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Truncation and Exponence – How small can you get?

Sabine Arndt-Lappe (Universität Siegen)

Note: A large part of this presentation (both data and analysis) is joint work with Birgit Alber, Universitá degli Studi di Verona

I. Introduction

(1) the phenomenon - examples

a. hypocoristics

German:

Andreas	*Andi*
Dagmar	*Daggi*
Manuela	*Manu*

(Féry 1997, Wiese 2001, Alber 2006)

Japanese:

Midori	*Mii-čan, Mido-čan*
Yooko	*Yoko-čan, Yoo-čan*
Hanako	*Hana-čan, Haa-čan, Hač-čan*

(Poser 1984, Mester 1990)

Italian:

Andrea	*Andri*
Cristina	*Cri*
Simona	*Simo*

(Alber 2006)

English:

Patrick	*Pat, Patty*
Melinda	*Lyn, Lindy, Linny*
Elisabeth	*Bess, Beth, Bette, Bessie, Betty, Liz, Lizzy, Libby, Ibby, Lisa, Elis*

(Lappe 2007)

b. clippings

German:

Abitur	*Abi*
Lokomotive	*Lok*
Reproduktion	*Repro*

(Ronneberger-Sibold 1992)

Swedish:

elektricitet	*el*
raffinaderi	*raf*
realisation	*rea*

(Nübling 2001)

French:

abréviation	*abrèv*
habit	*bit*
docu	*documentaire*

(Scullen 1997)

English:

accumulator	*ac*
business	*biz, bizzo*
cigarette	*cig, ret, ciggy, cigga*

(Lappe 2007)

c. compositionality I: fixed segments/affixes – examples from English

-y:

Victor	*Vick-y*
Bartholemew	*Bart-y*
Melinda	*Lind-y*

no fixed segments

Victor	*Vic*
Bartholemew	*Bart*
Melinda	*Lin*

-o:

aggravation	*aggr-o*
business	*bizz-o*
jollification	*joll-o*

(Lappe 2007)

2 interesting questions:

- What is the structure of outputs of truncation? ('word structure')
- Which part of the base form survives in the derivative? ('anchoring')

(2) two research disciplines concerned with truncation

a. Word-formation theory (e.g. Dressler & Merlini Barbaresi 1994, Dressler 2000, descriptive studies of individual languages, for English cf., e.g., Jespersen 1965repr., Marchand 1960, Adams 1973, Bauer 1983)

=> The structural characteristics of truncated forms are considered to be largely unpredictable; their status as a word-formation process is debated.

b. Phonological theory: Prosodic Morphology
step 1: prosodic templates (McCarthy & Prince 1986 et seq., Weeda 1992)
step 2: Optimality Theory, *Generalised Template Theory* (GTT, McCarthy & Prince 1994, 1998, 1999, Benua 1995, 1997) and others (e.g. Downing 2006)

=> makes profound predictions concerning the structure of truncated forms in the languages of the world

BUT: Many of these predictions have neither been described systematically nor have they been tested empirically. To date there exist mainly studies of truncatory patterns in individual languages.

(Systematic studies exist mainly for reduplication, cf., e.g., McCarthy & Prince 1999, Downing 2006).

(3) this paper

- overview: What does Prosodic Morphology predict concerning the structural characteristics and anchoring of truncated forms?
- Testing (some of) the predictions against the data: word structure
  a. crosslinguistic evidence: Which structures are there, out in the world?
  b. case studies: inventories
- Testing (some of) the predictions against the data: anchoring
  a. crosslinguistic evidence: Which structures are there, out in the world?
  b. case studies: inventories
- theoretical implications: What kind of a theory do we need in order to account for the structure of truncations?

- focus: not so much the technical details of the OT analysis (cf. Alber & Lappe 2007, Lappe 2007: chpt. 7), but: What is possible in general in truncation? How predictable is the structure of truncation?

