

Directionality in affixation: testing the applicability of Marchand's (1964) semantic criteria

Alba E. Ruz & Bożena Cetnarowska

albaruz94@correo.ugr.es

University of Granada

bozena.cetnarowska@us.edu.pl

University of Silesia in Katowice

Word-Formation Theories VI & Typology and Universals in Word-Formation V

23–26 June 2022, Košice, Slovakia



UNIVERSIDAD
DE GRANADA



UNIVERSITY OF SILESIA
IN KATOWICE

Project Ref. PID2020-119851GB-I00 funded by



Contents

1. Background
2. Aims of the study
3. Method
4. Results and discussion
5. Conclusion

Background

Conversion is typically described in analogy to affixation (cf. Valera 2014, and references therein)

Examples of N/V conversion in English:

- | | | | | | |
|-----|-----------------------------|-----------|---|-----------------------------|----------|
| (1) | <i>attempt</i> ^V | [ACTION] | / | <i>attempt</i> ^N | [EVENT] |
| (2) | <i>smile</i> ^N | [GESTURE] | / | <i>smile</i> ^V | [ACTION] |

Examples of affixation in English:

- | | | | | | |
|-----|--|----------|---|--|---------|
| (3) | <i>write</i> ^V | [ACTION] | > | <i>writer</i> ^N | [AGENT] |
| (4) | <i>deboned</i> ^{ADJ} | | | | |
| | <i>de-</i> + <i>boned</i> ^{ADJ} | | | 1. Of a corset: not stiffened with whalebone | |
| | <i>debone</i> ^V + <i>-ed</i> | | | 2. Of meat or fish: that has had the bones removed | |

Background

Directionality in word formation

Various criteria have been proposed in the literature to identify directionality in unclear cases, including:

- i. Diachronic (historical evidence / attestation dates, e.g. Biese 1941)
- ii. Synchronic (emphasis on use and semantics cf. Marchand 1963, 1964)

Since then, several studies have taken on the issue from various perspectives (see e.g., Cetnarowska 1993, Štekauer 1996, Plag 2003, Bram 2011, Lohmann 2017, on English, Don 2003, based on phonological and morphological properties in Dutch, Plank 2010, on German, but potentially extendable to other languages, Tribout 2020, on French, or Ševčíková 2021 on Czech, among others).

“[D]irectionality remains a deadlock in many respects” (cf. Bauer and Valera 2005: 11).

Background

Marchand's (1964) content criteria for directionality

- i. **Semantic Dependence:** “[t]he word that for its analysis is dependent on the content of the other pair member is necessarily the derivative” (Marchand 1964: 12), e.g.: *knife*^N > *knife*^V ‘to cut with a knife’
- ii. **Semantic Pattern:** “[c]ertain words have characteristic meanings which mark them as derivatives” (Marchand 1964: 15), e.g.: ‘to act as N’ ‘one who Vs’ ‘to make ADJ’
- iii. **Semantic Range:** that “[o]f two homophonous words exhibiting similar sets of semantic features the one with the smaller field of reference is the derivative” (Marchand 1964: 14), e.g.: *convert*^V > *convert*^N ‘one who has been converted to a religion/belief’
- iv. **Restriction of Usage:** “[i]f one word has a smaller range of usage than its pair member, it must be considered the derivative” (Marchand (1964: 13), e.g. restrictions to some forms, poetic, slang, etc.
- v. **Register use**
- vi. **Frequency of occurrence**

Aims of the study

- i. To study whether Marchand's semantic criteria (1964) for directionality prove applicable in a sample of word-class changing affixation in English
 - ii. To see how measurable the criteria are when considering senses
- Directionality should be studied by word senses and not by lexemes (Plank 2010)

Contents

1. Background
2. Aims of the study
3. Method
 - i. Data sample selection and extraction
 - ii. Application of the semantic criteria
4. Results and discussion
5. Conclusion

Method

i. Data sample selection and extraction

List of 30 underived bases (Projekt Monika, cf. Körtvélyessy et al. 2020, and specifically Popova 2020, dealing with the study of derivational paradigms in English)

