



LNG2211

English Morphology

Term 2/2022

Department of English

Faculty of Humanities and Social Sciences



Morphological Productivity

Morphological Productivity

product

produce

productive

productivity





Morphological Productivity

product	N
produce	V
productive	Adj
productivity	N



Morphological Productivity

The productivity of a word formation :

The degree of cognitive ease with which speakers can produce or process new complex words on the basis of that process.



Morphological Productivity

The productivity of a word formation :

(Simple English version)

The ease with which people can make or understand new difficult words based on their thinking ability.



Morphological Productivity

X-ness (goodness, sweetness)

X-ly (quietly, softly)

X-some (wholesome, cumbersome)

X-al (withdrawal, rebuttal)



Morphological Productivity

The affix is productive if:

- ❖ **It occurs with many bases.**
- ❖ **It can be easily used with new bases to form new words.**
- ❖ **It has few restrictions that would prevent coinages with new bases.**



Morphological Productivity

Consider the following suffixes:

-ness (greyness, happiness)

-ity (sensitivity, purity)

-th (depth, length)

Which one is most productive?



Productivity is gradient

- ❖ **Some affixes can be more or less productive.**
- ❖ **Some affixes are highly productive, e.g.**
-er, -ness, -able, -ly, un-
- ❖ **Other affixes are nearly unproductive so it is almost impossible to form new coinages.**



Productivity is gradient

- ❖ **Other affixes are nearly unproductive, so it is almost impossible to form new coinages.**

ADJ + *th*

N + *dom*

V + *ment*

ADJ + *en*



Productivity is gradient

- ❖ **Other affixes are nearly unproductive, so it is almost impossible to form new coinages.**

ADJ + *th* *warm* > *warmth*

N + *dom* *king* > *kingdom*

V + *ment* *judge* > *judgment*

ADJ + *en* *black* > *blacken*



Productivity is gradient

- ❖ **Other affixes are nearly unproductive, so it is almost impossible to form new coinages.**

ADJ + *th*

green > **greenth*

N + *dom*

worm > **wormdom*

V + *ment*

email > **emailment*

ADJ + *en*

green > **greenen*



Measuring Productivity

- ❖ **How can you tell that one affix is more productive than the other?**
- ❖ **Check on the extensive text collection, i.e., corpus**
 - 1) How many formations with a certain suffix are there?**
 - 2) How many of these occur only once: hapax legomena?**



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Measuring Productivity



British National Corpus (BNC)

SEARCH FREQUENCY CONTEXT OVERVIEW

List Chart Collocates Compare KWIC

[POS] ?

Find matching strings Reset

Sections Texts/Virtual Sort/Limit Options

(HIDE HELP)

The [British National Corpus \(BNC\)](#) was originally created by [Oxford University press](#) in the 1980s - early 1990s, and it contains [100 million words](#) of text from a wide range of genres (e.g. spoken, fiction, magazines, newspapers, and academic).

The BNC is related to many other [corpora of English](#) that we have created. These corpora were [formerly](#) known as the "BYU Corpora", and they offer unparalleled insight into [variation in English](#).

Click on any of the links in the search form to the left for context-sensitive help, and to see the range of queries that the corpus offers. You might pay special attention to the [comparisons between genres](#) and [virtual corpora](#), which allow you to create personalized collections of texts related to a particular area of interest.

[Five minute tour](#)

Measuring Productivity

-able derivatives: BNC frequency and listedness in Webster's Third

<i>-able derivative</i>	token frequency	listed in <i>Webster's Third</i>
absorbable	1	yes
abusable	1	no
accruable	1	no
acid-extractable	1	no
actable	1	yes
actualizable	1	yes
abstractable	2	no
admissable	2	no
addressable	12	no
adorable	66	yes
abominable	84	yes
actionable	87	yes
affable	111	yes
achievable	176	yes
adaptable	230	yes
adjustable	369	yes
admirable	468	yes
advisable	516	yes
accountable	611	yes
acceptable	3416	yes



Measuring Productivity

TYPE	N	TYPE	N	TYPE	N
WIDEN	316	FLATTEN	90	BLACKEN	28
WEAKEN	315	FASTEN	89	SMARTEN	24
TIGHTEN	299	DAMPEN	87	LIKEN	22
SOFTEN	285	STIFFEN	75	MOISTEN	19
BROADEN	261	RIPEN	69	CHEAPEN	13
LESSEN	209	AWAKEN	68	REDDEN	11
LOOSEN	159	QUICKEN	63	DEAFEN	9
SHORTEN	142	THICKEN	60	GLADDEN	8
SHARPEN	132	QUIETEN	58	SADDEN	7
HARDEN	132	DARKEN	56	STEEPEN	6
STRAIGHTEN	131	FATTEN	49	NEATEN	6
LIGHTEN	128	SWEETEN	43	WHITEN	5
DEEPEN	120	SLACKEN	38	MADDEN	1
WORSEN	106	TOUGHEN	35		
BRIGHTEN	105	FRESHEN	34		

In the BNC, ADJ + *en* has a type frequency of 44.