(4) claims:

- Contra earlier claims in Prosodic Morphology, not all truncation corresponds to the minimal prosodic word.
- Contra earlier claims in word-formation theory, however, this does not mean that truncation is structurally unpredictable.
- The patterns observed are indeed expected if
    a. GTT is supplemented by a constraint favouring monosyllabicity and
    b. ranking permutations of markedness and anchoring constraints active in truncation are spelled out and taken seriously (factorial typology, contra earlier, templatic approaches to truncation).
- Properties of an optimality-theoretic approach that can account for the structure of truncation:
    a. non-templatic (i.e. no fixed, predefined template shape)
    b. process-specific faithfulness or correspondence constraints
    c. markedness ranking relevant for the truncatory process must resemble or correspond to the markedness ranking of the language

(5) the data

crosslinguistic (ongoing project, Alber & Lappe 2007)
truncation patterns extracted from the literature, tagged according to template type/size and anchoring; lit. has been selected from different theoretical frameworks
So far: 76 patterns, spread over 22 languages

case studies
English (Lappe 2007),
small case studies from Italian (cf. also Alber 2007), German, Estonian

II. Truncation in Prosodic Morphology – the basic assumptions on word structure

- 2 basic observations
- **basic observation no. 1:**
  The structure of truncations very often corresponds to the minimal prosodic word of the relevant language (= one metrical foot, McCarthy & Prince 1986). The minimal prosodic word functions as a template for the truncatory process.

(7) truncations as minimal prosodic words

a. trochee, quantity insensitive: Spanish hypocoristics
minimal word: ('σσ)

base	hypocoristic	
Aristobulo	Tobo	
Arminda	Minda	
Umberto	Beto	
Gilebaldo	Balo	(Piñeros 1998, 2000a,b, Roca & Feliu 2003)

b. trochee, quantity-sensitive: Japanese *tyan*-suffixed hypocoristics
minimal word: ('H), ('LL)

base	hypocoristic
Midori	Mido-čan, Mii-čan
Yooko	Yoko-čan, Yoo-čan
Hanako	Hana-čan, Haa-čan, Hač-čan
Takako	Taka-čan, Taa-čan, Tač-čan

(Poser 1984a, b, 1988, Mester 1990: 479, Benua 1995: 117ff.)

c. iamb, quantity-sensitive: vocatives in Central Alaskan Yupik
minimal word: ('H), (L'H)

base	vocative	
Aŋukaɣnaq	Aŋ, Aŋuk	
Nupiɣaq	Nup, Nupix, Nupik	
Aŋivɣan	Aŋif	
Kalixtuq	Kał, Kalik	(McCarthy & Prince 1998: 287f.)

- **basic observation no. 2 (*Generalised Template Theory*, GTT):**

  The minimal prosodic word corresponds to the unmarked prosodic word (McCarthy & Prince 1994 et seq.).
  In OT: The minimal prosodic word is the optimal structure if markedness constraints that are active in the language, are free to exert their influence (*The Emergence of the Unmarked*).
- Which markedness constraints are these?
    a. those constraints which are active in the metrical system of the language
    ('classic' GTT, e.g. McCarthy & Prince 1994 et seq., Benua 1995, 1997, cf. also, e.g., Féry 1997/Wiese 2001 for German, Pineros 1998 for Spanish)
    b. a constraint which – in effect – favours monosyllabic templates (cf. Lappe 2003, 2007 for the problem of generating monosyllabic templates in truncation; cf., e.g., Alber 2001, Downing 2006 for alternative proposals)

shorthand: SIZEREST ('size restrictors')

(8) example: Spanish hypocoristics (one pattern, there are also others)

a. markedness constraints which are active in the metrical system of Spanish: TROCH, FOOTBINARITY, PARSESYLLABLE, ALLFEETRIGHT

b. If these constraints are not dominated by other active constraints, they render a trochaic foot the optimal word structure. This is the case in hypocoristic formation.

c. Ranking – interaction of SIZEREST with two types of faithfulness constraints.

MAX-IO: Every segment in the input has a correspondent in the output.
MAX-BT: Every segment in the base has a correspondent in the truncated form.