Table 1. Number of derivatives by affixation per paradigm base

Nouns	nDerivatives	Verbs	nDerivatives	Adjectives	nDerivatives
<i>bone</i>	16	<i>burn</i>	8	<i>bad</i>	4
<i>day</i>	7	<i>cut</i>	10	<i>black</i>	11
<i>dog</i>	17	<i>dig</i>	8	<i>long</i>	12
<i>eye</i>	11	<i>drink</i>	16	<i>narrow</i>	7
<i>fire</i>	10	<i>give</i>	7	<i>new</i>	5
<i>louse</i>	9	<i>hold</i>	15	<i>old</i>	6
<i>name</i>	14	<i>know</i>	13	<i>straight</i>	9
<i>stone</i>	15	<i>pull</i>	5	<i>thick</i>	14
<i>tooth</i>	20	<i>sew</i>	5	<i>thin</i>	7
<i>water</i>	20	<i>throw</i>	7	<i>warm</i>	9
Sum	139		94		84

Method

i. Data sample selection and extraction

List of word-class changing affixes (Quirk et al. 1985, Stockwell & Minkova 2001) → Search of derivatives in the *Oxford English Dictionary* (OED) and the *British National Corpus* (BNC) → **Total of 317 derived lexemes**

Table 1. Number of derivatives by affixation per paradigm base

Nouns	nDerivatives	Verbs	nDerivatives	Adjectives	nDerivatives
<i>bone</i>	16	<i>burn</i>	8	<i>bad</i>	4
<i>day</i>	7	<i>cut</i>	10	<i>black</i>	11
<i>dog</i>	17	<i>dig</i>	8	<i>long</i>	12
<i>eye</i>	11	<i>drink</i>	16	<i>narrow</i>	7
<i>fire</i>	10	<i>give</i>	7	<i>new</i>	5
<i>louse</i>	9	<i>hold</i>	15	<i>old</i>	6
<i>name</i>	14	<i>know</i>	13	<i>straight</i>	9
<i>stone</i>	15	<i>pull</i>	5	<i>thick</i>	14
<i>tooth</i>	20	<i>sew</i>	5	<i>thin</i>	7
<i>water</i>	20	<i>throw</i>	7	<i>warm</i>	9
Sum	139		94		84

Method

ii. Application of Marchand's (1969) criteria: semantic dependence

Table 2. Semantic dependence in the paradigm of *bone*^N (OED)

BASE	D1	D2	nSenses	+ SD	– SD	?	nSD
<i>bone</i> ^N			22				
	<i>boned</i> ^{ADJ}		3	1, 2, 3			3
	<i>boneless</i> ^{ADJ}		3	1, 2		3	2
	<i>boneless</i> ^N		*				*
		<i>bonelessly</i> ^{ADV}	1	1			1
		<i>bonelessness</i> ^N	1	1			1
	<i>bony/bonny/</i>		3	1, 2		3	2
	<i>boney</i> ^{ADJ}						
	<i>bony</i> ^N		1	1			1
	<i>bony</i> ^V		1	1			1
		<i>bonily</i> ^{ADV}					
		<i>boninness</i> ^N	1	1			1
	<i>boning</i> ^N		4	1, 2, 3a, 3b, 4			4
	<i>boner</i> ^N		4	1, 2a	2b, 3	4	1.5
	<i>boneish</i> ^{ADJ}		2	1, 2			2
	<i>debone</i> ^V		1	1			1
		<i>deboned</i> ^{ADJ}	2	1, 2			2
		<i>deboning</i> ^N	1	1			1
Total			28				23.5

Method

ii. Application of Marchand's (1969) criteria: semantic pattern

Table 3. Semantic pattern in the paradigm of *bone*^N (OED)

