




## Antonyms and word-level negation

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## Background

### Lexical typology

- "[S]ystematic study of cross-linguistic variation in words and vocabularies, i.e., the cross-linguistic and typological branch of lexicology" (Koptjevskaja-Tamm 2012: 373).
- One possible angle: basic/underived vs. derived words and the issues of motivation (e.g., Nichols et al. (2004) on intransitive vs transitive verbs; gender or evaluation in nominals, etc.).
- Can negation be a derivational category?

### Well, why not?

- Newspeak:
 

"In addition, any word could be negative by adding the prefix *un-*... By such methods it was found possible to bring about an enormous diminution of vocabulary. Given, for instance, the word *good*, there was no need for such a word as *bad*, since the required meaning was equally well - indeed, better - expressed by *ungood*. All that was necessary, in any case where two words formed a natural pair of opposites, was to decide which of them to suppress. *Dark*, for example, could be replaced by *unlight*, or *light* by *undark*, according to preferences."

(from Orwell's *Nineteen Eighty-Four*, p. 305, edition of 1949)

### Typological studies of negation

- Standard negation (Dahl 1979, Payne, 1985, Miestamo 2005)
- Prohibitives (van der Auwera & Lejeune 2005)
- Stative predications (Eriksen 2011, Veselinova 2013, 2015)
- Negative indefinites (Kahrel 1996, Haspelmath 1997)
- Negative lexicalizations (Veselinova, in progress)
- But no large-scale work on affixal/derivational/lexical negation  
*unhappy*    *sleepless*    *dislike*

### Zimmer 1964: affixal negation

- Restricted to a few well-known Indo-European languages; other families are given less attention.
- Hypotheses:
  - Hyp. I: "Negative affixes are used primarily with adjectival stems that have a "positive" value on evaluative scales such as "good - bad", "desirable - undesirable":
  - cf. *unclever* vs. \**unstupid*, *unkind* vs. \**unmean*
- But most of the words with *un-* in English have "neutral" underlying stems: *uneaten*, *unseen*

### Zimmer 1964: affixal negation

- Hyp. 2: "Negative affixes are not used with adjectival stems that have a "negative" value on evaluative scale such as "good – bad", "desirable – undesirable"

However *un*corrupt, *un*selfish.



"We could perhaps say that for any given language negative affixes that are distinct from the particle(s) used in sentence negation are likely to have a greater affinity for evaluatively positive adjective stems than for evaluatively negative ones. What this means in practice is that for any language with such negative affixes we would at least expect that the number of "negative" adjectives among their derivatives would exceed the number of "positive" adjectives among their derivatives". (Zimmer 1964: 82)

### Antonyms

- Types of opposition
  - Contradictory/complementary:  
*dead vs. alive*
  - Contrary:  
*big vs. small*

- Scalarity



### Antonyms

Unmarkedness of the positive term

- *How long is it?* vs. *#How short is it?*
- *length vs. shortness*
- Cf. Zimmer's hypothesis above.

### Antonyms

- Gaps in lexicalized antonym pairs
  - French *profond* 'deep' vs. *peu profond* 'shallow'
- Semantic relation between antonymy and negation.
  - Lexical antonyms: *small vs. big*
  - Morphological antonyms: *happy vs. unhappy*.

### Zimmer 1964

"Another problem for further investigation would be the degree to which there is cross-linguistic similarity in the concepts that are designated by simplex terms, and the degree to which antonym pairs of the schema 'x vs. un-x' can be matched in different languages having negative affixes. The questions to be investigated would be of the following kind: Is it generally true that words for 'just' have no simplex antonyms? Are there languages in which 'common' is customarily designated by an expression meaning 'not rare', or 'regular' by an expression meaning 'not random, not haphazard'? Such questions of lexical universals (whether they be "factual universals" or significant preponderances of certain lexical features) are of considerable interest and can moreover be investigated with a fair degree of ease." (Zimmer 1964: 90)

