

A COURSE IN THE STRUCTURE OF

ENGLISH WORDS

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I. Historical Background

In 1971, the Classics Department at the University of Oregon decided to give up on a course it felt was a lost cause. Entitled *Classical Elements of English*, this course was designed to increase the student's vocabulary by exposing him to a large number of Latin and Greek roots. Unfortunately, most students reacted to the idea with profound apathy. A sprinkling of students signed up for the course whenever it was offered, but apparently not enough to warrant retaining it in the curriculum.

In 1972, *Classical Elements of English* (later retitled *The Structure of English Words* [SEW]) was transferred to the Linguistics Department: this year it is being taught to more than 700 students, and hundreds of others have been turned away for lack of space. Every term we receive comments from our students such as "This is the most useful course I've ever taken," and "Why doesn't the University make it a requirement for everybody?" Obviously, the course as it is now conceived works. The purpose of this paper is to describe the content of this course and the methods we have developed over the past seven years for teaching it.

II. Course Description

Basically, SEW is a lower division service course. Most of the students we have polled enroll in it either to improve their vocabularies or to learn more about English words. What they receive in addition to these things is a fairly painless introduction to most aspects of general and historical linguistics.

One of the features of the course is that it provides students with an efficient method for increasing their passive vocabulary. This method, which we will refer to as WORD ANALYSIS, is based mainly on morphophonemics. During a ten to eleven week period, our students are asked to memorize 150 of the most common morphemes found in English words of classical origin. Each of these morphemes is given in its basic form (i.e. the form from which all regular allomorphs are derivable by rule) and with its most basic meaning. (See Appendix I for a list of these morphemes.) Alternate forms of a

morpheme are given only when they are unpredictable, as in the case of metathesized, infix, rhotacized and ablaut variants.

The students are then taught a set of fifteen relatively simple morphophonemic rules. These rules state the conditions under which all the regularly derivable allomorphs occur. For example, one of the basic forms is *tag* 'to touch'. It occurs in such words as *tactile*, *tangent*, *integral*, and *contiguous*. With the exception of *tang*, which unpredictably contains a nasal infix, each of these allomorphs (*tac*, *teg*, *tig*) is the result of regular rules.

The students are taught how to parse an unfamiliar word, identify its component morphemes (applying rules where necessary) and determine its literal meaning (i.e. the logical composite of the basic meanings of its morphemes). This procedure often suffices to yield the current meaning of a word. But even where the literal meaning is no longer identical with the current meaning, the students are not at a loss since they are taught to recognize common meaning shifts such as metaphor, degeneration, amelioration, and weakening and to determine which shift has occurred from the context of the sentence or discourse in which the word occurs.

Before presenting details of our method, we would like to emphasize that we do not consider vocabulary enrichment the only concern--or even the main concern--of the course that we are describing. Since this is a linguistics course required of all undergraduate students majoring in linguistics at the University of Oregon, our main goal is to teach introductory morphology, morphophonemics, semantics, and comparative linguistics. Our aim is to make these subjects not only intellectually stimulating but practically applicable. As a result, students often enroll in SEW to improve their vocabulary, become interested in linguistics as a discipline, and end up as linguistics majors. And those who take only this one linguistics course come away with the idea that linguistics is not simply a sterile ivory tower enterprise, but that it has a role in the real world. We know that our students have a positive feeling about the class because they do much of our recruiting. In fact, over a third of the students who take SEW each term report that they do so because it has been recommended by friends or acquaintances as a useful course.

III. The Base Forms

The word analysis method we use involves both memorization and computation. In Appendix I we have listed some of the most commonly occurring classical morphemes of English. We have our students memorize about 15 of these morphemes each week. It has been estimated that the 100 most common English morphemes occur in 42,000 words. Consequently, this memorization alone increases the students' understanding of many words. In the text we have written for this course (Sloat & Taylor, 1978), we also provide a glossary containing essentially all of the productive or semi-productive classical morphemes--more than 1300 in all--together with their

glosses and example words. The students can get additional information on these morphemes by looking up one of the sample words from the glossary in the *American Heritage Dictionary* (a required text for this course) and tracing its etymology into that dictionary's very useful Appendix of Indo-European Roots. We assign a number of exercises during the term which necessitate looking up some of the less common morphemes in the glossary. (See Appendix II for sample exercises.) The forms of the morphemes that the students learn are base forms in the technical sense. Only when a morpheme has unpredictable variants must the variants be memorized. The unpredictable variants are usually the nonproductive remnants of some earlier process such as rhotacism (*plus/plur; flos/Flor; ques/quer*), ablaut (*gen/gon/gn; pend/pond; men/mon/mn*), or infixation (*tag/tang; frag/frang; cub/cumb*). As part of the course, we teach the students enough about the history of English, Latin and Greek that they have no trouble identifying and dealing with unexpected instances of these historical remnants.

