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CLASS 8: PRODUCTIVITY AND HISTORICAL SOURCES

PRODUCTIVITY IN ENGLISH MORPHOLOGY

(1) A suffix is **formally general** if it always attaches to a category *X* and derives category *Y*.

Example: *-ness* always **attaches to any adjective** (A) and yields an **abstract noun** (N) which is either in common use or would not be listed in a dictionary because its meaning is predictable.

*Example: *-ity* **attaches only to some adjectives** to yield an **abstract noun**.

*Example: *-th* **attaches to very few adjectives** to yield an **abstract noun**.

(2) A suffix is **formally regular** if it always attaches to a category *X* of a certain structure.

Example: *-ness* can attach to **any adjective of any structure**.

Example: *-ity* can **attach to adjectives** of the structures *-ive*, *-able/ible*, *-al*, *-ar*, *-ic*, *-id*, *-ous*.
However, there are formally irregular forms (*density*, **tensity*, *tension*).

*Example: *-th* can **attach to adjectives** of irregular, unpredictable structure.

(3) *Formal regularity does not imply formal generality.* [for a reverse-like rule, see (4)]

Often the gaps found (**richity*) have **historical roots** (Latin *-ity* vs. Germanic *-ness*; see below.)

Formal regularity does not always come in **syntactic** (e.g. $A+af \rightarrow N$) or **morphological varieties** (depending on the form/structure of a base it attaches to), it can also be **phonologically conditioned** (such as V with final stress allows *-al_N* as in \rightarrow *survival*, **edital*; exception: *burial*).

(4) *Formal generality presupposes formal regularity.* [in practice, not by definition]

But apart from this discussion, we can also identify *semantic regularity*:

(5) A process is **semantically regular** if the derived meaning is always uniform and consistent.

Example: *-ly* always contributes the meaning ‘**in an X fashion**’ or ‘**to an X degree**’
(note that *-ly* is also formally regular: it attaches to A and yields Adv)

Unsurprisingly, formal and semantic regularity can **diverge**: consider the different contribution of *-ity* in *selectivity*, *locality*, *partiality*, *polarity* or *-able* in *readable*, *punishable*. Moreover, some morphologically clearly related words **vary** in terms of what types of derivational affixes, incl. stress, they allow (e.g. *admit*, *commit*, *permit*, *remit*, *transmit* and *-ion*, *-al*, *-ment*, *-ance*). The **converse** situation is arguably found in names for domestic animals in terms of sex and age.

The latter especially raises the question why there is no **cowlet* analogous to *piglet* — instead we have *calf*. We say that *calf* **semantically blocks** the existence (or derivation) of *cowlet*:

(6) *If there is a word X specified for Y, then Y should be expressed by X and not be derived.*

While there might be exceptions (big surprise), blocking of supplet forms is **absolute**.

Excursus: Productivity in **syntax**.

Some **ditransitive verbs** (7) allow the **double-object construction** aka *dative shift* (8a), others don't (8b). So while productive in the regularity sense (structure: double-object-construction is allowed with ditransitive verbs), it is not completely general (not all ditransitive verbs).

- (7) a. They gave some pictures to us.
b. They donated some pictures to us.
- (8) a. They gave us some pictures.
b. *They donated us some pictures.

HISTORICAL SOURCES OF THE ENGLISH VOCABULARY

Language **phyla** (other **language families**: Greek, Romance, Slavic, Celtic etc.):

- (9) Proto-Indo-European ⇨ Indo-European ⇨ Germanic ⇨ West Germanic ⇨ English

English has imported or **borrowed** a lot of vocabulary from other, related (IE) languages.

Cognates are words descended from one PIE-ancestral morpheme (Greek, Romance, Germanic).

Often the same cognate root is borrowed from **different languages**, surfacing in different forms (*heart/cordial/cardiac*: Lat. *cord-*, Gr. *kard-* — *bear/confer/Christopher*: Lat. *fer-*, Gr. *pher-*).

Some of these **develop into free morphemes** in English, while bound in origin (*heart, bear*).

Interestingly, we very rarely see **borrowing of inflectional morphology** — new words taken over from other languages are assimilated to the morphological system the language already has.

- inflectional suffixes from the language of origin are **ignored** (e.g. past tense, 3rd person, case)
- there are very few **exceptions** (as usual): Gr. *phenomenon/-a*, Lat. *cactus/-i*, Hebr. *kibbutz/-im*
- this said, sometimes even these exceptional plural forms are **regularized** (such as *cactuses*)

But in the development of a language, there can be **reduction in the inflectional system** itself.