### Canonical antonyms

- Hypothesis (Paradis & al. 2009; Jones & al. 2007)
  - All!/many!/some? languages have "canonical antonyms", i.e. "a limited core of highly opposable couplings that are strongly entrenched as pairs in memory and conventionalized as pairs in text and discourse, while all other couplings form a scale from more to less strongly related"
- Main dimensions:
  - SPEED *slow–fast*,
  - LUMINOSITY *dark–light*,
  - STRENGTH *weak–strong*,
  - SIZE *small–large*,
  - WIDTH *narrow–wide*,
  - MERIT *bad–good*
  - THICKNESS *thin–thick*

## Our pilot study

## Defining the domain

1. Word-level negation of property words (adjectives?) that can be used as adnominal modifiers.
  - Examples: *unwise, dissatisfied*.
  - We call this antonymic derivation (AD)
2. More generally, word-level negation that produces word forms that can be used as adnominal modifiers.
  - Examples: *hatless, sleepless*.
  - caritives, privatives, etc.
3. Even more generally, negation in adnominal modifier position.
  - negative adpositional phrases, negated participles, negative relative clauses...
  - e.g. *Men without hats, men not having hats, men who don't have hats...*
  - We could call this adnominal modifier negation (AMNeg).

## More precise research questions

- General research question: How is negation expressed in adnominal modifier position.
- Formal
  - type of marking (e.g., prefix vs. suffix)?
  - number of different derivational negators in a language,?
  - can these markers be used on other word classes?
  - how are they related to other negative markers in the language, primarily to clausal negation?
- Semantic
  - what types of opposition (contrary vs. contradictory, scalar vs. non-scalar etc.) and which domains (evaluation, size, dimension, temperature etc.) are expressed by lexical antonyms vs. each attested type of overt morphological marking?
- Looking for correlations between semantic and formal properties of antonyms.

## Sample and sources

- A stratified variety sample of 240 languages.
- Additional languages can be included as we become aware of relevant data.
  - relative rarity of the phenomenon.
- Search for relevant data
  - grammars, dictionaries etc.
- More in-depth analysis
  - questions to experts.

## Hypotheses to be tested (concerning AD)

- Evaluatively positive members of an antonym pair are more likely to accept morphological negation (*unclever* vs. *\*unstupid*).
- Canonical antonyms would lexicalize, non-canonical would more probably be expressed through negation.
- The existence of a lexical antonym may block the possibility of morphological marking.

## Hypotheses to be tested (concerning AD)

- If triads (or tetrads) exist, there will be cross-linguistically recurring ways in which the meanings of the lexical vs. morphological antonyms are related to each other.
- Russian:
  - *krasivyj* 'beautiful' – *nekrasivyj* 'NEG.beautiful' – *urodlivij* 'ugly'
  - *dobryj* 'kind' – *zloj* 'mean' – *nedobryj* 'NEG.kind' – *nezloj* 'NEG.mean'
  - *glubokij* 'deep' – *melkij* 'shallow' – *neglubokij* 'NEG.deep'
  - *živoj* 'alive' – *mertvyj* 'dead' – *neživoj* 'NEG.alive'

Hypotheses to be tested (concerning AD)

- Morphological antonyms built with elements similar to clausal negators in the language will tend to involve contradictory rather than contrary opposites.
  - *osvensk* 'un-Swedish' – *icke-svensk* 'non-Swedish'
  - *epäsuomalainen* 'un-Finnish' – *ei-suomalainen* 'non-Finnish'
- Elements similar to clausal negators tend to be more productive.

Some preliminary observations

- Antonymic derivation
  - From a European perspective, AD with affixes like *un-* would be expectable.
  - It is attested in some languages outside Europe... but seems to be much less common than expected.
- Privatives/caritives
  - Privative/caritive suffixes deriving adjectives that express absence/lack seem to be more common.
- Adnominal modifier negation more generally.
  - E.g., participial forms of negated verby adjectives.