(9) GTT-Ranking for truncation
MAX_{IO} >> SIZEREST >> MAX_{BT}

(10) Spanish hypocoristics: *Tobo* < *Aristobulo* (Piñeros 2000a):

base: ˌa.ris.ˈto.βu.lo	MAX-IO	ALL-FT-R	PRSESYLL	FTBIN(SYLL)	MAX-BT
a. 2 feet (ˌa.ris.)(ˈto.βo)		*!			lo
b. 1 foot, 1 extrametrical syll. (ˈto.βo)<lo>			*!		aris
c. monosyllabic foot ˈ(toβ)				*!	aris ulo
☞ d. disyllabic foot (ˈto.βo)					aris lo
e. no truncation (ˌa.ris.)(ˈto.βu.)lo		*!***	*		

- no truncation in the language in general:
MAX-IO >> FT-BIN, PARSE-σ, ALLFTL

- truncatory template: one (σσ)-foot:
FT-BIN, PARSE-σ, ALLFTL >> MAX-BT

III. Which part of the base survives in truncation? Anchoring

problem: In Prosodic Morphology, is of not much theoretical interest

=> only few systematic studies of individul patterns, no systematic typological investigation

Typically, truncated forms retain material which is prominent in the base form, mainly:

a. the initial syllable of the base
b. the (main-)stressed syllable of the base

(11) Spanish hypocoristics – main-stress anchoring
Tóbo - Aristóbulo
Bálo – Gilebáldo

Which constraints determine anchoring? Faithfulness constraints which call for prominent syllables in the base to be retained (ANCHOR-σ_1, ANCHOR-σ_{STRESS})

example: Italian hypocoristics – initial-syllable anchoring

(12) SIZEREST, ANCHOR-σ_1 >> ANCHOR-σ_{STRESS} >> MAX-BT

/Federíca/	SIZEREST	ANCHOR-σ_1	ANCHOR-σ_{STRESS}	MAX-BT
☞ a. (fe.de)			*	rica
b. (ri.ca)		*!		fede

(13) 3 constraint families (informally):

SIZEREST: creates unmarked word structure (esp. foot, syllable)
ANCHOR-P: retains prominent material from the base
MAX-BT: strives to retain as many segments as possible from the base

V. Word structure in truncation – the data

A. The corpus

(14) existing studies (Alber & Lappe 2007)

feet, bigger than one syllable:	44 patterns	57.9 %
maximal foot:	6 patterns	
2 feet:	1 pattern (?)	
monosyllables:	23 patterns	30.3 %
subminimal foot:	2 patterns	
variable word structure:	9 patterns	11.8 %
	76 patterns	100 %

=> Most patterns conform to the basic patterns studied in Prosodic Morphology (cf. above, 'basic observation no. 1')

=> BUT: There also exist many other patterns: esp. subminimal monosyllables, variable structures, which have not been discussed in the literature to date.

problem: Maybe the large number of minimal words in the data is due to the fact that the literature has mainly focussed on those patterns (thus: has been selective with the total inventory of patterns).

B. 4 case studies: English, Italian, German, Estonian (all trochaic)

English hypocoristics and clippings (Lappe 2007)

(15) the database

- name truncation: a private U.S. website set up as a resource for genealogical research, yielding 948 different forms
- word clipping: dictionaries (OED, Slang dictionaries), yielding 702 different forms

(16) distribution of patterns in name truncation

	N	%	examples:
S	386	40.72%	*Rube* (*Ruben*)
S w, *y*-suffixed	380	40.08%	*Minnie* (*Minerva*)
S w, [ə]-suffixed	135	14.24%	*Rena* (*Irene*)
other	47	4.96%	*Arilla* (*Cinderella*)
Σ	948	100.00%	

=> 95.04% of the data can be assigned to three different patterns:
- ✓ unsuffixed monosyllables
- ✓ *y*-suffixed disyllables (stress on the initial syllable)
- ✓ [ə]-suffixed disyllables (stress on the initial syllable)

(17) distribution of patterns in word clipping

	N	%	examples:
S	421	60.0%	*mish* (*missionary*)
S w, *y*-suffixed	94	13.4%	*assy* (*asphalt*)
S w, o-suffixed	99	14.1%	*dero* (*derelict*)
w S	47	6.7%	*exec* (*executive*)
other	41	5.8%	*influ* (*influenza*)
Σ	702	100.0%	

