

Morphemes and the paradigm

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1. Abstract

Morphemes constitute a complex phenomenon which might be crucial for our understanding of morphology. However, the phenomenon itself and its theoretical ramifications continue to be obscure to this day and disagreement prevails. As a necessary first step to achieve a greater consensus my goal is to map clearly the variation found in morpheme-like elements in the literature and cross-linguistically.

2. Introduction and background

Elements of pure form, not aligned to any morphosyntactic feature value (so-called 'morphemes', Aronoff 1994), have been the object of analysis of many morphologists (most prominently Martin Maiden) and a topic for debate in recent years (e.g. Bermúdez-Otero 2016) but continue to be controversial to this day both theoretically (how should they inform our models?) and empirically (how should we identify them in a language?). Obtaining a clear picture of the variation which can be found within and around morphemicity (see the framework of canonical typology, Corbett 2005) is a necessary first step towards understanding the phenomenon.

3. Research questions

- Which different phenomena have been labeled 'morphemic'?
- How can we distinguish them and name them?
- What is the canonical, clearest instance of a morpheme?
- Along which dimensions may morpheme-like elements diverge?
- Can we quantify morphemicity?

4. The canonical morpheme

A distinction has to be drawn between so-called (Round 2013) 'rhizomorphemes' (i.e. inflection classes), 'metamorphemes' (i.e. sets of paradigm cells) and 'meromorphemes' (i.e. the actual formal exponents).

(Mero)morpheme: a formal element with an unnatural yet systematic morphosyntactic distribution.

A canonical (mero)morpheme is a 'piece of form' which:

- constitutes a morphological single object.
- has a distribution which is at odds with other components of language: semantics, syntax and phonology.
- has a distribution which is not accidental (i.e. is not the result of simple homophony) and has grammatical import.

Two examples:

	SG	PL
1EXC	seð	sieti
1INC	-	seð
2	sieti	sieti
3FEM	sieti	seð
3MASC	seð	seð

Subject agreement of 'walk' in Dhaasanac (Baerman et al. 2005:106 after Tosco 2001)

	SG	PL
1	-ve	-pe
2	-pe	-ve
3	-ve	-ve

Subject agreement in Hua verbs, dual omitted (Stump 2016: 128 after Haiman 1980)

Metamorphemes (e.g. L- or N-morpheme of Romance) are grammatical abstractions on the basis of meromorphemes which have identical paradigmatic distributions. Most of this applies to them as well.

8. References

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5. Scales of variation

5.1 Is it a morphological object?

5.1.1 Segmentability

A property or prototypical morphemes (and also of whole words) is that they are units which are segmentable from surrounding elements, i.e. they are islands of invariance surrounded by peaks of uncertainty. Morphological objects differ as to their segmentability. Highly segmentable Spanish 1PL forms: *ama-mos, tendre-mos, vivi-mos, tenga-mos, corri-mos, so-mos, tuvi-mos, fui-mos, sea-mos*

5.1.2 Productivity

A formal element is more robust if it is manifested in a great number of lexemes:

- Lexemes giving positive evidence for the category to the exclusion of other cells.
- Number of lexemes which are not fully informative: formal identity is manifested, but only trivially so, i.e. not to the exclusion of all other cells.
- Number of lexemes providing negative evidence, i.e. which contradicts the morphological affinities which the morpheme assumes.

	PRES.IND	PRES.SUB
1SG	salg-o	salg-a
2SG	sal-es	salg-as
3SG	sal-e	salg-a

i) Spanish *salir* 'exit'

	PRES.IND	PRES.SUB
1SG	mid-o	mid-a
2SG	mid-es	mid-as
3SG	mid-e	mid-a

ii) Spanish *medir* 'measure'

	PRES.IND	PRES.SUB
1SG	sé	sep-a
2SG	sab-es	sep-as
3SG	sab-e	sep-a

iii) Spanish *saber* 'know'

5.2 Is it exclusively morphological?

5.2.1 Independence of phonology

A formal identity can be the result of a synchronic phonological process, can correlate with a phonological property or can be independent of phonology.

5.2.2 Independence of (morpho)syntax

The extent to which a formative correlates to a feature value depends on the assumed feature structure and the number of steps (blockings, rules of referral etc.) needed to reach a morphosyntactically natural distribution. A gradient dimension:

	SG	DU	PL		SG	DU	PL		SG	PL		SG	DU	PL
1	mon	muäna	mij	1	fecemin	fecohul	fecomun	1	was	were	1	-onji	-ontae	-ontone
2	ton	tuäna	tij	2	fecem	fecebil	fecebil	2	were	were	2	-onji	-onji	-ontifi
3	son	suäna	sij	3	feceb	fecebil	fecebil	3	was	were	3	-i	-onji	-ontifi

Skolt Saami pronouns (Feist 2011:251)

Amele 'see' perf. sw. (Roberts 1987)

English 'were'

Wojokeso s.s. (West 1973:10)

5.2.3 Independence of semantics

Morphosyntactically unitary objects like Latin ablative or Spanish imperfect may have semantically unrelated uses.

5.3 Is it systematic?

- Phonological size: number and type of segments of the formative.
- Morphosyntactic size: number of cells/morphosyntactic contexts.
- Allomorphy and morphophonology: coextensivity with other forms.

6. Measures of morphemicity

6.1 Internal morphosyntactic coherence (Esher 2014): average similarity of feature values between two cells within the morpheme, e.g. L-Morpheme = 46%

6.2 External morphosyntactic coherence (Bank & Trommer 2012): Given a certain meaning hypothesis, fraction of cells correctly predicted. Depends on number of false positives/false negatives. E.g. L-Morpheme, meaning PRES.SUB, 6/7 = 86%

7. Conclusion

Clarity (quantification?) in what counts as morphemic and how, and in what variation we can find is needed before exploring their theoretical implications.