3SG.F	t-	Ø	Ø	Kæwui
3PL.M		×	-æn	kæwal-æn
3PL.F	<u>V</u>	,	-ænt	kæwal-ænt

- Perfective stem of 'adjectival' verbs lacks prefixes; thus, the endingless 1PL and 3SG *should* both be realized by the bare stem.
- But speakers reject 1PL interpretation of bare stem: 'Instead, a circumlocution or a specialized construction was offered to express senses like 'we became black' (Heath 2005: 437f).

(Paradigms based on the short imperfective & long imperfective stem always have prefixes, and are not defective.)

3.2 Mismatch

(Chickasaw set II transitive verbs; Munro & Gordon 1982, Munro 2005, Payne 1982)

(12) 3 classes of intransitive verbs; 'fluid-S' system, sort of

	set I ≈ agentive SBJ	set II ≈ patientive SBJ	set III ≈ dative SBJ
1sg	-li	sa-	am-, sam-
1 _{PL}	ii-, kii-	po-	pom-
2sg	ish-	chi-	chim-
2PL	hash-	hachi-	hachim-
3	Ø	Ø	im-

(13) Example of intransitive with set II markers

1sg	sa-chokma
	' <u>I</u> am good'
1 _{PL}	po-chokma
	' <u>we</u> are good'
2sg	chi-chokma
	' <u>you (SG)</u> are good'
2 _{PL}	hachi-chokma
	' <u>you (PL)</u> are good'
3	chokma
	' <u>he</u> is good'

(14) Normal transitive verb uses set I for subject and set II for object

(2.7) Trothing dumper to the base see Troth sweller and see II for self-eet						
set.	I markers:	1sg	1PL	2sg	2PL	3
	1sg			is-sa-hoyo	has-sa-hoyo	sa-hoyo
				'you (SG) look for me'	'you (PL) look for me'	'he looks for <u>me</u> '
S:	1PL			ish-po-hoyo	hash-po-hoyo	po-hoyo
arker				'you (SG) look for us'	'you (PL) look for us'	'he looks for <u>us</u> '
	2sg	chi-hoyo-li	kii-chi-hoyo			chi-hoyo
I m		'I look for you'	'we look for you'			'he looks for <u>you (SG)</u> '
et I	2PL	chi-hoyo-li	kii-chi-hoyo			hachi-hoyo
Se		'I look for you'	'we look for you'			'he looks for <u>you (PL)</u> '
	3	hoyo-li	ii-hoyo	ish-hoyo	hash-hoyo	hoyo
		'I look for him'	'we look for him'	'you (SG) look for him'	'you (PL) look for him'	'he looks for <u>him</u> '

(15) Defective transitive verb: reinterpretation of 'patientive' intransitive subject as transitive object. Only works where one object is zero-marked (i.e. 3rd person object)

set.	I markers:	1sg	1PL	2sg	2PL	3
	1sg					sa-banna 'I want him'
						<u>'I</u> want him'
.s.	1PL					po-banna 'we want him'
ker,						' <u>we</u> want him'
ari	2sg					chi-banna
I m						'you (SG) want him'
set L	2PL					hachi-banna
Se						'you (PL) want him'
	3					banna
						' <u>he</u> wants him'

Transitivity

4 Unclassifiable

(16) Itel'men 'be' (Bogoras 1922: 766)

	present	past
1sg		t-li-k
2sg	čhi-ž-č	łi-č
3sg		łi-č
1 _{PL}		n-łi-k
2 _{PL}		łi-šx
3PL	čhi-ž-ši?n	ł-či?n

• Transitive forms w/ 3rd person subject function as verb of having.

Part B: diachronic typology

1 Morphologization of formerly motivated restrictions

1.1 Phonological

(17) Latin $n\bar{o}l\bar{o} \leftarrow n\bar{e} + vol\bar{o}$, but only where root vowel was e or o

	'not wish'	'wish'
1SG PRS	nōlō	volō
2SG PRS		vīs
3SG PRS		vult
1PL PRS	nōlumus	volumus
2PL PRS		vultis
3PL PRS	nōlunt	volunt

1.2 Morphosyntactic

Macedonian (10). English *funner belongs here too (for some of us). Possibly Chickasaw (15) and Tamashek (11).

1.3 Semantic

British English scales?