=> 94.3% of the data can be assigned to four different patterns:
- ✓ unsuffixed monosyllables
- ✓ *y*-suffixed disyllables (stress on the initial syllable)
- ✓ *o*-suffixed disyllables (stress on the initial syllable)
- ✓ unsuffixed disyllables (stress on the final syllable)

Italian hypocoristics

(18) the data
university students from Verona and Trento, 2002
collected in collaboration with Birgit Alber (cf. Alber 2007 for an analysis)
task: *Take down truncated names which are used for people you know*

(19) distribution of patterns

	N	%	examples:
S w	108	42.4%	Anto (< Antonella)
S w, *i*-suffixed	105	41.2%	Sabri (< Sabrina)
subminimal monosyllable	35	13.7%	Giò (< Giovanni)
other	7	2.8%	Mi'le (< Milena), Eleo (< Eleonora)
Σ	255	100.0%	

=> 97.3% of the data can be assigned to three different patterns:
- ✓ unsuffixed disyllables
- ✓ *i*-suffixed disyllables (stress on the initial syllable)
- ✓ subminimal monosyllables

German hypocoristics

(20) the data
university students from Siegen, 2007
task: *Take down nicknames which are used for people you know*

(21) distribution of patterns

	N	%	Beispiele:
S w	537	83,78%	Karo (< Karolin)
...ending in: - nonetymological –*i* - nonetymological –[ə] - other nonetymolog. seg.	 212 37 69		 Wolfi (< Wolfgang) Wolle (< Wolfgang) Gitta (< Brigitte), Inchen (< Ina)
S	93	14,51%	Jo (< Johann)
other	11	1,72%	Jensemann (< Jens)
Σ	641	100.0%	

=> 87.52% of the data can be assigned to four different patterns:

- ✓ unsuffixed disyllables
- ✓ *i*-suffixed disyllables (stress on the initial syllable)
- ✓ [ə]-suffixed disyllables (stress on the initial syllable)
- ✓ monosyllables

Estonian name truncations and clippings

collected by Taivi Rüüberg, University of Siegen, July 2007

(22) distribution of patterns

	N	%	Beispiele:
S s	55	70,51%	Vambo (< Vambola)
... ending in: - nonetymolog. *–i* - nonetymolog. *–u* - nonetymolog. *–(k)a* - other nonetymolog. seg.	 11 9 7 3		 Kusti (< Konstantin) Lennu (< Lennart) Jürka (< Jüri)
S	23	29,49%	Tönn (< Tönis)
.... ending in: - nonetymolog. *–ts/-s* - nonetymolog. andere	 16 0		Rolts (< Roland)
other	0	0,00%	
Σ	78	100.0%	

=> We find the familiar patterns

summary

- The distribution of word structure in the case studies mirrors that in the corpus collected from the literature
- The overwhelming majority of patterns corresponds to the prosodic word structure expected in GTT
- potentially problematic cases for GTT: esp.
    a. monosyllabic feet
    b. subminimal monosyllables (e.g. Italian)
    c. variable word structures
    d. w S structures in trochaic languages (e.g. English)

- a., b., are to be discussed now, c., d. will be discussed in section VII.

VI. Modelling word structure

typical SIZEREST constraints used in GTT: prosodic markedness constraints which are active in the metrical system of the language

(23) FT-BIN
PARSE-σ
ALL-FEET-LEFT/RIGHT
TROCH/IAMB
WSP

A. Generating the maximal foot

The template generated by the classic GTT ranking is always maximal

(24) SIZEREST >> MAX-BT

generates exactly one foot

strives to preserve as much segmental material as possible from the base

(25) example: Spanish hypocoristics

Fernándo	Férnan	Férna
Bernárdo	Bérnar	Bérna
Xesús	Xésus	Xésu

=> two patterns: one is maximal, one is not

=> In order to generate non-maximal feet, additional constraints have to be taken into account (e.g. syllable structure constraints)