BASE	D1	D2	nSenses	–SP/?	nSP
<i>bone</i> ^N			22		
	<i>boned</i> ^{ADJ}		3		3
	<i>boneless</i> ^{ADJ}		3		3
	<i>boneless</i> ^N		*		*
		<i>bonelessly</i> ^{ADV}	1		1
		<i>bonelessness</i> ^N	1		1
	<i>bony</i> ^{*ADJ}		3		3
	<i>bony</i> ^N		1	1	0
	<i>bony</i> ^V		1		1
		<i>bonily</i> ^{ADV}			1
		<i>boninness</i> ^N	1		
	<i>boning</i> ^N		4	V: 1, 2, 3a, 4	0.5
	<i>boner</i> ^N		4		4
	<i>boneish</i> ^{ADJ}		2		2
	<i>debone</i> ^V		1		1
		<i>deboned</i> ^{ADJ}	2	V: 2	1
		<i>deboning</i> ^N	1		1
Total			28		22.5

Method

ii. Application of Marchand's (1969) criteria: restrictions of usage

Table 4. Restrictions of usage in the paradigm of *bone*^N (OED)

BASE	D1	D2	nS	RU1	RU2	RU3	RU4	nRU
<i>bone</i> ^N			22	Hist./obs./rare: 3, 10, 18, 19b, 20, 21 Slang: 11,14	Pl.: 5a, 7, 16 (+coll.), 17 Mass n.: 8a		Figurative: 1c, 4b, 9	11.5
	<i>boned</i> ^{ADJ}		3	Specific: 2				1
	<i>boneless</i> ^{ADJ}		3	Specific: 2			Figurative: 3	1
	<i>boneless</i> ^N		*					*
		<i>bonelessly</i> ^{ADV}	1				Figurative: 1	1
		<i>bonelessness</i> ^N	1					0
	<i>bony</i> ^{*ADJ}		3	Specific: 3 (U.S. Mining.)				1
	<i>bony</i> ^N		1	Specific: 1 (U.S. Mining.)				1
	<i>bony</i> ^V		1	Obsolete (+ nonce- word): 1				1
		<i>bonily</i> ^{ADV}	1					0
		<i>boninness</i> ^N	1					0
	<i>boning</i> ^N		4	Specific: 1, 2, 3 Slang: 4	– Pl.			4
	<i>boner</i> ^N		4	Slang: 1, 3, 4				3
	<i>boneish</i> ^{ADJ}		2	Obsolete: 1				1
	<i>debone</i> ^V		1					0
		<i>deboned</i> ^{ADJ}	2	Specific: 1				1
		<i>deboning</i> ^N	1	Specific: 1				1
Total			28				Total nRU (Der)	16

Method

ii. Application of Marchand's (1969) criteria: semantic range (number of senses)

Table 6. Number of senses for the lexemes in the paradigm of *bone*^N

BASE	D1	D2	nSenses
<i>bone</i> ^N			22
	<i>boned</i> ^{ADJ}		3
	<i>boneless</i> ^{ADJ}		3
	<i>boneless</i> ^N		*
		<i>bonelessly</i> ^{ADV}	1
		<i>bonelessness</i> ^N	1
	<i>bony</i> ^{*ADJ}		3
	<i>bony</i> ^N		1
	<i>bony</i> ^V		1
		<i>bonily</i> ^{ADV}	1
		<i>boninness</i> ^N	1
	<i>boning</i> ^N		4
	<i>boner</i> ^N		4
	<i>boneish</i> ^{ADJ}		2
	<i>debone</i> ^V		1
		<i>deboned</i> ^{ADJ}	2
		<i>deboning</i> ^N	1
Total			28

Method

ii. Application of Marchand's (1969) criteria: semantic range (qualitative analysis)

Table 5. Semantic range in the paradigm of *bone*^N (OED)

BASE	D1	D2	SR	New/unrelated senses
<i>bone</i> ^N				
	<i>boned</i> ^{ADJ}		≈	
	<i>boneless</i> ^{ADJ}		<	
	<i>boneless</i> ^N		<	
		<i>bonelessly</i> ^{ADV}	≈	
		<i>bonelessness</i> ^N	≈	
	<i>bony</i> ^{*ADJ}		≈	
	<i>bony</i> ^N		<	
	<i>bony</i> ^V		<	
		<i>bonily</i> ^{ADV}	?	
		<i>boninness</i> ^N	≈	
	<i>boning</i> ^N		<	
	<i>boner</i> ^N		<	2b, 3
	<i>boneish</i> ^{ADJ}		<	
	<i>debone</i> ^V		<	
		<i>deboned</i> ^{ADJ}	?	
		<i>deboning</i> ^N	<	