IV. The Rules

Along with the base forms, the students learn rules such as those given in Appendix III. These rules derive contextual variants of the base forms. Although there are many subtle rules we could give, we concentrate only on those which determine very important patterns in the classical vocabulary, particularly those reflected in the orthography. Many morphemes with an *a* in the base form have an *e* in place of the *a* in noninitial syllables of words. Thus, the morpheme *ann* 'year' appears with an *a* in *annual* but with an *e* in *biennial*. This same pattern can be seen in the following sets:

- | | | | | | | |
|--------|------------|--------------------|----|---------------------|----|----------------|
| (1) a. | <u>fac</u> | 'to do, to make' | b. | <u>factory</u> | c. | <u>perfect</u> |
| | <u>apt</u> | 'able' | | <u>apt/aptitude</u> | | <u>inept</u> |
| | <u>cap</u> | 'to take, to hold' | | <u>capture</u> | | <u>except</u> |

To account for this pattern, we teach our students a rule we call *a*-Weakening (in deference to students of historical Latin).

- (2) *a*-Weakening:

a → *e* except in initial syllables

Thus, when the student is analyzing a word and discovers a morpheme that looks familiar but has an *e* instead of *a*, he is not surprised. If the context is appropriate, he must consider whether he is dealing with a morpheme that has a basic *a* or a basic *e*.

A similar process affects morphemes with basic *e*. Under certain conditions the *e* is replaced by *i*. This pattern is seen in these examples:

- | | | | | | | |
|--------|-------------|-------------------|----|------------------|----|---------------------|
| (3) a. | <u>reg</u> | 'straight, rule' | b. | <u>regular</u> | c. | <u>incorrigible</u> |
| | <u>spec</u> | 'to look, to see' | | <u>spectacle</u> | | <u>conspicuous</u> |
| | <u>ten</u> | 'to hold' | | <u>tenacious</u> | | <u>continent</u> |
| | <u>sed</u> | 'to sit' | | <u>sedentary</u> | | <u>president</u> |

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An *i* replaces *e* in the examples of (3c) because, in these words, the base forms of (3a) are in noninitial syllables. The rule that accounts for this phenomenon is called *e*-Weakening. The environment for *e*-Weakening is not quite as simple as that for *a*-Weakening, however. The complication is illustrated by the items of (4).

- (4) corrective
respect
content

The crucial difference between the forms in (3c) and those in (4) is that a cluster of consonants follows the vowel of the morpheme in question in (4), whereas in (3c) only one consonant follows and it is immediately followed by another vowel. Thus we write the rule:

- (5) *e*-Weakening
e → *i* / ___ CV except in initial syllables

Both *a*-Weakening and *e*-Weakening can apply to the same form:

- (6) con+tag+u+ous
a-Weakening: e
e-Weakening: i
contiguous

The student must therefore be made aware that a morpheme with a surface *i* followed by CV may have as its base form *i*, *e*, or *a*.

Another process which occurs frequently in classical morphemes is the deletion of a final vowel when the following morpheme begins with either a vowel or an *h*. This process is illustrated by the following sets of words:

- (7) anti- antipathy antagonize anthelion
epi- epidemic eponym ephemeral
cata- catapult catoptric catholic
meta- metazoa metonymy method

Although quite regular, it applies only to morphemes containing two or more vowels. Thus, morphemes like *di-* 'two', *re-* 'again', and *pre-* 'before' do not lose their vowel when followed by a vowel or an *h*:

- (8) di- dichromate dioxide dihedral
re- recede react rehabilitate
pre- precede preoccupy prehensile

To account for these facts, we teach our students the following rule:

(9) Vowel Deletion

$$V \rightarrow \emptyset / ___ + \left\{ \begin{array}{l} V \\ h \end{array} \right\} \text{ except in one-vowel morphemes}$$

In Appendix III are listed several other rules which our students learn. Below are sample derivations that apply some of these rules to a few of the morphemes in Appendix I.

(10) Sample Derivations

- | | |
|--|--|
| 1. /tag+t+ile/ dev: k tactile | 2. /in+tag+r+al/* a-weak: e integral |
| 3. /tag+s/ dev: k x-rep: x tax | 4. /ag+ile/ agile |
| 5. /ag+t/ dev: k act | 6. /ambi+ag+u+ous/* V-del: \emptyset a-weak: e e-weak: i ambiguous |
| 7. /fac+t+ory/ factory | 8. /per+fac+t/ a-weak: e perfect |
| 9. /de+fac+i+ent/ a-weak: e e-weak: i deficient | 10. /in+spec+t/ inspect |
| 11. /con+spec+u+ous/* e-weak: i conspicuous | 12. /con+plec+s/ x-rep: x n. as: m complex |
| 13. /in+plec+it/ n. as: m e-weak: i implicit | 14. /sal+i+ent/* salient |

| | | | |
|---------|-----------------|-----------|------------|
| 15. | /re+sal+i+ent/* | 16. | /re+sal+t/ |
| a-weak: | e | a-weak: | e |
| e-weak: | i | e-change: | u |
| | resilient | | result |

It should be emphasized that the rules we have been discussing have certain definite limitations. First, most of them apply only to words borrowed into English from Latin or Greek. The native Anglo-Saxon vocabulary is not affected by the majority of these rules. For practical purposes of vocabulary building, this is no problem, however. The native English portion of the vocabulary is composed by and large of simplex words such as *hand*, *house*, *red*, and *son* which are known to all proficient speakers of English and need not be analyzed anyway. Furthermore, we have found that our students quickly learn to distinguish words that can be analyzed from those which cannot and therefore seem not to be bothered by native counter-examples.