B. Generating submaximal feet: monosyllabic templates

a very frequent structure (cf. (14) above)

problem:
How can a monosyllable be generated? not trivial, given that MAX-BT is active in the ranking. In quantity-sensitive languages, disyllabic feet should therefore always be preferred over monosyllabic feet (cf. Lappe 2003).

claim: a new SIZEREST constraint; motivation: *prominence maximization*, Beckman 1998, Zoll 1996, 1998, Alber 2001, Lappe 2003, 2005): Segmental material strives to be in a prominent position, i.e. in initial or stressed positions. (for alternative proposals to account for monosyllabicity cf., e.g., Urbanczyk 2006, Downing 2006)

(26) PROMMAX: Every segment in the output is in a prominent position (i.e. in the initial or stressed syllable).

(27) PROMMAX >> MAX-BT

Every segment is in a prominent syllable, in other words:
the word has only one (maximally filled) syllable

(28) PROMMAX >> MAX-BT

base: Timothy	PROMMAX	MAX-BT
☞ a. (Tim)		o.thy
b. (Ti.mo)	mo!	thy
c. (Timo).(thy)	mo.thy!	

C. Getting even smaller – the subminimal monosyllable

We often find that syllable structure constraints are active in truncation
an example from disyllabic truncation:

(29) disyllabic hypocoristics in Italian:

Fe.de - Fe.de.ri.ca *Fe.der
Va.le - Va.len.ti.na *Va.len

(30) NOCODA, PARSE-σ, ALL-FT-LEFT >> MAX-BT

The word structure is a foot which ends in a codaless syllable

The effect of NOCODA in monosyllabic truncated names:

(31) subminimal monosyllables in Italian (cf. also a clipping pattern in Zuñi)

Cri - Cristina
Fra - Francesca
Lu - Luisa
Ste - Stefania

(32) NOCODA, PROMMAX >> MAX-BT

The word structure is a syllable without a coda: C(C)V

It has frequently been assumed that subminimal word structures don't exist in truncation, since they don't fulfill the minimal word criterion.
However, such structures are part of the inventory of structures predicted by GTT, provided that the language itself allows them.

This is the case in Italian.

(33) (fa) 'do, 3 P Sg.'
(é) 'be, 3 P. Sg.'
('L)

(nò.vi)(tá) 'news'
('LL)('L)

VII Anchoring in truncation – the data

A. The corpus

(34) existing studies (Alber & Lappe 2007)

anchoring point:

initial syllable	40 patterns	52.6%
main-stressed syllable	12 patterns	15.8%
initial and main-stressed syllable	7 patterns	09.2%
final syllable	3 patterns	03.9%
initial and final syllable	2 patterns	02.6%
others	1 pattern	01.3%
unclear / not investigated	11 patterns	(14.5%)
	---	---
	76 patterns	100%

NB:
- general problem: Anchoring is not systematically investigated in all studies
- to keep matters simple, we assume that the domain for anchoring is always the syllable and not the foot or the segment (cf., e.g., Cabré 1998, Cabré & Kenstowicz 1996 who use the foot as the domain for anchoring in Catalan hypocoristics).

=> The overwhelming majority of patterns (57 patterns!) anchor to either the initial or the main-stressed syllable, or to both of them.

=> unclear: the status of the base-final syllable

B. 3 case studies: English, Italian, German

English

(35) anchoring in monosyllabic name truncation for bases with noninitial main stress:

	N	%	examples:
initial syllable (no main stress)	63	53.0%	*Hez* (*Hezekiah*)
main-stressed syllable	50	42.0%	*Kye* (*Hezekiah*)
other	6	5.0%	*Sabe* (*Isabella*)
Σ	119	100.0%	

=> 95.0% of the data anchor to the first or the initial syllable.

(36) anchoring in *y*-suffixed hypocoristics for bases with noninitial main stress:

- very much like monosyllables

(37) anchoring in monosyllabic clippings for bases with noninitial main stress:

	N	%	examples:
initial syllable (no main stress)	123	90.4%	*ack* (> *acknowledge*)
main-stressed syllable	10	7.4%	*sheen* (> *machine*)
other	3	2.2%	*droid* (> *android*)
Σ	137	100.0%	

=> 90% of the data anchor to the initial syllable of their bases.