English lost over time (Old >> Middle >> Early Modern >> Standard Modern English) some:

- *gender* (masculine, feminine, neuter)
- *case* (nominative, accusative, genitive, dative)
- declension and conjugation *classes* (see Appendix I)
- full or even partial specification of *verb forms* (Appendix I)

Affixes, being typically derived from earlier stages or borrowed from other languages, can hence be **classified** into their Germanic and Romance **origins**. And again, the generalization is that Germanic affixes typically attach to a **free morpheme**, Romance ones to **bound morphemes**.

OE		EME		LME
zero	→	zero	→	zero
umlaut	→	/ə/	→	
-u	→			
-a	→			
-e	→			
-an	→	/ən/	→	/ən/
-um	→			
-as	→	/əs/	→	/əs/
-es	→			

Witness the fate of the **a-stem declension** (to which all other declensions eventually collapsed):

	OE		EME		LME
NOM/ACC SG	<i>stan</i>	→	<i>ston</i>	→	<i>stoon</i>
DAT SG	<i>stan-e</i>	→	<i>ston-ə</i>	→	
GEN SG	<i>stan-es</i>	→	<i>ston-əs</i>	→	<i>stoon-əs</i>
NOM/ACC PL	<i>stan-as</i>	→			
DAT PL	<i>stan-um</i>	→	<i>ston-ən/-əs</i>	→	
GEN PL	<i>stan-a</i>	→	<i>ston-ə/-əs</i>	→	

The ME ending /ən/ (written **-en**) was **more widespread in plurals** than now (e.g. *eyen* ‘eyes’, *shoon* ‘shoes’ etc.). Formally, though, **the LME system is parallel to the NE one** because it distinguishes only **singular vs. plural** and **genitive from non-genitive forms**.

The same operations reduced both the **article and adjectival endings to zero** (adjectives went through a phase of systematic **-e vs. zero** ending, as in Chaucer, but this was lost around 1400).

Old English Verbs

- **weak & strong** classes; endings for **all persons/numbers**; each verb had **13-14 forms**
- **7 classes** of strong verbs with different vowels in **present, past and participles**
- the terms **strong/weak** were promulgated by Jacob Grimm:
 - **strong**: verbs are strong if they form their preterite by a change in the root vowel
 - **weak**: those that form the preterite with the addition of a *-d*, *-ed*, *-t* are weak (as if, in their weakness, they need the addition of an external sign to indicate tense)
 - weak verbs are characteristic of Germanic languages (one difference to other IE languages)
 - most verbs now are weak, including any new verb in English
 - OE had about 300 strong verbs, NE fewer than 70

Strong verb classes in OE:

CLASS		PRESENT	PAST SG	PAST PL	PAST PART
I	‘to ride’	<i>ridan</i>	<i>rad</i>	<i>ridon</i>	<i>ridden</i>
II	‘to creep’	<i>creopan</i>	<i>creap</i>	<i>crupon</i>	<i>cropen</i>
IIIa	‘to find’	<i>findan</i>	<i>fand</i>	<i>fundon</i>	<i>funden</i>
IIIb	‘to help’	<i>helpan</i>	<i>healp</i>	<i>hulpon</i>	<i>holpen</i>
IV	‘to bear’	<i>beran</i>	<i>baer</i>	<i>baeron</i>	<i>boren</i>
V	‘to tread’	<i>tredan</i>	<i>traed</i>	<i>traedon</i>	<i>treden</i>
VI	‘to bake’	<i>bacan</i>	<i>boc</i>	<i>bocon</i>	<i>bacen</i>
VII	‘to blow’	<i>blowan</i>	<i>bleow</i>	<i>bleowon</i>	<i>blowen</i>

OE verb endings:

PRESENT	INDICATIVE	SUBJUNCTIVE
1SG	<i>-e</i>	<i>-e</i>
2SG	<i>-(e)st</i>	<i>-e</i>
3SG	<i>-eþ</i>	<i>-e</i>
PL	<i>-aþ</i>	<i>-en</i>
PAST		
1SG	∅	<i>-en</i>
2SG	<i>-e</i>	<i>-en</i>
3SG	∅	<i>-en</i>
PL	<i>-on</i>	<i>-en</i>

ME vowel reduction and borrowing into indicative and subjunctive *-en*:

PRESENT	NORTH	MIDLANDS	SOUTH
1SG	<i>-e</i>	<i>-e</i>	<i>-e</i>
2SG	<i>-es</i>	<i>-est</i>	<i>-est</i>
3SG	<i>-es</i>	<i>-eþ/-es</i>	<i>-eþ</i>
PL	<i>-es</i>	<i>-en/-es</i>	<i>-eþ</i>
PAST			
SG	∅	∅ (<i>-est</i> in 2SG)	∅ (<i>-est</i> in 2SG)
PL	∅	<i>-en</i>	<i>-en</i>

Subsequent **loss of *-e(n)*** and 2SG gives the **NE paradigm**: ∅ throughout, *-s* 3SG PRES.