The second limitation on these rules is that they describe subregularities in the lexicon, not exceptionless processes. That is, there are some words even within the classical vocabulary which do not manifest the predicted changes. This is particularly true of words formed late in the history of the language from Latin and Greek morphemes. Also, there are morphemes which seem impervious to some rules. The morpheme *path* 'to feel, suffer', for instance, never undergoes weakening.

Again, however, this presents no practical difficulty since if a rule does not apply, the surface forms of the morphemes remain more like the base forms the student has learned. For example, the word *contagious* should undergo a-weakening and e-weakening exactly as *contiguous* does, but it does not. Since the student has memorized the morphemes *con-*, *tag*, and *-ous*, he is simply relieved of the one further step of computation. Although the weakening rules would suggest that the second syllable should contain an *i*, it is clear, since it doesn't, that *tag* must be the base form. There is no other possibility. Students seem to have very little difficulty analyzing such transparent (and hence exceptional) forms. In teaching the rules we stress that IF a rule is going to apply, it will apply in such and such a way. Otherwise, the base form will remain unchanged. Actually, we teach our students to do a sort of "upside down morphology". That is, we teach them to analyze a word only until they reach morphemes

*We tell our students that the *r* in *integral*, the *i* in *salient* and *resilient*, and the *u* in *ambiguous* and *conspicuous* (together with some cases of *o*, *s*, *t*, and *m*) are pieces left over from earlier systems which the student can disregard in deducing literal meanings. We call these pieces STEM EXTENDERS.

they recognize. If that happens to be immediately, as in the case of *contagious*, all the better, since the entire enterprise is a practical one the purpose of which is to find the meanings of unfamiliar words.

We should further emphasize one point: we are in no way claiming that these are "rules" in the Chomskian sense. They describe subpatterns in the English lexicon. However, we do not believe them to be part of the internalized grammar of the English speaker. In fact, our experience in teaching them to English speakers suggests that most of them are NOT known (consciously or unconsciously) until specifically taught. We find it interesting--and a bit ironic--that rules such as these are justifiable on pragmatic pedagogical grounds, but not as descriptions of naturally acquired linguistic competence. We present the rules as historical processes in the classical languages. The results of these processes are the patterns we now find in English.

V. Meaning Extensions

Once the student has identified the morphemes in a word, he can compose its literal meaning. For example, the word *contiguous* is made up of the morpheme *con-* 'together, with', *tag* 'to touch', a meaningless stem extender *u*, and the adjectival suffix *-ous*. Thus, the literal meaning of *contiguous* is 'touching together'. Clearly, this is very close to the actual current meaning of the word. A great many words are like *contiguous* in that their literal meaning is all you need to know in order to understand the word. This is particularly true of the words the students are least likely to know before taking SEW since meanings tend to drift away from their original source more slowly in words of low frequency than in common words.

However, not all words have current meanings that are as easily deduced as that of *contiguous*. For example, the word *respect* is composed of the morphemes *re-* 'back, again', *spec* 'to look' and the stem extender *-t*. Its literal meaning is therefore something like 'to look again' or 'to look back'. From this notion of observing or checking someone else's behavior, perhaps as a model, has come the present day meaning 'to show esteem for'. Notice that *respect* is a word of relatively high frequency, known to almost all speakers of English. Such a word poses no real problems since our students have no need to analyze it anyway.

In addition to cases like *contiguous*, a fairly uncommon word with a current meaning close to its literal meaning, and *respect*, a common word with a highly developed meaning, there are words such as *depend*, which has two meanings, one close to literal and the other highly developed. The prefix *de-* means 'down from' and *pend* means 'hang'. The less common meaning of *depend* is to 'hang down from' as in the sentence *The lamps depended from the ceiling*. *Translate*, from *trans* 'across' and *late* 'carry', is

another such word. In its less common usage, it means literally 'to carry across' as in *Elijah was translated into Heaven*. We feel that to be able to deal with the less common meanings of familiar words is just as valuable as deducing the meaning of new words.

We have found that our students are able to make the semantic extensions from the literal to the current meanings of words with relatively little difficulty. This is probably true because the mechanisms of meaning change that operated in Latin and Greek and in earlier stages of English are the same ones operating in English today. Therefore, the students find the meaning extensions in classical vocabulary to be familiar and natural. For example, when an English speaker says "I don't get it", meaning "I don't understand", he is using the same extension found in the word *comprehend*. (In fact, the morpheme *hend* not only has the same literal and extended meanings as modern English *get*, the two forms are cognate. We show our students that Grimm's Law and the infixation of *-n* in the Latin morpheme relate these forms comparatively.)