(38) Italian disyllabic hypocoristics (bases with noninitial main stress):

	N	%	Beispiele
initial syllable (no main stress)	53	52.5%	Marghe (< Margherita)
main-stressed syllable	40	39.6%	Betta (< Elisabetta)
other	8	8.0%	Nico (< Domenico)
Σ	101	100.0%	

=> 92.1% of the data anchor to either the initial or the main-stressed syllable.

(39) German hypocoristics (different patterns; only bases with noninitial main stress)

	N	%	Beispiele
initial syllable (no main stress)	181	51,13%	Conni (< Cornelia)
main-stressed syllable	121	34,18%	Nele (< Cornelia)
other	52	14,69%	Hammi (< Abraham)
Σ	354	100,00%	

=> 85.31% of the data anchor to either the initial or the main-stressed syllable

=> The case studies confirm the figures that have emerged from corpus compiled from the literature (cf. (34) above).

VIII. Modelling anchoring and its interaction with word structure

- **claim**: the two (three) main anchoring constraints for truncation are
  - ANCHOR(σ_1)
  - ANCHOR(σ_{STRESS})
  - (maybe) ANCHOR(σ_{FINAL})

=> We predict an interaction
between different anchoring constraints and
between anchoring constraints and other constraints

=> The 'ill-behaved' word structures from section V are a result of that interaction.
- variable word structures
- w S structures in trochaic languages (e.g. English *celéb* < *celebrity*)

A. ANCHOR(σ_1), ANCHOR(σ_{stress}), SIZERESTS

(40) typology for ANCHOR(σ_1), ANCHOR(σ_{stress}), SIZERESTS

1. ANCHOR-σ_1, SIZERESTS	>>	ANCHOR-σ_{stress}
predicted outputs: unmarked word structure, anchoring to the initial syllable of the base ex: Italian Ándre (Andréa), French abrév (abbreviatíon), Serbo-Croatian Svétka (Svetlana)		
2. ANCHOR-σ_{stress}, SIZERESTS	>>	ANCHOR-σ_1
predicted outputs: unmarked word structure, anchoring to the main-stressed syllable of the base ex: French crobe (micróbe), Catalan Fína (Josefína), German Básti (Sebástian)		
3. ANCHOR-σ_1, ANCHOR-σ_{stress}	>>	SIZERESTS
predicted outputs: word structure that may be marked, but that preserves both the initial and the main-stressed syllable of the base ex: cf. below		

patterns (40) 1., 2: truncation as we know it...

a wellformed template, anchoring either to the initial or to the main-stressed syllable of the base

(41) examples: Both anchoring possibilities exist in Italian, French, English

a.	Ále	Sándra	Alessándra
	Fránce	Césca	Francésca
b.	Domí		Dominíque
		Lodí	Elodíe
c.	Pat	Trish	Patricia
	Hez	Kye	Hezekiah

patterns (40) 1., 2: ... with a twist ...

We predict that if for some reason one anchoring constraint cannot be satisfied, the other will be (if possible)

e.g. French hypocoristics (Nelson 2003: 133ff.; probably only a tendency)

(42)	Domí		Dominíque
	Caró		Carolíne
		Lodí	Elodíe
		Zabét	Elisabet

(43) ONSET >> ANCHOR-σ_1 >> ANCHOR-σ_{stress}

pattern (40) 3: truncation as we havn't seen it (yet)

all prominent material is saved at the expense of SIZERESTS

We predict that high-ranking anchoring constraints may result in atemplatic or marked word structure

(44) giving anchoring preference over canonical word structure - examples

a. Southern Italian vocatives

Antoné	(< Antonélla)
Carmé	(< Carméla)
Pá	(< Páola)

b. German

Elegánt-i	(Elegánter)
Kompóst-i	(Kompóst)
Verstéck-i	(Verstéckspiel)

c. English unsuffixed disyllabic clippings

celéb	(< celébrity)
metróp	(< metrópolis)
exéc	(< exécutive)

d. Dutch hypocoristics

Regíen	(< Regína)
Patríes	(< Patrícia)
Pandóor	(< Pandóra)

=> the typology

- covers all regular anchoring patterns in our database (except those that anchor to the base-final syllable)
- for some patterns in our sample: explains why these patterns do not correspond to the unmarked word structure of the language (e.g. w S structures in English, Dutch)

- for some patterns in our sample: explains why these patterns vary in their word structure (e.g. Southern Italian vocatives, a clipping pattern in German).