Qualitative analysis of the SR

≈ : similar

> : wider

< : narrower

≉ : narrower/close to similar

? : unclear

Method

ii. Application of Marchand's (1969) criteria: range of registers

Table 7. Range of registers in the paradigm of *bone*^N (BNC) (+: attested / -: not attested)

BASE	D1	D2	nReg	Spok	Fiction	Magaz	Newsp	Non-Acad	Acad	Misc
<i>bone</i> ^N			7	+	+	+	+	+	+	+
	<i>boned</i> ^{ADJ}		6	+	+	+	+	+	-	+
	<i>boneless</i> ^{ADJ}		6	+	+	+	+	+	-	+
	<i>boneless</i> ^N		2	-	-	+	-	+	-	-
		<i>bonelessly</i> ^{ADV}	1	-	+	-	-	-	-	-
		<i>bonelessness</i> ^N		-	-	-	-	-	-	-
	<i>bony</i> ^{*ADJ}		7	+	+	+	+	+	+	+
	<i>boney</i> ^{*ADJ}		3	-	+	+	+	-	-	-
	<i>bony</i> ^N			-	-	-	-	-	-	-
	<i>bony</i> ^V			-	-	-	-	-	-	-
		<i>bonily</i> ^{ADV}	2	-	+	+	-	-	-	-
		<i>boniness</i> ^N	2	-	+	-	-	-	-	+
	<i>boning</i> ^N		2	+	-	-	+	-	-	-
	<i>boner</i> ^N			-	-	-	-	-	-	-
	<i>boneish</i> ^{ADJ}			-	-	-	-	-	-	-
	<i>debone</i> ^V		1	-	+	-	-	-	-	-
		<i>deboned</i> ^{ADJ}		-	-	-	-	-	-	-
		<i>deboning</i> ^N		-	-	-	-	-	-	-

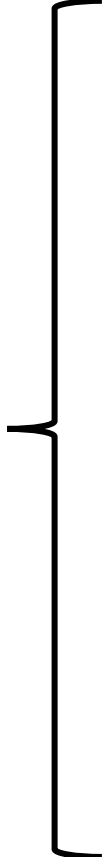
Method

ii. Application of Marchand's (1969) criteria: frequency of occurrence

Table 8. Normalized frequency of occurrence (NF) in the paradigm of *bone*^N (BNC)

BASE	D1	D2	NF
<i>bone</i> ^N			45,60
	<i>boned</i> ^{ADJ}		0,33
	<i>boneless</i> ^{ADJ}		0,46
	<i>boneless</i> ^N		0,03
		<i>bonelessly</i> ^{ADV}	0,02
		<i>bonelessness</i> ^N	
	<i>bony</i> */ <i>boney</i> ^{ADJ}		3,36
	<i>bony</i> ^N		
	<i>bony</i> ^V		
		<i>bonily</i> ^{ADV}	0,02
		<i>boninness</i> ^N	0,02
	<i>boning</i> ^N		0,03
	<i>boner</i> ^N		
	<i>boneish</i> ^{ADJ}		
	<i>debone</i> ^V		0,01
		<i>deboned</i> ^{ADJ}	
		<i>deboning</i> ^N	

Contents

1. Background
 2. Aims of the study
 3. Method
 4. Results and discussion
 5. Conclusion
- 
- i. Semantic dependence (SD)
 - ii. Semantic pattern (SP)
 - iii. Restrictions of usage (RU)
 - iv. Semantic range (SR)
 - v. Range of registers (Reg)
 - vi. Frequency of occurrence (Freq)

Results

i. Semantic dependence

Table 9. Senses of the derivatives from the nominal, adjectival and verbal bases showing SD by order of derivation