Additionally, we have inherited much of the cultural tradition of the Greeks and Romans. Thus, we have no trouble with such a radically extending meaning as is found in the word *disaster*, for instance. *Disaster*, composed of the morphemes *dis-* 'bad' and *aster* 'star', means literally 'bad stars'. No one in a culture where horoscopes are published daily in the newspaper will have trouble relating having bad stars to the DISASTER which could result.

The student is trained to find the literal meanings of words and to be aware of the possibility that the meaning has been extended. The context in which a word appears usually helps determine whether the word's meaning has been shifted and, if so, to what degree and in what direction.

VI. Evaluation

The method of word analysis outlined above has proven to be extremely effective in increasing our students' passive vocabularies. This is shown by two different kinds of testing. The first consists of a pre-test and post-test containing multiple choice synonym matching questions like those on the Graduate Record Examination. We have given this test at the beginning and end of the term in a number of classes, and the results have been quite consistent. In each case, the student scores have improved by a factor of about 50%. This is true whether we matched the pre-test and post-test population or not. It should be stressed that we were very careful never to use the words given on this test as examples in class during 1975-76 when we were using the test.

The particular pre- and post-test we use has certain limitations, of course; the main one being that it is only an indirect measure of overall

vocabulary improvement. For a more direct measure of general vocabulary increase, we use a test in which the students extrapolate the size of their vocabularies at the beginning and end of the term from a count of the words known in a randomly selected sample of dictionary pages. This test indicates an average gain per native speaking student of about 6,700 words. (The foreign students showed much larger gains.) This figure can be better appreciated if we look at it as 610 words per week, or 203 each class hour, or over four per minute of class time.

VII. Conclusion

Because of student demand for a continuation of the SEW, we are this year offering a course in advanced word analysis and English lexicology. At present the class is limited by room size to 75 students. However, we foresee an increasing demand similar to that in SEW. As SEW has increased in size, we have seen a corresponding increase in the number of students majoring in Linguistics, and this at a time when the overall enrollment at the University is falling. Obviously, it is possible to offer substantial courses in Linguistics that have wide appeal for nonmajors at the same time they serve as a means of recruitment. We are of course very happy to have the new majors. However, we feel that it is our obligation as linguists not only to train the next generation of scholars but to acquaint as many people as possible with the methodology and theoretical insights of linguistics and the results of historical and cooperative studies. This knowledge is as much a part of a liberal education as is an acquaintance with the works of Shakespeare.

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Appendix I

APPENDIX I - BASE FORMS

Set 1

ad- 'to, toward'
ag 'to do, act'
ex-, ec- 'out away'
re-, red- 'again, back, down, (very)'
gen, gon, gn, germ 'birth, origin'
cid 'to cut, kill'
con-, co- 'with, together, (very)'
-ia 'condition'
de- 'away, down, from, (very)'
ped, pod, pus 'foot'

Set 3

secu 'to follow'
an- 'lacking, not'
spec, skop, scop 'to look'
anti- 'against, opposite'
auto, tauto 'self'
ced, ceed 'to yield, stop, go'
syn- 'together, with'
erg, urg, org 'work'
reg 'straight, lead, king'
merg 'to dip, plunge'

Set 5

ana- 'back, up, again'
seg 'to cut, split'
sta(t), stant, st 'to stay, stand'
meta- 'beyond, after'
tom, tm 'to cut'
ante, anti 'before, old'
apo- 'away, from, off, (very)'
in-, en- 'not'
-l 'small'
cata- 'down, away (very)'

Set 7

fid 'to trust'
sed 'to sit, stay'
phot 'light'
pel 'to push'
cap 'head'

Set 2

duc 'to lead'
anthrop 'man, human being'
fac, -fy 'to do, make'
en-, in-, 'in, into (very)'
later 'worship'
frag 'to break, divide'
ab-, abs- 'from, away'
cap, cup 'to take, contain'
leg, log 'speech, reason, writing'
cub, cumb 'to lie'
sub 'down, under'

Set 4

meter 'measure'
pond, pend 'to hang'
ob- 'to, toward'
per- 'through, (very)'
cere, cre 'come forth, grow'
sim, sem 'same, one'
clud, claus, clos 'to close'
post, poster 'after, behind'
pre-, prae-, pro- 'before, near'
tag, tang 'to touch, feel'

Set 6

dis-, di- 'away, apart, not, (very)'
phag 'to eat'
miso 'to hate'
fer, pher, phor 'to bear, send'
phil 'to love'
eu- 'well, good'
path 'to feel, suffer'
cad 'to fall'
aster 'star'
ander 'man, male'

Set 8

fin 'end'
cosm 'universe, world'
flec 'to bend, turn'
gam 'marriage, sexual union'
phob 'to fear'

Set 7 (Cont.)

plec, -ply 'to fold, tangle'
mit 'to send, do'
trans-, tra- 'across, beyond'
sal 'to leap'
cel 'to cover'

Set 9

apt 'fit, able'
circ(um), curv, cor 'round, around'
bi(o) 'life'
fa, fe,
pha, phe 'to speak, spoken about'
crat 'government'
gloss, glot 'tongue, speech'
greg 'flock'
dog, doc 'to teach, praise'
es(s), ent, ont 'to be, to be basic'