B. Enter CONTIG: Saving all the prominent material and the template

(45) discontinuous mapping in Spanish hypocoristics

Fénčo	Fulgencio
Fíko	Federíco
Fínda	Florínda
Mína	Marína

(46) ANCHOR(σ_1), ANCHOR(σ_{stress}), SIZERESTS >> CONTIGUITY-BT

IX. Conclusion

We looked at:

- truncations: word structure and anchoring
- theoretical machinery: GTT, anchoring constraints
- database: 76 patterns, 22 languages from Alber & Lappe (2007), case studies of different sizes from individual languages

the main findings:

- empirical, word structure:
  - Most truncations correspond to the minimal prosodic word form predicted in Prosodic Morphology.
  - Many truncations correspond to the maximal minimal prosodic word template predicted by the GTT version of Prosodic Morphology
  - All truncations correspond to a word structure that is allowed in the language in general.
- BUT: There are also other structures, especially:
  - many monosyllables
  - variable, i.e. atemplatic structures
  - pseudo-iambic structures in trochaic languages
- empirical, anchoring:
  - Anchoring in truncation is surprisingly uniform
  - anchoring points: initial and main-stressed syllables (final syllables?)
- theoretical:
  - It is necessary to supplement the 'classic' SIZEREST by a markedness constraint favouring monosyllabicity

  - The GTT version of Prosodic Morphology predicts more than has hitherto been assumed.
  - The interaction between SIZEREST constraints and anchoring constraints can account for the 'other' word structures that are found in the corpus (variable, atemplatic, etc.)
  - It even predicts the appearance of subminimal structures, which have been assumed not to exist in the literature.
- theoretical implications: What kind of a theory do we need in order to account for the structure of truncations?
  - non-templatic (i.e. no fixed, predefined template shape, but, the truncatory form is optimal under a given ranking)
  - process-specific faithfulness or correspondence constraints (anchoring!)
  - markedness ranking relevant for the truncatory process must resemble or correspond to the markedness ranking of the language

Appendix: Is this word formation? – some arguments from English

- productive
- clear difference in meaning between base and derivative form
- meaning: very often diminutive or: expressing familiarity with the referent (Wierzbicka 1986, Schneider 2003)
- e.g. English name truncations: serve a welldefined function within the system of terms of address in English (cf. Schneider 2003, Lappe 2007: chpt. 1)

(6) the meaning of truncatory patterns in English:

a. truncated names: Ted (< Edward):

S1: *I hope you don't mind if I call you Ted, er, I mean as opposed to Edward*?

S2:*No, no, everyone calls me Ted.*

(*Monty Python's Flying Circus*, episode 1 (1969): 'It's the Arts')

b. *y*-hypocoristics: Vicky (< Viktor):

'It's hot, isn't it?', said Hermione [...]. 'Viktor's just gone to get some drinks.' Ron gave her a withering look. 'Viktor?' he said. 'Hasn't he asked you to call him Vicky yet?' Hermione looked at him in surprise. 'What's up with you?' she said. [...]

'You - you're - ' Ron was obviously casting around for words strong enough to describe Hermione's crime, 'fraternising with the enemy, that's what you are doing.'

(Rowling, J.K. (2000), *Harry Potter and the Goblet of Fire*, p. 366f.; emphasis in the original)

- form: predictable, albeit allowing for alternant forms; crucially, however, variability is systematic.
  Predictability extends to all aspects of structure, not only to (general) word structure and anchoring (especially: segmental makeup, consonant cluster phonotactics, cf. Lappe 2007)

=> In other words: We have both a predictable exponendum and a predictable exponent

=> We should have a theory of exponence that can account for the structure of truncation.

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