N	D1	D2	ADJ	D1	D2	V	D1	D2	D3
<i>bone</i>	83%	100%	<i>bad</i>	100%		<i>burn</i>	86%	50%	
<i>day</i>	70%	100%	<i>black</i>	81%	75%	<i>cut</i>	56%	100%	
<i>dog</i>	69%	100%	<i>long</i>	67%	50%	<i>dig</i>	69%	100%	
<i>eye</i>	80%	100%	<i>narrow</i>	93%	100%	<i>drink</i>	81%	–	
<i>fire</i>	48%	100%	<i>new</i>	64%		<i>give</i>	91%		
<i>louse</i>	43%	100%	<i>old</i>	100%	100%	<i>hold</i>	64%	80%	100%
<i>name</i>	61%	100%	<i>straight</i>	80%	100%	<i>know</i>	89%	80%	
<i>stone</i>	88%	80%	<i>thick</i>	89%	100%	<i>pull</i>	88%		
<i>tooth</i>	70%	100%	<i>thin</i>	100%		<i>sew</i>	100%	–	
<i>water</i>	72%	100%	<i>warm</i>	94%	–	<i>throw</i>	100%	0%	

Examples:

- +SD (5) *boneless*^{ADJ} 1. ‘Having no bones; lacking bones’
- SD (6) *boner*^N 2b. Attributive. Cow of poor quality whose meat is used for low-quality beef products.
- (7) *warming*^N 2. A thrashing, trouncing. Also figurative.

Results

ii. Semantic pattern

Table 10. Senses of the derivatives from the nominal, adjectival and verbal bases showing SP by order of derivation

N	D1	D2	ADJ	D1	D2	V	D1	D2	D3
<i>bone</i>	83%	100%	<i>bad</i>	100%		<i>burn</i>	95%	50%	
<i>day</i>	60%	100%	<i>black</i>	82%	100%	<i>cut</i>	56%	100%	
<i>dog</i>	77%	100%	<i>long</i>	87%	100%	<i>dig</i>	69%	100%	
<i>eye</i>	80%	100%	<i>narrow</i>	46%	100%	<i>drink</i>	81%	100%	
<i>fire</i>	45%	100%	<i>new</i>	73%		<i>give</i>	91%		
<i>louse</i>	57%	100%	<i>old</i>	100%	100%	<i>hold</i>	89%	50%	100%
<i>name</i>	60%	50%	<i>straight</i>	70%	100%	<i>know</i>	79%	100%	
<i>stone</i>	86%	100%	<i>thick</i>	100%	100%	<i>pull</i>	85%		
<i>tooth</i>	69%	100%	<i>thin</i>	100%		<i>sew</i>	83%	–	
<i>water</i>	61%	100%	<i>warm</i>	94%	–	<i>throw</i>	100%	100%	

Examples:

+SP (8) *warming*^N 1a ‘the action of making warm; the state of becoming warm.’

–SP (9) *narrowly*^{ADV} 4. †a. Barely, scarcely. Obsolete. rare.

Results

iii. Restrictions of usage

Table 11. Senses showing RU for the nominal, adjectival, and verbal bases and their derivatives by order of derivation

N	Base	D1	D2	ADJ	Base	D1	D2	V	Base	D1	D2	D3
<i>bone</i>	68%	65%	43%	<i>bad</i>	23%	38%		<i>burn</i>	57%	48%	50%	
<i>day</i>	43%	50%	0%	<i>black</i>	60%	65%	8%	<i>cut</i>	24%	63%	50%	
<i>dog</i>	55%	64%	50%	<i>long</i>	6%	67%		<i>dig</i>	11%	38%	100%	
<i>eye</i>	25%	75%	0%	<i>narrow</i>	33%	43%	100%	<i>drink</i>	25%	50%		
<i>fire</i>	33%	59%	100%	<i>new</i>	11%	64%		<i>give</i>	18%	45%		
<i>louse</i>	50%	57%	50%	<i>old</i>	38%	50%		<i>hold</i>	18%	61%	70%	100%
<i>name</i>	36%	56%	0%	<i>straight</i>	30%	30%		<i>know</i>	41%	58%	40%	
<i>stone</i>	22%	38%	20%	<i>thick</i>	50%	22%	17%	<i>pull</i>	37%	50%		
<i>tooth</i>	33%	38%	0%	<i>thin</i>	38%	33%		<i>sew</i>	50%	33%		
<i>water</i>	31%	54%	57%	<i>warm</i>	19%	53%		<i>throw</i>	37%	60%	100%	