There is one hapax legomenon.



Measuring Productivity

REALLY	46440	EXACTLY	10306	SLOWLY	7405
PROBABLY	26528	IMMEDIATELY	9867	LARGELY	7271
ACTUALLY	25441	EASILY	9637	POSSIBLY	7045
PARTICULARLY	21683	HIGHLY	9006	CURRENTLY	7026
USUALLY	18864	EVENTUALLY	8860	MAINLY	7011
CERTAINLY	18114	FULLY	8794	CAREFULLY	6816
SIMPLY	17283	DIRECTLY	8607	PREVIOUSLY	6797
CLEARLY	15010	SLIGHTLY	8597	ENTIRELY	6739
FINALLY	12581	HARDLY	8415	EXTREMELY	6688
RECENTLY	12176	COMPLETELY	8339	FAIRLY	6582
QUICKLY	11839	NORMALLY	8133	INCREASINGLY	6565
GENERALLY	11457	RELATIVELY	7814	EQUALLY	6465
NEARLY	11176	APPARENTLY	7600	SURELY	6032
SUDDENLY	11014	MERELY	7423	FREQUENTLY	5711
OBVIOUSLY	10662	EARLY	7420	TOTALLY	5693

By contrast, ADJ + /ly has a type frequency that is in the thousands, with many hapaxes.



Restrictions on productivity

1. **Pragmatic restrictions**
2. **Structural restrictions**
3. **Lexical restrictions**
4. **Semantic restrictions**



Restrictions on productivity

1. Pragmatic restrictions

The formation does not make any sense!

- You cannot **unmurder* someone.
- The **onliest* book I've ever read.
- I **disgrow* broccoli in my garden.



Restrictions on productivity

2. Structural restrictions

The affix only works with bases of a certain structure.

arrive > *arrival*

betray > *betrayal*

deny > *denial*

answer > **answeral*

state > **stateal*



Restrictions on productivity

2. Structural restrictions

The affix only works with bases of a certain structure.

arrive > *arrival*

betray > *betrayal*

deny > *denial*

answer > **answeral*

state > **stateal*

Rule: The base has to be bisyllabic with final stress.



Restrictions on productivity

2. Structural restrictions

black > *blacken*

less > *lessen*

wide > *widen*

high > **highen*

low > **lowen*

fine > **finen*

Rule: The base has to be monosyllabic



Restrictions on productivity

2. Structural restrictions

black > *blacken*

less > *lessen*

wide > *widen*

valid > **validen*

hiralious > **hiraliousen*

expensive > **expensiven*

Rule: The base has to be monosyllabic with final obstruents.



Restrictions on productivity

3. Lexical restrictions

The formation means something for which there already is a very frequent word.

steal + er > **stealer*
good + est > **goodest*
see + able > **seeable*



Restrictions on productivity

3. Lexical restrictions

The formation means something for which there already is a very frequent word.

<i>steal + er</i>	>	<i>*stealer</i>	<i>thief</i>
<i>good + est</i>	>	<i>*goodest</i>	<i>best</i>
<i>see + able</i>	>	<i>*seeable</i>	<i>visible</i>

This is called **BLOCKING**.

Semantic Blocking

What do you call the baby of a ...

pig
goose
cat
dog





Semantic Blocking

What do you call the baby of a ...

pig
goose
cat
dog

Can you say *catlet*, *doglet*?
Why not?



Semantic Blocking

Species	horse	pig	cow	sheep	goose
Adult	Male				
	Female				
Young					



Semantic Blocking

Species		horse	pig	cow	sheep	goose
Adult	Male	stallion	boar	bull	ram	gander
	Female	mare	sow	cow	ewe	goose
Young		foal	piglet	calf	lamb	gosling



Restrictions on productivity

4. Semantic restrictions

The affix only works with bases of a certain semantic kind.

employ + ee > employee

train + ee > trainee

interview + ee > interviewee

*eat > *eatee*

*peel > *peelee*

Rule: The formation has to refer to a sentient human being.

Well done!

Congratulations!



Unit completed!



Questions?

We can discuss in class or
contact me via **LINE** or **Email**



See you next week!