APPENDIX II: LEXICAL BORROWING IN ENGLISH

Lexicon

There are three common ways of defining the *lexicon*:

- (i) one person's mental inventory of meaningful expressions
- (ii) sum total of all speakers' inventories for one language
- (iii) a written document (book, online) presenting a portion of (ii)

- *lexeme*: anything that has to be memorized, not constructed by rule

- single words

fish, prestidigitation, on, compose

- word-parts

writer, prestidigitation, decompose, composing

- lexical phrases (meaning is clear from parts):

wash the dishes, go grocery shopping, that reminds me, make a mistake, won't do any harm

- idioms (meaning has to be memorized; can't be guessed from parts):

bought the farm, flew off the handle, off one's rocker, toss one's cookies

Etymology

- etymology of a word = history of the word
- origin (source language; 'path' from source to English)
- changes in meaning, pronunciation, spelling, part of speech
- documented occurrences in texts
- *Oxford English Dictionary* [<http://www.oed.com>]
- how lexicographers develop etymologies
- folk vs. expert etymologies

Folk etymology

- an unfamiliar word is re-interpreted as containing familiar parts
- ME, ENE: *woman* > *woe-man*; *asparagus* > *sparrowgrass*
- French: *crevice* > *crayfish* Spanish: *cucaracha* > *cockroach*
- NE: *history* > *his story* *forced-air heat* > *four-stair heat*
- next door* > *next store* *take for granted* > *take for granite*
- surname* > *sir name* *old wives' tale* > *old wise tale*
- a mine of information* > *a mind of information*
- *etymon*: ancestor of current word; earlier forms of word PIE **pod-* > English *foot*
- *cognate* words: words in different languages from the same ancestor word

English	German	Spanish	French	PIE
<i>foot</i>	<i>Fuss</i>	<i>pie</i>	<i>pied</i>	* <i>pod-</i>
<i>father</i>	<i>Vater</i>	<i>padre</i>	<i>pere</i>	* <i>pater</i>
<i>tooth</i>	<i>Zahn</i>	<i>diente</i>	<i>dent</i>	* <i>dont-</i>
<i>one</i>	<i>eins</i>	<i>uno/una</i>	<i>un/une</i>	* <i>oinos</i>
<i>two</i>	<i>zwei</i>	<i>dos</i>	<i>deux</i>	* <i>duwou</i>

- *doublets*: ‘twice-borrowed’ words; same word from different languages

Parisian French	Norman French	<i>Latin</i>
<i>guard</i>	<i>ward</i>	
<i>gauge</i>	<i>wage</i>	
<i>guarantee</i>	<i>warranty</i>	
<i>regard</i>	<i>reward</i>	
<i>chase</i>	<i>catch</i>	
<i>chattel</i>	<i>cattle</i>	
<i>lance</i>	<i>launch</i>	
<i>choir</i>		<i>chorus</i>
<i>prove</i>		<i>probe</i>
<i>frail</i>		<i>fragile</i>
		<i>ounce/inch < Lat. uncia</i>

Norse	<i>Old English</i>
<i>skirt</i>	<i>shirt</i>
<i>scrub</i>	<i>shrub</i>
<i>dike</i>	<i>ditch</i>
<i>hale</i>	<i>whole</i>

Where has English gotten its words from?

- internal sources: inheritance in a straight line from PIE through Proto-Germanic, OE, etc. to NE
- use of existing vocabulary to build new words
- external sources: words borrowed from a language in contact with English

Native words

- internal sources: native words
- retention of a word since Proto-Indo-European (PIE > PGmc > OE > ME > ENE > NE)

PIE **dheusóm* ‘breathing creature’ > PGmc **deuzam* ‘creature’
> OE *deor* ‘animal’ > NE deer ‘antlered ruminant’

PIE **pod-*, **ped-* ‘foot’ > PGmc **fot* > OE *fot* > ME *fot*, *foot* > NE *foot*

- creation of a word using existing resources (borrowed or native)
e.g. prefixes, suffixes, compounding, clipping, etc.

fix + ation > *fixation* — *spin + doctor* > *spin doctor* — *professional* > *pro*

- external, non-native sources: borrowings from other languages
- different major and minor ‘lenders’ in different periods of English

Borrowed words

- source languages of borrowed words at different periods; each reflects nature of contact
- Common (Proto) Germanic period (before migration to Britain)
- unknown substratum language??
- Latin: trade, war