Hup (Nadahup, AmazoniaPattie Epps, p.c.)

w'ət	'long, tall'	w'ət-nih	'short'
wán	'deep'	wan-nih	'shallow'
dáb	'many'	dáb-nih	'few'
yíb	'slippery, slick'	yíb-nih	'not slick'
yiwík	'heavy'	yiwík-nih	'light'
cíg	'sharp'	cíg-nih	'dull'
póg	'big'	cípmæh, tæh	'small'
w'èh	'far, distant'	mah-yiʔ (adverbial)	'near'
g'əʔ	'thick'	cáp	'thin'
g'í	'hot'	tút, m'æ	'cold'
big	'old' (non-humans)	húp	'new, beautiful'
tab'áʔ	'hard, dense'	wəy	'soft, weak'
póh	'high'	tú	'low'
yów	'straight'	d'ok- (verb)	'be bent'

Tibeto-Burman extensives

Table 1: Extensive forms in Southern Lisu

'many'	mjo <sup>21</sup>	'few'	ju <sup>55</sup>
'far'	yü <sup>21</sup>	'near'	p'a <sup>33</sup> ti <sup>55</sup>
'tall/high'	mo <sup>44</sup>	'low/short'	ø <sup>44</sup>
'big'	wu <sup>21</sup>	'small'	zo <sup>44</sup>
'long (distance)'	ʃ <sup>44</sup>	'short (distance)'	no <sup>55</sup>
'long (time)'	mu <sup>44</sup> (ʃ <sup>44</sup> )	'short (time)'	du <sup>55</sup>
'thick (inanimate)'	t'u <sup>33</sup>	'thin (inanimate)'	ba <sup>21</sup>
'wide'	hi <sup>44</sup>	'narrow'	(Chinese)
'deep'	ne <sup>55</sup>	'shallow'	t'e <sup>21</sup>
'heavy'	li <sup>21</sup>	'light'	lo <sup>33</sup>
'fat (animate)'	ts'u <sup>33</sup>	'thin (animate)'	teø <sup>44</sup>

(Bradley 2012)

Tibeto-Burman extensives

Table 1: Nosu extensive paradigms (V = Verb stem)

	Shengza	Yinuo	Sondi/Adur
<b>Positive</b>	/l'a <sup>44</sup> / + V [33] (6) /l'a <sup>33</sup> / + V [33] (2) /l'a <sup>23</sup> / + V [44] (1)	/l'a <sup>33</sup> / + V [22] (4) /a <sup>33</sup> / + V [33] (4)	/l'a <sup>44</sup> / + V [33]
<b>Negative</b>	/l'i <sup>44</sup> / + V [33]	/l'i <sup>22</sup> / + V [33]	/l'i <sup>44</sup> / + V [33]
<b>Question</b>	/kha <sup>21</sup> / + V [44]	/kha <sup>33</sup> / + V [21]	/ha <sup>21</sup> / + V [44]
<b>Augment 1</b>	/tshi <sup>21</sup> / + V [44] + V [33]	/khu <sup>55</sup> / + V [33] + V [22]	Sondi /tshi <sup>21</sup> / + V [44] + V [21] Adur /tshi <sup>21</sup> / + V [44] + V [44]
<b>Augment 2</b>	/tshi <sup>21</sup> / + V [44] + V [21]		

(Bradley 1995)

Pidgins and creoles

- Uncommon to form antonyms with overt negation (Mikael Parkvall, p.c.)
- But one language where this occurs in Mobilian Jargon (Drechsel 1996):

small	tʃeto-kjo (esketene, oje)	big-NEG
short	fala-kjo (yafkolole)	long-NEG
new	sepe-kjo (hemona)	old-NEG
bad	tʃokma-kjo	good-NEG
dull (knife)	alokpa-kjo	sharp-NEG

## Esperanto

<i>malakra</i>	blunt
<i>malalta</i>	low
<i>malbela</i>	nasty, ugly
<i>malbona</i>	bad, miserable, nasty, poor
<i>maldekstra</i>	left
<i>maldiligenta</i>	lazy
<i>maldolĉa</i>	bitter
<i>malebria</i>	sober
<i>malforta</i>	faint, light, weak
<i>malfrue</i>	late
<i>malgranda</i>	diminutive, little, small
<i>malhela</i>	bleak, dark, dismal, dreary
<i>maljuna</i>	old
<i>mallarĝa</i>	narrow
<i>mallonga</i>	brief, short
<i>malluma</i>	dark, dim
<i>malmolta</i>	hard
<i>malrapida</i>	slow
<i>malseka</i>	wet
<i>malvarma</i>	cold