Restricted senses in the derivatives are typically related to senses in the base which are restricted too, e.g.:

(10) *pulling*^N 2. e. **British slang**. The action of picking up a sexual partner.

(11) *pull*^V 12. a. **transitive. British slang**. To pick up (a partner), esp. for sexual intercourse; to seduce.

Results

iv. Semantic range: number of senses in the OED

Table 12. Number of senses for the derivatives from the nominal bases by order of derivation (OED)

N	Base > D1	Base = D1	Base < D1	D1 > D2	D1 = D2	D1 < D2
<i>bone</i>	100%	0%	0%	57%	29%	0%
<i>day</i>	100%	0%	0%	100%	0%	0%
<i>dog</i>	100%	0%	0%	40%	40%	0%
<i>eye</i>	100%	0%	0%	100%	0%	0%
<i>fire</i>	100%	0%	0%	0%	100%	0%
<i>louse</i>	40%	60%	0%	0%	50%	0%
<i>name</i>	100%	0%	0%	100%	0%	0%
<i>stone</i>	100%	0%	0%	40%	20%	0%
<i>tooth</i>	57%	36%	7%	17%	0%	0%
<i>water</i>	90%	0%	0%	33%	0%	0%

Results

iv. Semantic range: number of senses in the OED

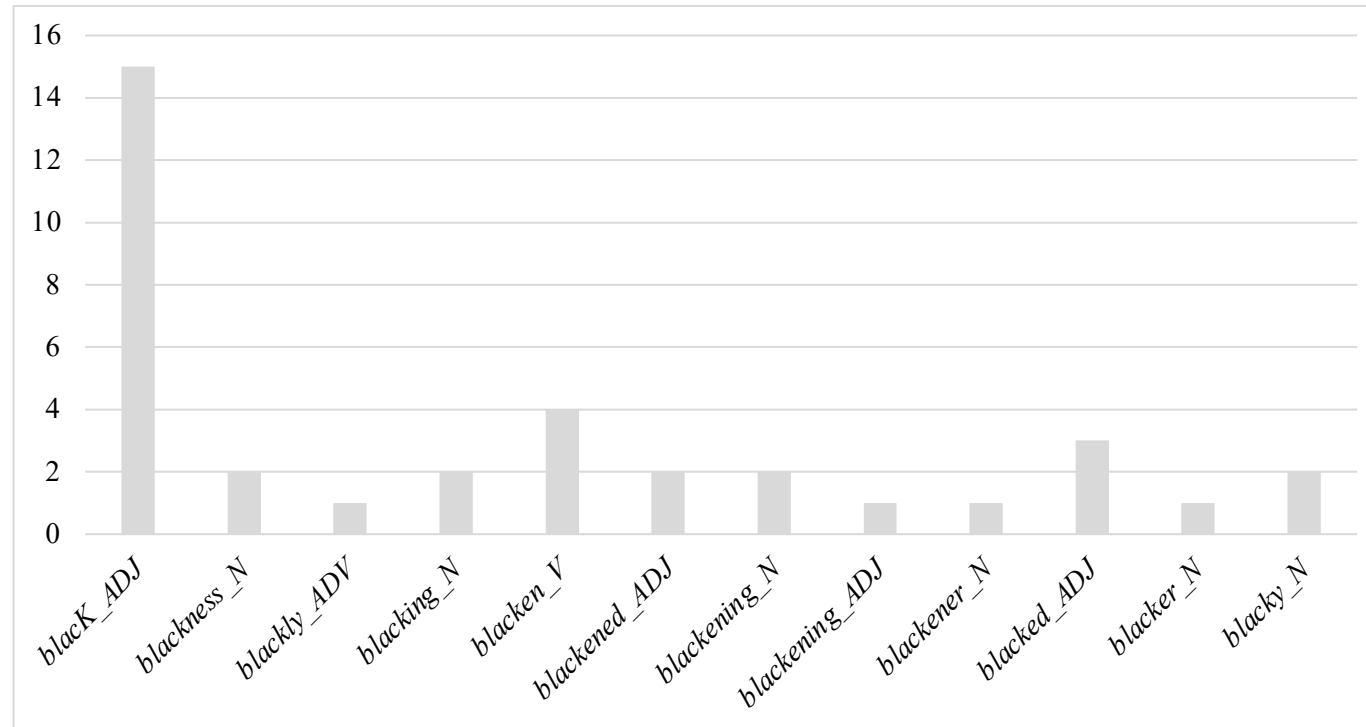


Figure 1. Number of senses for each lexeme in the paradigm of *black*^{ADJ}

Issues: inconsistencies in the organization of senses in the OED and their description, e.g.:

(12) *eyelessness*^N 'The state or condition of being eyeless (in various senses)'.

Results

iv. Semantic range: qualitative analysis of the OED senses

Table 13. Qualitative analysis of the SR for the nominal paradigms by order of derivation (OED)