Set 11

hemi-, semi- 'half'
hyper, super 'over, above'
hypo- 'under'
mal 'bad'
idio 'peculiar'
nom 'law'
mant 'to prophesy'
men, min, mn 'to think'
leg 'to choose'
hem, em 'blood'

Set 13

ten(d) 'to stretch'
port 'to carry'
sper, spor 'seed, to scatter'
nom, onom, onym 'name'
poly- 'many'
theo 'god'
nec, noc 'death, harmful'
neg 'not, to say no'
uter, hyster 'womb'
dactyl 'finger'

Set 8 (Cont.)

den, odon 'tooth'
se- 'apart'
mort 'death'
dys 'bad, badly'

Set 10

di, dich, dy, du 'two'
gyn 'woman'
vir 'man'
don, dot, dat, dos 'to give'
gnos, gno 'to know'
grad 'to step, go'
homo-, homeo- 'same'
hetero 'other, different'
graph, gram 'to write'
ten 'to hold'
morph 'form'

Set 12

infra- 'beneath, within'
soph 'wise'
lat 'to carry'
sen 'old'
dic(t) 'to speak'
op, oph(thalm) 'eye, sight, to look'
son 'sound'
spir 'to breathe'
proto 'first'

Set 14

volv 'to turn'
para 'beside, beyond'
stru(c) 'to build'
ven 'to bring, come'
tract 'to drag, draw'
pon, pos 'to place, put'
zo 'animal'
voc, vok 'voice, to speak'
pyr 'fire, fever'
ge 'earth'

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Appendix I

Set 15

lig 'to bind'
mag, meg, maj 'great, large'
term 'boundary, end'
bi 'two'
ver, vor 'to turn'
venter 'belly'
vid, id, eid 'to see, idea'
viv 'to live'
pan 'all'
tele- 'distance'

APPENDIX II*

SAMPLE WORKSHEET #1

The words in column B have all come into the language within the last twenty years. Therefore, most of them do not appear in any dictionary. Determine the literal meaning of each word, then match it with the most appropriate definition in column A.

- | A | B |
|---|--------------------|
| ___ 1. A drug that facilitates the excretion of salt. | a. dystopia |
| ___ 2. The drawing of nourishment by the body from its own tissues. | b. xenobiologist |
| ___ 3. The existence of a number of centers of Communist thought and leadership. | c. synanthropic |
| ___ 4. Relating to aggressive or defensive social interaction (such as fighting). | d. saluretic |
| ___ 5. Relating to a theoretical condition of no gravitation. | e. quadraphony |
| ___ 6. A depressingly wretched place. | f. psychotoxic |
| ___ 7. The remote detection and measurement of living organisms. | g. polysentrism |
| ___ 8. One who studies life forms from other planets. | h. biospeleologist |
| ___ 9. A short sentence containing all the letters of the alphabet. | i. autophagy |
| ___ 10. One who studies cave dwelling organisms. | j. agonistic |
| ___ 11. Ecologically associated with man. | k. agravic |
| ___ 12. The transmission of sound on four channels. | l. biotelemetry |
| ___ 13. Causing harmful personality or behavioral changes. | m. pangram |

*Worksheets were used during 1978-79.

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Appendix II

SAMPLE WORKSHEET #2

Analyze the following words, giving the underlying form, any rules that have applied and the literal meaning.

1. euphoria
2. vivacious
3. agraphia
4. ingredient
5. anonymous
6. occidental
7. pertinaceous
8. atheism
9. avocation
10. inadvertent
11. gynandromorph
12. dissident
13. senicide
14. isodont
15. correlative

SAMPLE WORKSHEET #3

If the underlined metaphorically extended words are taken in their literal senses (the senses derived from the meanings of their base forms) each of the sentences below is redundant. Give the literal meanings that create these pseudo-redundancies.

1. The stone siding was falling off the dilapidated old building.
2. The Dutchess sat there sedately.
3. Scarlett O'Hara carried a parasol to prevent the sun from darkening her skin.
4. The dentist's assistant stood next to him as he worked.
5. The congregation flocked together into the church.
6. George was a farmer.
7. The revolutionaries turned back at the palace gates.
8. The travelling salesman led Marybelle away from the others and seduced her.
9. The infidels lost the battle because they did not place their trust in God.
10. The plague decimated ten percent of the world's population.
11. Pope Gregory sent out emissaries to the British Isles.
12. Eugene was a well-born young man.

