

# INTRODUCTION TO PARADIGM MORPHOLOGY

## PATTERNS IN PARADIGMS, THEORY

Matthew A. Tucker

Linguistics 105: Morphology  
Fall 2012

November 19, 2012



# ANNOUNCEMENTS

## HWs

- HW# 7 is due Wednesday.
- If you are leaving early you may turn it in however you like (email, my mailbox, *etc.*) but **you are responsible for getting it to us by 2:00 PST on Wednesday.**
- We will mark homeworks received after that as late.

## OTHER

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- It is important to start thinking about your final paper again about now.

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# WHERE WE ARE, REDUX

## GOOD NEWS, EVERYBODY!

The tour de morphological typology is complete.

- We know how to...
  - deal with affixation.
  - analyze a range of phenomena with syntactic tools.
- *Up next:* morphological problems where syntax isn't the right tool.
- Three main topics:
  - 1 Patterns in PARADIGMS.
  - 2 A host of problems in SYNTAX-PHONOLOGY.
  - 3 Approaches to charting the MENTAL LEXICON.

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# PARADIGMS: PRELIMINARIES

- 1 PARADIGMS: PRELIMINARIES
- 2 PARADIGMS: WHAT IS INTERESTING
- 3 WORD-AND-PARADIGM MORPHOLOGY

# PARADIGMS, INTROREDUX

## RECALL FROM EARLIER. . .

Paradigm =<sub>def</sub> a collection of forms which vary in expressing different values of a fixed set of morphosyntactic features.

- Which features to include is an *analytic choice* in most cases.

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TABLE : Latin First Declension



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- Just a few of the questions:
  - How do we capture the agglutination?
  - How do we capture the deviations from agglutination?
  - How do we relate the forms across aspects/moods to each other?
  - How do we capture the ordering of these morphemes?
  - Is there a "default" here after irregularities are captured?

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# PARADIGMS FOR US

IN THE THEORY I'VE BEEN TEACHING. . .

Paradigms are **not** units the grammar knows about or uses.

- *Instead*: paradigms are “meta” generalizations which speakers make because they know that different values of the same feature are related morphosyntactically.
- This accounts for some facts about paradigms:
  - ① What features go into paradigms are largely up to the analyst.
  - ② It is hard to find *synchronic* processes which target a paradigm.
- What kinds of things would spell trouble for this view?
  - ① Some process which makes reference to a paradigm.
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# PARADIGMS: WHAT IS INTERESTING

- 1 PARADIGMS: PRELIMINARIES
- 2 PARADIGMS: WHAT IS INTERESTING
- 3 WORD-AND-PARADIGM MORPHOLOGY

# SOME PROPERTIES COMMONLY SEEN

- Paradigms are logically  $n$ -dimensional for  $n \geq 1$ :

(1)

SG	PL
-∅	-s

- Paradigms are EXHAUSTIVE for a given word/feature set.
- Paradigms often involve SUPPLETION and SYNCRETISM.
- Forms in paradigms tend to look similar (UNIFORMITY).
- Not always possible to derive all forms asymmetrically from one base form.
- Very common in discussions of {fusional, agglutinating, polysynthetic} languages.

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# PROPERTIES COMMONLY SEEN, II

- Cross-paradigmatic allomorphy is common (*or*: there are different paradigms for different classes of stems).

(2) Verbs in Romance:

- Infinitives in *-ar(e)*
- Infinitives in *-er(e)*
- Infinitives in *-ir(e)*

- **Question:** what determines class membership for paradigm class?
- *Phonology:* Armenian plurals based on syllable count:

(3) a. *ar* 'child' → *ar-er* 'children' (2 syllables)

b. *ar* 'child' → *ar-er* 'children' (2 syllables)

(4) a. *ar* 'child' → *ar-er* 'children' (2 syllables)

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(3) *gə* 'one' → *gə* 'ones' (1 syllable)

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(4) *gə* 'one' → *gə* 'ones' (3 syllables)

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    - a. *jerk*, “hand” → *jerk-er*, “hands”
    - b. *yuy*, “oil” → *yuy-er*, “oils”
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    - a. *erexa*, “child” → *erexa-ner*, “children”
    - b. *tari*, “oil” → *tari-ner*, “oils”

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# PROPERTIES COMMONLY SEEN, II

- Cross-paradigmatic allomorphy is common (*or*: there are different paradigms for different classes of stems).
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SYNCRETISM =<sub>def</sub> When two or more cells in a paradigm share a form.

PERSON	SG	PL
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TABLE : Maltese Perfective Aspect Agreement

- Usually thought of as evidence that the morphemes which are syncretic are **UNDERSPECIFIED** for the features in question.
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How much of syncretism is real in a speaker's mind?

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- (5) a. [ Entweder wir oder sie ] spiel-en gegen Bulgarien.  
 either we or they play against Bulgaria  
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- *Example*: Russian *jer* vocalization:

d'en, "day"			m'est', "feud, vengeance"		
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GEN	dn'a	dn'ej	GEN	m'est'i	m'est'ej
DAT	dn'u	dn'am	DAT	m'est'i	m'est'am
ACC	d'en'	dn'i	ACC	m'est'	m'est'i
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# WORD-AND-PARADIGM MORPHOLOGY

- 1 PARADIGMS: PRELIMINARIES
- 2 PARADIGMS: WHAT IS INTERESTING
- 3 WORD-AND-PARADIGM MORPHOLOGY**

# WORD AND PARADIGM

## QUESTION

How could we incorporate paradigms into generative morphology?

- We've been assuming that morphemes are the primitive units of word-formation.
- "Words" are the limit of morpheme attachment and not necessarily primitives.
- *Alternatively* we could say the *word* is the smallest unit in computation.
- This involves writing rules which take a STEM and a FEATURE CONTEXT and output a word.
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- MORPHOLEXICAL RULES take an input and a feature context and realize them phonologically.
- Rules are structured into ORDERED BLOCKS where the output of a previous block forms the stem for the next block.

PERSON	SG	PL
1	amā-ba-m	amā-bā-mus
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- Two blocks ordered sequentially:
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