N	D1 $\approx$ Base	D1 $\lesssim$ Base	D1 < Base	D1 > Base	D2 $\approx$ D1	D2 $\lesssim$ D1	D2 < D1	D2 > D1
<i>bone</i>	0%	0%	100%	0%	17%	17%	33%	0%
<i>day</i>	0%	33%	67%	0%	100%	0%	0%	0%
<i>dog</i>	0%	0%	100%	0%	0%	60%	0%	0%
<i>eye</i>	0%	0%	100%	0%	0%	50%	50%	0%
<i>fire</i>	0%	0%	100%	0%	0%	0%	0%	0%
<i>louse</i>	0%	0%	40%	40%	50%	50%	0%	0%
<i>name</i>	0%	10%	70%	0%	25%	50%	25%	0%
<i>stone</i>	0%	10%	90%	0%	40%	60%	0%	0%
<i>tooth</i>	0%	14%	86%	0%	17%	67%	17%	0%
<i>water</i>	0%	0%	90%	0%	30%	30%	40%	0%

Variation found for each paradigm

Results

v. Range of registers (BNC)

Table 14. Range of registers for the derivatives of the bases by order of derivation (BNC)

	Base > D1	Base = D1	Base < D1	D1 > D2	D1 = D2	D1 < D2	D2 > D3	D2 = D3	D2 < D3
N	63%	37%	0%	79%	21%	0%			
ADJ	49%	51%	0%	94%	6%	0%			
V	40%	60%	0%	66%	33%	0%	0%	100%	0%

Example of a typical case:

(13)	Base	D1	D2	nReg
	<i>stone</i> ^N			7
		<i>stony</i> ^{ADJ}		7
			<i>stoniness</i> ^N	3

Results

vi. Frequency of occurrence (BNC)

Table 15. Normalized frequency of occurrence for the derivatives of the bases by order of derivation

	Base > D1	Base < D1	D1 > D2	D1 < D2	D2 = D3
N	98%	2%	95%	5%	
ADJ	100%	0%	94%	6%	
V	100%	0%	89%	11%	100%

Few examples where the Freq of the derivative > base, e.g.:

(14)	Lexeme	Frequency	Normalized frequency (BNC)
	<i>louse</i> ^N	192	1,99
	<i>lousy</i> ^{ADJ}	221	2,29

Conclusion

Do the criteria prove applicable in affixation? Is an analysis at the level of senses feasible?