SAMPLE WORKSHEET #4

BASIC MEANINGS

Give the meaning of the underlined affix in each of the following words:

- | | |
|-------------------------|-----------------------|
| 1. spectat <u>or</u> | 13. fin <u>ite</u> |
| 2. tax <u></u> | 14. curat <u>rix</u> |
| 3. sub <u>urban</u> | 15. <u>dis</u> aster |
| 4. sub <u>urban</u> ite | 16. cand <u>le</u> |
| 5. ref <u>ugee</u> | 17. pub <u>escent</u> |
| 6. depend <u>ent</u> | 18. mortu <u>ary</u> |
| 7. <u>emphatic</u> | 19. pyret <u>ic</u> |
| 8. antipath <u>y</u> | 20. spasm <u></u> |
| 9. frag <u>ile</u> | 21. eth <u>ics</u> |
| 10. reptil <u>oid</u> | 22. fin <u>al</u> |
| 11. <u>inept</u> | 23. legal <u>ize</u> |
| 12. <u>conspicuous</u> | 24. phys <u>ics</u> |

SAMPLE WORKSHEET #5

1. A man exhibits acumen if his thinking is
(a) slow (b) sharp (c) relaxed
2. A man is impecunious if he has no
(a) blook (b) sense (c) money
3. An anarchist dislikes all forms of
(a) rudeness (b) entertainment (c) government
4. If someone said your brain has ossified, they would mean it had
(a) become mushy (b) improved (c) turned to bone
5. A monolatrist is one who
(a) has only one mate (b) worships only one god
(c) speaks only one language
6. A polyglot is one who
(a) has more than one husband (b) speaks many languages
(c) worships many gods
7. Someone with dysphagia would have trouble
(a) seeing (b) moving (c) eating
8. A gregarious person is one who is
(a) sociable (b) clever (c) old
9. Someone suffering from arachnophobia would fear
(a) water (b) spiders (c) heights
10. A malefactor is liable to
(a) help you (b) teach you (c) harm you
11. A mycophagist is one who
(a) loves animals (b) eats mushrooms (c) is nearsighted
12. A febriferous climate would be
(a) hot and sunny (b) cold and damp (c) warm and muggy
13. Someone who was ignipotent could
(a) start fires (b) sing well (c) fly
14. A macropterous bird has
(a) webbed feet (b) large wings (c) heavy body
15. Your consanguine relatives are related to you
(a) by marriage (b) through your father (c) by blood
16. A pantheon would be a gathering of
(a) all the gods (b) city officials (c) children

SAMPLE WORKSHEET #6

The construction - *phobia* (*phob* 'to fear' and *-ia* 'condition') denotes an exaggerated, usually inexplicable and illogical fear of something. What would a person suffering from each of the following phobias fear?

1. taphophobia
2. necrophobia
3. acrophobia
4. claustrophobia
5. cynophobia
6. bathophobia
7. arachnophobia
8. anthropophobia
9. hydrophobia
10. photophobia
11. heliophobia
12. hypnophobia
13. xenophobia
14. zoophobia
15. agoraphobia
16. regiphobia
17. Francophobia
18. Anglophobia
19. adipophobia
20. nyctophobia

SAMPLE WORKSHEET #7

The base form *mant* 'to prophesy' often appears with the nominalizing suffix *-y*, giving *mancy*, which means 'divination by means of'. Soothsayers and prophets have used an amazing number of things to help them divine the future. In column B there is a list of only a few of these. Match the terms in column A with the correct means of divination. (This exercise can be done entirely with the glossary.)

| A | B |
|-----------------|--|
| 1. ambulomancy | 1. selecting passages at random from the Bible |
| 2. astromancy | 2. examining dung |
| 3. bibliomancy | 3. communication with the dead |
| 4. ceromancy | 4. studying lines in the soles of the feet |
| 5. chiromancy | 5. names or letters in a name |
| 6. hydromancy | 6. configuration of leaves |
| 7. necromancy | 7. configuration and movement of the stars |
| 8. onomancy | 8. walking |
| 9. ornithomancy | 9. inspection of the hand |
| 10. pedomancy | 10. the flight and cries of birds |
| 11. phyllomancy | 11. the figures produced by dropping melted wax into water |
| 12. pyromancy | 12. signs derived from water, its ebbs, tides, etc. |
| 13. scatomancy | 13. examining fire |

APPENDIX III - SAMPLE RULES

- 1) a-Weakening: $a \rightarrow e$ (except in initial syllables)
- 2) e-Weakening: $e \rightarrow i$ / $__ CV$ (except in initial syllables)
- 3) Vowel Deletion: $v \rightarrow \emptyset$ / $__ \left\{ \begin{matrix} v \\ h \end{matrix} \right\}$ (except in one vowel morphemes)
- 4) Devoicing: $\left[\begin{matrix} +int \\ +voice \end{matrix} \right] \rightarrow [-voice]$ / $__ [-voice]$
- 5) e-Change: $e \rightarrow u$ / $__ l+C$
- 6) e-Deletion: $e \rightarrow \emptyset$ / $__ r+V$
- 7) s-Deletion: $s \rightarrow \emptyset$ / $x+__$
- 8) X-Replacement (orthographic only) $c+s \rightarrow x$

APPENDIX IV

DIAGNOSTIC TEST*

Directions:

- 1) Write the number ____ in the upper right hand corner of your answer sheet.
- 2) Please mark only on the answer sheet. Do not mark on this questionnaire.
- 3) For each question, choose the word or phrase CLOSEST in meaning to the capitalized word.