2 Purely morphological patterns

Ideal state of harmony is disrupted by:

- Lexical change
- Morphological change
- Covert change?

2.1 Lexical change

New items fail to adapt to established morphological pattern.

(18) Russian *ubedit'* 'convince' (Baerman 2008)

Source
(Church
Slavonic)

	singular	plural
1	ubě(žd)u	ubědim
2	ubědiši	ubědite
3	ubědit	ubědjat



Native pattern

	singular	plural	
1	vo(ž)u	vodim	
2	vodiš'	vodite	
3	vodit	vodjat	
<i>vodit'</i> 'drive'			



	singular	plural
1		ubedim
2	ubediš'	ubedite
3	ubedit	ubedjat

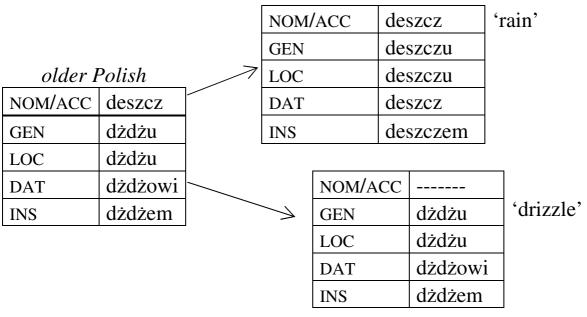
Where do new items come from? Some examples:

- Prestige language (Church Slavonic → Russian; Latin/French → Spanish & Portuguese). Revivification of obsolete lexemes may give the superficial appearance of decay (French *clore* 'close'; Gilliéron 1919).
- Zero-derivations: Russian *pylesos* 'vacuum cleaner' → *pylesosit'* 'to vacuum'

2.2 Morphological change

2.2.1 Paradigm split

(19) Polish deszcz 'rain'



(Kuryłowicz's 4th law of analogy)

2.2.2 Inflection class shift

(20) German backen 'bake': strong versus weak

3SG PRESENT	bäckt/backt
SIMPLE PAST	buk/backte/
PAST PARTICIPLE	gebacken/gebackt

• Aggravated by category loss (see below).

2.2.3 Phonological change

Can phonological change introduce fatal problems?

2.3 Covert change

2.3.1 Category loss

Morphological complications may be fatal where the category (grammatical or lexical) itself is (largely) superfluous. German (20); Modern Greek genitive plural (see Sims's talk in this conference); Tuvaluan (9)?

2.3.2 Rule change/straightforward loss

Can the threshold of tolerance simply be lowered?

Conclusion: synchronic & diachronic typology

- Synchronic patterns likely the result of diachronic processes. Inertia plays the key role.
- 'Unclassifiable' patterns (e.g. Itel'men) make neither synchronic nor diachronic sense. Are the data screwy, or are we missing something?

References

- Alpher, B. 1991. Yir-Yoront lexicon. Berlin: Mouton de Gruyter.
- Baerman, M. 2008. Historical observations on defectiveness: the first singular non-past. *Russian Linguistics* 32/1. 81-97.
- Besnier, N. 2000. Tuvaluan: A Polynesian language of the Central Pacific. London: Routledge.
- Bogoras, W. 1922. Chukchee. In F. Boas (ed.) *Handbook of American Indian languages* (part 2). Washington: Government Printing Office. 631-903.
- Gilliéron, J. 1919. La faillite de l'étymologie phonétique: Étude sur la défectivité des verbes. Neuveville: Beerstecher.
- Heath, J. 2005. *A grammar of Tamashek (Tuareg of Mali)*. Berlin: Mouton de Gruyter.
- Jamieson, C. A. 1982. Conflated subsystems marking person and aspect in Chiquihuatlan Mazatec. *International Journal of American Linguistics* 48/2. 139-176.
- Munro, P and L. Gordon. 1982. Syntactic relations in Western Muskogean: A typological perspective. *Language* 58/1. 81-115.
- Munro, P. 2005. Chickasaw. In: H. K. Hardy and J. Scancarelli (eds) *Native languages of the Southeastern United States*. Lincoln, Nebraska: University of Nebraska Press.
- Payne, D. 1982. Chickasaw agreement morphology. In: P. Hopper and S. Thompson (eds) *Studies in transitivity (Syntax and Semantics* vol. 15). New York: Academic Press. 351-78.