- i. SD / SP: seem to indicate correctly a base>derivative direction for most cases in our sample. However, this is not true for every sense, and variation is found in the paradigms.
- ii. RU: proves useful only at the level of sense and for specific cases on a base/derivative comparison.
- iii. SR: seems narrower for most derivatives. It is best measured qualitatively but proves time-consuming. A comparison of the number of senses does not always offer relevant results.
- iv. Reg: does not always offer relevant results. It may be reliable if studied by senses, and perhaps only after a more fine-grained classification is made.
- v. Freq: derivatives show a lower Freq than their bases for the paradigms studied. This may serve a useful diagnosis and offer interesting results if studied by senses. But when is a difference in frequency to be considered relevant?

References

- Bauer, L. and S. Valera. (2005) Conversion or zero-derivation: an introduction In: L. Bauer and S. Valera (eds) *Approaches to Conversion / Zero-Derivation*, 7–15. Münster: Waxmann.
- Biese, Y. M. (1941) Origin and development of conversions in English. *Annales Academiae Scientiarum Fennicae* B XLV/2.
- Bram, B. (2011) *Major Total Conversion in English: The Question of Directionality*. PhD Thesis, Victoria University of Wellington.
- Cetnarowska, B. (1993) *The Syntax, Semantics and Derivation of Bare Nominalisations in English*. Katowice: Uniwersytet Śląski.
- Davies, M. (2004–) *British National Corpus*. Oxford University Press. Available online at <https://www.english-corpora.org/bnc/>
- Don, J. (2003) A note on conversion in Dutch and German. In: L. Cornips and P. Fikkert (eds) *Linguistics in the Netherlands*, 33–43. Amsterdam: John Benjamins. <https://doi.org/10.1075/avt.20.07don>
- Körtvélyessy, L., A. Bagasheva, and P. Štekauer (2020) *Derivational Networks Across Languages*. Berlin: De Gruyter Mouton. <https://doi.org/10.1515/9783110686630>
- Lohmann, A. (2017) Phonological properties of word classes and directionality in conversion. *Word Structure* 10/2, 204–234. <https://doi.org/10.3366/word.2017.0108>

References

- Marchand, H. (1963) On a question of contrary analysis with derivationally connected but morphologically uncharacterized words. *English Studies* 44, 176–187.
- Marchand, H. (1964). A Set of Criteria for the establishing of derivational relationship between words unmarked by derivational morphemes. *Indogermanische Forschungen* 69: 10–19 .
- Plag, I. (2003) *Word-Formation in English*. Cambridge: Cambridge.
- Plank, F. 2010. Variable direction in zero-derivation and the unity of polysemous lexical items. *Word Structure* 3/1: 82–97.
- Popova, G. (2020) Derivational networks in English. In L. Körtvélyessy, A. Bagasheva and P. Štekauer (eds.), *Derivational Networks Across Languages*, 147–156. Berlin: De Gruyter Mouton. <https://doi.org/10.1515/9783110686630-015>
- Proffitt, M. (2019–) *The Oxford English Dictionary Online*. Oxford University Press. Available online at <http://www.oed.com>
- Tribout, D. (2020) Nominalization, verbalization or both? Insights from the directionality of noun-verb conversion in French. *Zeitschrift für Wortbildung* 4/2, 187–207. <https://doi.org/10.3726/zwjw.2020.02.10>
- Ševčíková, M. (2021) Action nouns vs. nouns as bases for denominal verbs in Czech: A case study on directionality in derivation. *Word Structure* 14, 97–128. <https://doi.org/10.3366/word.2021.0181>
- Valera, S. (2014) Conversion. In Rochelle L. and P. Štekauer (eds.), *The Oxford Handbook of Derivational Morphology*. Oxford: Oxford University Press: 154–168

Directionality in affixation: testing the applicability of Marchand's (1964) semantic criteria

Alba E. Ruz & Bożena Cetnarowska

albaruz94@correo.ugr.es

University of Granada

bozena.cetnarowska@us.edu.pl

University of Silesia in Katowice

Word-Formation Theories VI & Typology and Universals in Word-Formation V

23–26 June, 2022, Košice, Slovakia



UNIVERSIDAD
DE GRANADA



UNIVERSITY OF SILESIA
IN KATOWICE

Project Ref. PID2020-119851GB-I00 funded by