1. INDIGENOUS

- (a) foreign (b) loutish (c) innate
(d) ignorant (e) irate

2. VOCIFEROUS

- (a) always hungry (b) truthful (c) speaking out loudly
(d) iron-like (e) cruel

3. CIRCUMSPECT

- (a) cautious (b) encircled (c) indiscreet
(d) spherical (e) approximate

4. EULOGIZE

- (a) to breed selectively (b) to speak well of (c) to castrate
(d) to belittle (e) to improve oneself

5. ERGOPHOBIA

- (a) fear of vanity (b) fear of pain (c) fear of making a
mistake
(d) fear of darkness (e) fear of work

*Not used after 1976.

6. RECIDIVIST

- (a) dramatist (b) reciter (c) confirmed criminal
(d) pensioner (e) a conservative

7. GENUFLECT

- (a) seem authentic (b) push away (c) reveal
(d) bend the knee (e) reflect accurately

8. MICROPUS

- (a) a minute crystal (b) an instrument for measuring very small distances
(c) unimportance (d) a little world (e) having small feet

9. PRECLUDE

- (a) decide (b) close off beforehand (c) foretell
(d) introductory performance (e) anticipate

10. SEDULOUS

- (a) diligent (b) exciting (c) murky
(d) traitorous (e) contemptible

11. DEMOGRAPHY

- (a) the mapping of the skull (b) the study of witchcraft
(c) beautiful handwriting (d) the science of population statistics
(e) the study of the natural features of the earth

12. BIBLIOPHILE

- (a) a biblical scholar (b) a librarian (c) a book lover
(d) a book store (e) a list of writings

13. CHRONOMETER

- (a) a device for measuring light (b) device for determining color intensity
(c) a clock (d) an instrument for recording rainfall
(e) an historical account

14. MISOGYNIST

- (a) one who hates physical exercise
- (b) one who hoards money
- (c) one who makes frequent mistakes
- (d) a woman hater
- (e) a wrong name

15. AMENTIA

- (a) a fine
- (b) subnormal intelligence
- (c) prayerfulness
- (d) restoration
- (e) attractiveness

16. CORPOREAL

- (a) dead
- (b) bodily
- (c) full of small holes
- (d) fundamental
- (e) spiritual

17. PERIDONTAL

- (a) diseased
- (b) occurring at intervals
- (c) pertaining to the gums
- (d) external
- (e) on the outer edge

18. MALEDICTION

- (a) a curse
- (b) a chronic illness
- (c) a blessing
- (d) speech used only by men
- (e) evil

19. AGGREGATE

- (a) portion
- (b) separate
- (c) peevish
- (d) war-like
- (e) gathered together

20. HETEROGENEOUS

- (a) widespread
- (b) dissimilar
- (c) uniform
- (d) extremely intelligent
- (e) sexually responsive

21. EXPLICATE

- (a) to unfold the meaning of
- (b) to soothe
- (c) very clear
- (d) to spit
- (e) to destroy completely

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Appendix IV

22. PROPENSITY

- (a) agility (b) joy (c) tendency (d) ownership
(e) modesty

23. DIFFIDENT

- (a) nasty (b) rebellious (c) hard to understand
(d) unlike (e) lacking confidence

24. PERSPICUOUS

- (a) transparent (b) evil (c) sweaty (d) repulsive
(e) valiant

25. TACTOR

- (a) electronic component (b) diplomat (c) opponent
(d) of questionable judgement (e) organ of touch

APPENDIX V

VOCABULARY ESTIMATE

To calculate your improvement, you will need to know the size of your vocabulary before and after taking this class. Here is how to form an approximation of your vocabulary size:

1. Take a fairly large desk dictionary such as *Webster's New Collegiate* or *Random House*. (Do NOT use your *American Heritage*.) Try to use the same dictionary used at the beginning of the term.
2. Count the number of distinct words you know on the page following the first page of each letter except x. This time, include all words for which you can determine a literal meaning.
3. Find the number of pages of definitions in your dictionary.
4. Divide the number of pages of definitions by 25. This will give the approximate number of pages per letter.
5. Multiply the total number of words you knew by the number arrived at in step 4. This will give you your approximate vocabulary size.

EXAMPLE: Suppose your dictionary has 1000 pages of definitions. 1000 divided by 25 is 40, so you looked at 1/40 of the total number of pages. Say you knew a total of 500 words on the 25 pages you looked at. 40×500 is 20,000 which is your approximate vocabulary size.

Number of words you knew _____

Approximate number of pages per letter _____

Approximate vocabulary size _____

Dictionary used _____

Name _____

Date _____

Adapted from Arthur Waldhorn and Arthur Zeiger. *Word Mastery Made Simple*. 1955. New York: Garden City Books.