- Old English period (in order of quantity):
 - Norse: Danelaw settlers
 - Latin; Greek via Latin
 - Celtic (minor, except place names)
- Middle English period:
 - Norman and Parisian French
 - Latin
 - Dutch, Italian, Arabic, others (all minor)
- Early Modern English period:
 - Latin (Renaissance/Enlightenment borrowings)
 - Greek (Renaissance/Enlightenment borrowings)
 - languages of the world (exploration/empire)
 - other European languages (high culture, trade)

Heavy borrowing from French occurred in two phases

1. *1066-1250*: About 900 words were borrowed during this phase, with most of them showing the effects of Anglo-Norman phonology. Examples from this source are:

Social: baron, noble, dame, servant, messenger, feast, minstrel, juggler, largess

Literary: story, rime, lay, douzepers

Church: The largest number of words were borrowed for use in religious services since the French-speaking Normans took control of the church in England.

2. *1250-1400*: The heaviest borrowing from French occurred in this period because after about 1250 there were more French speakers who began speaking English — remember the loss of Normandy in 1204. The words borrowed during this phase are found in many areas.

Government/Administrative: govern, government, administer, crown, state, empire, royal, majesty, treaty, statute, parliament, tax, rebel, traitor, treason, exile, chancellor, treasurer, major, noble, peer, prince, princess, duke, squire, page (but *not* king, queen, lord, lady, earl), peasant, slave, servant, vassal

Ecclesiastical: religion, theology, sermon, confession, clergy, cardinal, friar, crucifix, miter, censer, lectern, abbey, convent, creator, savior, virgin, faith, heresy, schism, solemn, divine, devout, preach, pray, adore, confess

Law: justice, equity, plaintiff, judge, advocate, attorney, petition, inquest, felon, evidence, sue, accuse, arrest, blame, libel, slander, felony, adultery, property, estate, heir, executor

Military/Army & Navy: (Much of the fighting was done in France; many now-obsolete words for pieces of armor, etc., were borrowed at this time.) army, navy, peace, enemy, arms, battle, spy, combat, siege, defense, ambush, soldier, guard, mail, buckler, banner, lance, besiege, defend, array

Clothing: habit, gown, robe, garment, attire, cape, coat, collar, petticoat, train, lace, embroidery, pleat, buckle, button, tassel, plume, satin, taffeta, fur, sable, blue, brown, vermilion, russet, tawny, jewel, ornament, broach, ivory, turquoise, topaz, garnet, ruby, pearl, diamond

Food: feast, repast, collation, mess, appetite, tart, sole, perch, sturgeon, sardine, venison, beef, veal, mutton, port, bacon, toast, cream, sugar, salad, raisin, jelly, spice, clove, thyme

Social: curtain, couch, lamp, wardrobe, screen, closet, leisure, dance, carol, lute, melody

Hunting: rein, curry, trot, stable, harness, mastiff, spaniel, stallion, pheasant, quail, heron, joust, tournament, pavilion

Art, Learning, Medicine: painting, sculpture, music, beauty, color, image, cathedral, palace, mansion, chamber, ceiling, porch, column, poet, prose, romance, paper, pen, volume, chapter, study, logic, geometry, grammar, noun, gender, physician, malady, pain, gout, plague, pulse, remedy, poison

Common words and expressions include *nouns* — age, air, city, cheer, honor, joy; *adjectives* — chaste, courageous, coy, cruel, poor, nice, pure; *verbs*—advance, advise, carry, cry, desire; *phrases* — draw near, make believe, hand to hand, by heart, without fail (*loan-translations*)

Many of the above words differ from Modern French in form and pronunciation because of **phonological changes** such as the following:

- French /s/ was lost before other consonants in the 12th century, so OF *feste* became MF *fête* (NE *feast*); cf. *forest* – *forêt*, *hostel* – *hôtel*, *beast* – *bête*
- in the 13th century, the French *j* came to be pronounced /tʃ/, and *ch* became /ʃ/
 - early borrowings (i.e. before the 13th century) thus have the /dʒ/- & /tʃ/-pronunciations: *charge*, *change*, *chamber*, *chase*, *chair*, *chimney*; *just*, *jewel*, *journey*, *majesty*, *gentle*
 - later borrowings (i.e., after the 13th century) have the /ʒ/- and /ʃ/-pronunciations: *chamois*, *chaperon*, *chiffon*, *chevron*, *jabot* (last trim on the front of a dress), *rouge*
- the Anglo-Norman dialect was also different from the Paris dialect, which was Central French: AN retained the initial *ca-*, which became *cha-*, *chie-* in CF, e.g.: NE *caitiff*, not CF *chaitif*. English contains words borrowed from both dialects at different times, e.g.:

<i>cattle</i>	< AN <i>catel</i>	<i>catch</i>	< AN <i>cachier</i>
<i>chattel</i>	< CF <i>chattel</i>	<i>chase</i>	< CF <i>chacier</i> (MF <i>chasser</i>)
- CF also showed an early dislike of *w-*, but the northern dialects did not, e.g.: *warden* from AN and *guardian* from CF. CF also dropped the /w/ in *qu-* (AN /kw/, CF /k/), so NE has *quarter*, *quality*, *question*, etc., pronounced /kw-/ (cf. MF *qualité* etc.)

Vowels also show some differences. For example, AN retained the /ei/ diphthong, but in the 12th century it became /oi/ in CF, so:

NE <i>leal</i>	< AN <i>leial</i>	NE <i>loyal</i>	< CF
NE <i>real</i>	< AN <i>reial</i>	NE <i>royal</i>	< CF

Some **10,000 French words** were borrowed into Middle English, and about **75% (7500)** of these words are still in use. These words were **quickly assimilated** into English; i.e. English suffixes etc. were freely added to the borrowed French words; e.g. *gentle*, borrowed in 1225, is found compounded with an English word, *gentlewoman*, in 1230.

This heavy borrowing from French had several **effects** on English:

1. Native words were *replaced*:

OE <i>æðele</i>	F <i>noble</i>	(cf. German <i>adlig</i>)
OE <i>æðeling</i>	F <i>nobleman</i>	(cf. German <i>Adliger</i>)
OE <i>here</i>	F <i>army</i>	(cf. German <i>Heer</i>)
OE <i>campa</i>	F <i>warrior</i>	(cf. German <i>Kämpfer</i>)
OE <i>sib</i>	F <i>peace</i>	

2. English and French words were retained with a differentiation in *meaning*:

<i>hearty</i>	–	<i>cordial</i>
<i>ox</i>	–	<i>beef</i>
<i>sheep</i>	–	<i>mutton</i>
<i>swine</i>	–	<i>pork</i>
<i>calf</i>	–	<i>veal</i>
<i>house-</i>	–	<i>mansion</i>

3. OE *word-forming* powers were reduced, with less use of pre- & suffixes, fewer compounds.

Latin Borrowings. In a sense the **French words** were **Latin borrowings** since French developed from **Vulgar Latin** — as did all the Romance languages. The borrowings that came directly from Latin tended to be more **learned** in character — e.g., *allegory, index, magnify, mechanical, private, secular, zenith*. **Aureate terms** — direct borrowings from Latin — were a **stylistic** affectation of the 15th century Scottish Chaucerians such as James I, Henryson, and Dunbar. Some of these words have been **dropped** from English (or never really made it in) while others have **survived**: *diurnal* (daily/daytime), *tenebrous* (dark), *laureate, mediation, oriental, prolixity*.

It has been pointed out that as a result of ME borrowing from French and Latin, Modern English has **synonyms on three levels**: *popular* (English), *literary* (French), and *learned* (Latin), such as:

rise–mount–ascend

ask–question–interrogate

fire–flame–conflagration

holy–sacred–consecrated.

Semantic Change

- semantic change = change in a word's meaning over time
 - *referent*: object or concept a word names
 - *denotation*: a word's referent
 - *connotation*: additional meaning features (e. g., *hovel* vs. *cottage* vs. *cabin*)

Types of semantic change

Specialization:

- meaning narrows to include fewer referents
Examples: *corn, deer, starve, meat, liquor, hound*

Generalization:

- meaning broadens to include more referents
Examples: *mill, barn, novice, office*

Amelioration:

- meaning acquires positive connotation
Examples: *earl, knight, queen, nice, praise*

Pejoration:

- meaning acquires negative connotation
Examples: *lewd, churl, hussy, wench, villain, silly*

Transfer:

complete change of referent; shift of denotation
Examples: *pen, thing, tide, quick, spell, wan, grin*

Mechanisms:

- *metaphor*: extension to an object/concept perceived to be similar to original referent
Examples: *foot* (of mountain), *mouth* (of river), *heart, grasp*
- *metonymy*: extension to object/concept *associated with* original referent
Examples: *pen, china, silverware, ear, (farm/ranch)hand, wheels*

Social change and language: thou vs. you (see Fulwood-Text)

- pronouns and power (social rank), solidarity (social closeness)
- distinction is also made in e.g. Spanish, French, German
- English: *thou / thee, thy, thine* replaced by *you, your, yours*