# **Recursion and paradigms**

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# OUTLINE

# 1. Do we still need morphology?

- a. theoretically
- b. empirically  $\succ$  paradigms
- c. generalizing from examples
- 2. A new job for morphology: paradigms as recursion stoppers
- 3. Problems and conclusion

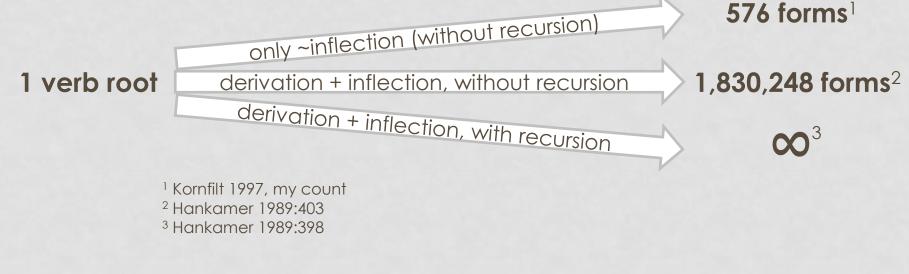


# 1. a. Reasons to suspect that morphology should not be regarded as a level of description in its own right

- cross-linguistic, workable notion of word is elusive → border between morphology and syntax is elusive (Haspelmath 2011)
- Construction Grammar's slogan: "it's constructions all the way down" (Goldberg 2006:18)
- Distributed Morphology's slogan: "Syntactic Hierarchical Structure All the Way Down" (Harley & Noyer 1999:3)

 b. Reasons to suspect that morphology should not be regarded as a level of description in its own right – examples –

 one of Haspelmath's (2011:59) examples: how to write down complete Turkish paradigms



# (1) Turkish (Hankamer 1989:396) daya -n -ış -tır -t -ıl -a -mı -yabil -ecek -ti -k prop up RFL RCP CAUS CAUS PASS POT1 NEG POT2 ASP TNS AGR 'we might not have been able to be made to make someone else practice mutual aid'

(2) Turkish (Hankamer 1989:397)

göz

gözlük

gözlükçü

gözlükçülük

gözlükçülükçü

gözlükçülükçülük

eye

glasses

seller of glasses (oculist)

*ük* the occupation of oculists

çü a lobbyist for the oculist profession

the occupation of being a lobbyist for the oculist profession

recursion: applying an

operation to its

output

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# b. Reasons to suspect that morphology should not be regarded as a level of description in its own right – examples –

morphemes as constructions (Goldberg 2006:5)

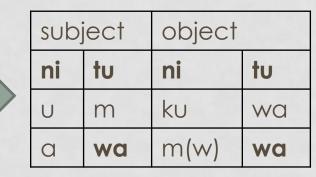
	pre-	TABLE 1.1. Examples of constructions, varying in size and complexity		
	post-	Morpheme Word	e.g. pre-, -ing e.g. avocado, anaconda, and	-ed
da	aredevil	Complex word Complex word (partially filled)	e.g. <i>daredevil, shoo-in</i> e.g. [N-s] (for regular plurals)	shoo-in
	nicken- earted	Idiom (filled) Idiom (partially filled)	e.g. going great guns, give the Devil his due e.g. jog <someone's> memory, send <someone> to the cleaners</someone></someone's>	long shot
		Covariational Conditional	The Xer the Yer (e.g. the more you think about it, the less you understand)	
		Ditransitive (double object)	Subj V Obj1 Obj2 (e.g. he gave her a fish taco; he baked her a muffin)	
	SLE 2019	Passive	Subj aux VPpp (PP <sub>by</sub> ) (e.g. <i>the armadillo was hit by a car</i> )	6

 b. Reasons to suspect that morphology should not be regarded as a level of description in its own right – examples –

• syntax in the word (Trommer 2001:18): Swahili verbs

(3)	ni	-Wa	-penda
	1sg	3PL	like
	'I like them'		

(4) wa -ni -penda
3PL 1sG -like
'they like me'



Almasi et al. 2014:15, 102; only M-/WA- class

 c. Reasons to suspect that morphology should not be regarded as a level of description in its own right – generalizing –

- But these phenomena can be treated morphologically anyway (Stump 1993, Hyman 2003)!
   This does not mean it is the best way to treat them.
- But these items are still organized by way of opposition!
   So is the lexicon.

lexicon (incl. phonemes) + syntax (incl. phonotactics) = language

But portmanteau morphemes are not like syntax!
 They are like Idioms.

## Radical conclusion: Morphology (including paradigms) unemployed in language modelling

Morphology has lost one of its jobs to the (structured) lexicon, i.e. capturing oppositions

and it has lost its other job to (constructional) syntax, i.e. capturing the idiosyncratic

(or both jobs to one lexicon-syntax continuum).

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2. A new job for morphology and paradigms

If we accept this conclusion...

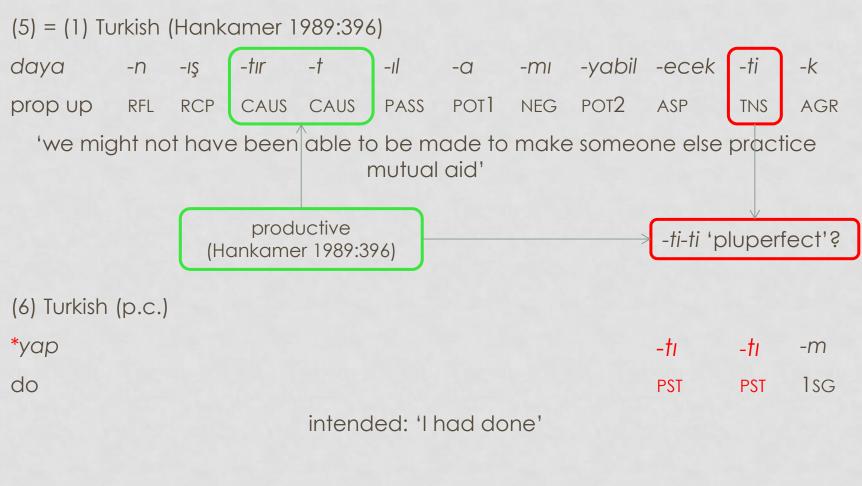
...there might be a new job for morphology, especially for paradigms:

## motivating restrictions on recursion.

Why?

From a CxG perspective, restrictions are epiphenomenal, so they – and their systematicity – might be missed.





	1sg	<b>2</b> sg	3sg	1pl	2pl	3pl
FUTURE	-(y)AcAK -Im	-(y)AcAK -sIn	-(y)AcAK -ø	-(y)AcAK -Iz	-(y)AcAK -sInIz	-(y)AcAK -IAr
REP. PAST	-mIs-Im	-mIs-sIn	-mIs-ø	-mIs-Iz	-mIs-sInIz	-mIs-IAr
PAST	-DI-m	-DI-n	-DI-ø	-DI-k	-DI-nIz	-DI-IAr

Kornfilt 1997:2.1.3.

semantic grid delimits recursion

### 3. Problems and conclusion – one example of a problem –

Does this account wrongly predict that there are double passives? Depends on one's notion of passive... one possibility:

argument structure + linking information:

passive:

do not realize the argument tagged "unmarked" but do realize the next lower one unmarked

double passive?

- operation could be repeated with its output
- but output = different verb (Bresnan 1982:16)
- so verb form would have to be realization of two verbs at once

 $x_{unmarked} > y > z$ 

 $y_{unmarked} > z$ 

3. Problems and conclusion – instead of a real conclusion –

message to take home (and to discuss now): We need paradigms to model the limits of recursion 90

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