APPENDIX VI

SAMPLE EXAMINATION FROM 1978-79

Name _____

1. (6 points) Match the underlined portion of each word in column A with the term in column B that BEST describes it.

| A | B |
|----------------------------|-----------------------|
| ___a. <u>ductile</u> | 1. derivational affix |
| ___b. <u>placate</u> | 2. infix |
| ___c. <u>tangible</u> | 3. bound root |
| ___d. <u>baseball</u> | 4. stem extender |
| ___e. <u>ungentlemanly</u> | 5. stem |
| ___f. <u>active</u> | 6. redundant suffix |
| | 7. compound |

2. (1 point) The morpheme *alec* means 'to protect'. What is the literal meaning of the name *Alexander*?
3. (1 point) The process whereby a speech sound becomes more like some sound in its environment is called _____.
4. (3 points) The morphology of the word *decide* is completely transparent. What is the literal meaning of *decide*? Has it undergone a metaphorical extension?
5. (3 points) Which ablaut grade does the root of each of the following words represent? (Remember Indo-European vowel length is not regularly recoverable in morphemes of classical origin.)
- a. pregnant
 - b. dependable
 - c. orgy

6. (8 points) Match each of the terms in column A with the sound(s) in column B it most closely describes.

| A | B |
|----------------|--------------------------------|
| a. laryngeal | _____ [p, b, m, w] |
| b. stops | _____ [f, v] |
| c. labiodental | _____ [h] |
| d. velar | _____ [p, t, k, b, d, g] |
| e. bilabial | _____ [w, y] |
| f. glides | _____ [k, g, ŋ] |
| g. alveolar | _____ [p, t, k, f, th, sh, ch] |
| h. voiceless | _____ [t, d, s, z, n, l] |
| i. affricates | |

7. (6 points) True or False

- _____ a. Every stem contains a root and an affix.
- _____ b. English and many other languages are descended from Latin.
- _____ c. Of the words *discus*, *dish* and *disk*, *discus* was borrowed last.
- _____ d. Lexicographers compile dictionaries.
- _____ e. The relationship between morphemes and syllables is totally predictable.

8. (2 points) Give two sounds that the *d* of the prefix *ed-* fails to assimilate to.

9. (5 points) What meaning shift took place in each of the following words?

- a. Latin *minister* 'servant' > English *minister* 'high officer of state'
- b. OE *wadan* 'to walk' > Mod Eng *wade* 'to walk through water'
- c. OE *bord* 'table' > Mod Eng *board* 'food' (as in room and board)
- d. Sw French *crestin* 'christian' > Mod Eng *cretin* 'idiot'
- e. French *souvenir* 'memory' > Mod Eng *souvenir* 'memento'

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10. (1 point) The morpheme *ar* means 'air'. What do you suppose the persons who coined the word *malaria* thought its cause was?
11. (1 point) The morpheme *mor* means 'stupid', as in *moron*. What is the literal meaning of *sophomore*?
12. (2 points) The Greek morpheme *hy* means 'swine'. What is the corresponding Indo-European root for 'swine'? _____
13. (1 point) What do the words *clink*, *stand*, *incumbent* and *tangible* have in common?
14. (6 points) Consider the underlined words in the following sentences. Put an M by those that are being used metaphorically and an L by those being used literally.
- _____ a. Nixon often distorted the truth.
- _____ b. John is a frequent blood donor.
- _____ c. The Roman nobility was famed for its decadence.
- _____ d. Darwin had a great deal of evidence to support his theory.
- _____ e. Electric shock causes contraction of the muscles.
- _____ f. This is a perplexing problem.
15. (1 point) The Greek word *doron* means 'gift'. What does the name *Theodore* mean?
16. (14 points) Give the literal meanings of the following words:
- a. catalog
- b. hysterectomy
- c. fertile
- d. infinite

- e. evoke
- f. eugenics
- g. mortification

17. (14 points) Give the underlying form of each of the following words.

- a. apprehensive
- b. emissary
- c. vivisection
- d. apathetic
- e. apandrous
- f. expectant
- g. convolute

18. (6 points) Match each of the following morpheme variants to the process which caused it.

- | | |
|--|-----------------------|
| ___ a. <u>t</u> mesis/ <u>a</u> tom | 1. total assimilation |
| ___ b. <u>s</u> cribble/ <u>s</u> cripture | 2. rhotacism |
| ___ c. <u>c</u> ontact/ <u>c</u> orrect | 3. ablaut |
| ___ d. <u>s</u> edulous/ <u>r</u> esident | 4. e-weakening |
| ___ e. <u>m</u> uscle/ <u>m</u> urine | 5. devoicing |
| ___ f. <u>c</u> reep/ <u>c</u> rept | 6. infixation |
| | 7. cluster shortening |

19. (2 points) A *perspicuous* discussion is one that is easy to

_____.

20. (6 points) Match the terms in column A with the appropriate concept in column B.

| A | B |
|--------------------|-------------------------------|
| ___ a. acrambulist | 1. dog-lover |
| ___ b. cynophile | 2. self-eating |
| ___ c. pyrophagous | 3. government by the wealthy |
| ___ d. hippophile | 4. fire-eating |
| ___ e. autophagous | 5. gov't by an absolute ruler |
| ___ f. plutocracy | 6. stilt-walker |
| | 7. horse-lover |

21. (1 point) The terms *mortician*, *funeral director* and *grief consultant* are examples of _____.

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