## Uralic languages

- NB: Some Uralic languages also show AD:
  - Komi with prefix *nie-* borrowed from Russian; South Saami with prefixes *ov-*, *vaane-* borrowed from Scandinavian.
  - Erzya, Finnish, Estonian with indigenous elements, e.g. Finnish *epä-, ei*.
  - Cf. Komi *-tem* on noun bases forming antonymic pair with positive *-a*.
- Caritives/Privatives/Abessives:
  - variation between what can be used predicatively, adverbially, attributively.
  - we focus on the attributive uses.
  - there is some debate as to which ones of these are derivation vs. inflection.

## Uralic languages

- Finnish
  - caritive/privative:
    - *autoton* 'carless' => *autoton mies* 'man without a car'
  - abessive:
    - *autotta* 'without a car' (not adnominal)
  - adposition:
    - *ilman* *autoa* 'without a car' (not adnominal)
- Cf. Estonian (Andres Karjus, p.c.)
  - caritive/privative:
    - *\*autotu* 'carless'
    - *unetu* 'sleepless' => *unetu mees* 'sleepless man'
  - abessive:
    - *autota* 'without a car' => *autota mees* 'man without a car'
  - adposition:
    - *ilma autota* 'without a car' => *ilma autota mees* 'man without a car'

## Forest Enets (Siegl 2015)

*osa* 'meat'  
*osa-ši-đa enĉiž*  
 meat-CAR-PTCP.IPF person  
 'person without meat' (Lit: meatless being person)  
*enĉiž osa-ši*  
 person meat-CAR.3SG  
 'The person is without meat.'

*đeĉu mi-n ŋul' šidu-ru-š kod-šud kaiže-iž*  
 Yenisei[GEN] in-LOC very two-LIM-TRES sledge-CAR remain-1DU  
 'We two remained without a sledge on the Yenisei.' (NKB Yenisei)

## Hungarian (Ě.Kiss 2015)

- a. *János pénz nélkül érkez-ett.*  
 John money without arrive-PST.3SG  
 'John arrived without money.'
- b. *egy pénz nélkül-i diák*  
 a money without-ADJ student  
 'a moneyless student'
- péNZ-telen, állás-talan diák*  
 money-less, job-less student  
 'a moneyless and jobless student'

## AMNeg more generally

- Verby adjectives/property words, e.g. in Korean
  - Attributive function: participle form.
  - Negation by means of the verbal negative *anh-*.
    - mek-ta* 'eat', *mek-un* 'one who has eaten'
    - mek-ci anh-ta* 'not to eat',
    - mek-ci anh-un* 'one who has eaten' (as attribute)
    - coh-ta* 'be good', *coh-un* 'good'
    - coh-ci anh-ta* 'to be no good',
    - coh-ci anh-un* 'no good' (as attribute).
  - Another copula *mos-* 'to be unable':
    - alumtaha-n* 'beautiful'
    - alumtap-ci mos-ha-n* 'not beautiful'.
- (Elena Rudnitskaya, p.c.)

## AMNeg more generally

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Lezgian (Haspelmath 1993: 262)

*wiri ačux tuš-ir fonema-jar*

all open COP.NEG-PTCP phoneme-PL

‘all the consonant phonemes’

(lit. ‘all the phonemes which are not open’)

## AMNeg more generally

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Jamsay Dogon (Heath 2008: 273)

*inè nùmò-bírè sà-rá-n ké*

person.L hand.L-work(noun) have-NEG-PTCP.SG TOP

‘(For) someone who doesn’t have a (skilled) occupation [topic]’

## The next steps

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- Systematic look at the sample languages
- Pointers to additional languages with relevant data are welcome!
- More in-depth analysis of relevant data with the help of experts.

Thank you!

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