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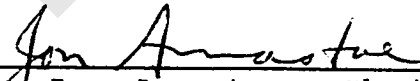
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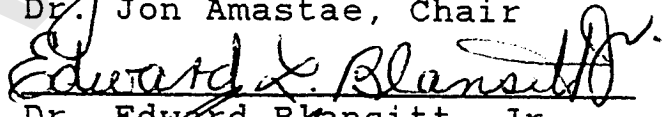
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OF A MINIMAL MONOSYLLABIC WORD CLASS

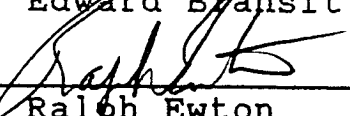
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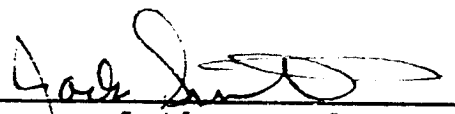
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PREVIEW

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To Paula Sabljak

LANGUAGE AND INVENTORY: RAMIFICATIONS  
OF A MINIMAL MONOSYLLABIC WORD CLASS

by

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SEMINAR PAPER

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...even with a little steak, you've still eaten  
the whole cow...

-Ryu Murakami

In the final analysis, when you looked at it hard  
enough you realized that no map ever went anywhere.  
All it did was come back to the same place it  
started from.

-William Marshall

PREVIEW

## INTRODUCTION

The rather lengthy title of this paper at once exemplifies, yet belies the paper's goal. It belies it in the sense that the paper deals with certain phonological aspects of American English which quantitatively, that is in terms of pure numbers, appear to be scant (minimal), but yet remain ebulliently viable in the language as it is used every day. On the other hand, the title exemplifies the way in which a great many linguistic considerations and problems may be generated, just by the very existence of such tiny scraps of linguistic phenomena.

As such, this paper represents a small part of a larger interest I have in the distribution of vowels in the English language especially in terms of those raw numbers. That is, my interest is drawn to the fact that vowels in word classes in English, particularly monosyllabic words, do not seem to have the even distribution one might expect. Though surely there is no reason that they should be equally distributed, on the other hand, theoretically at least, there is no reason why they should not. One word class, that which contains the lax high back unrounded vowel [ʊ] or [ʊ] as represented by "rook, hood, foot etc.," initially caught my attention as being particularly small. An exhaustive (but

probably not error-free) count yielded a mere (+/-) 49 monosyllabic words in this class.

I came to this particular linguistic area in a rather direct pedestrian fashion. Having taught my share of ESL classes and having dealt with those aspects of language teaching which have been, in the past, a familiar part of the pedagogical landscape, I was confronted by a rather peculiar feature of English that was apparent in word classes as they were used in texts for purposes of pronunciation practice and/or demonstration. This peculiarity was evident as these word classes were presented in the form of "minimal pairs."

Whether or not it is an effective methodological technique for teaching pronunciation, the notion of minimal pairs has nevertheless appeared in quite a few texts. As is well-known, minimal pairs are those pairs of words that are differentiated from each other by one single phonemic constituent. Briefly put, if two linguistic entities ("words") in a language have the same number of phonemes, and if these phonemes are sequentially aligned so that both entities match but for the exception of a single phonemic difference in the sequence, a minimal pair results if both entities can be meaningful (real words) with just this single differentiation.

The following are examples (vertically) of minimal pairs:

gun	fun	fan	fatter
fun	fan	fat	batter etc.

For pedagogical purposes, minimal pairs are generally contrasted in consonantal or vocalic positions. In most textbooks they are characteristically illustrated by monosyllabic words. English, in this respect, has a surprisingly (and significantly) large number of these.

What I noted, and I am sure others have as well, was that, of the monosyllabic monophthong word classes given for the demonstration of vowels, there was one class which seemed particularly "claustrophobic." This was the class that constituted the lax high back unrounded vowel mentioned above. As it was neither easy to readily find nor think of very many of these to pair up with other words, it became intuitively obvious that this class had fewer entries.

For me, that this word class is quantitatively smaller in and of itself is not a problem. However, the fact that this class is routinely put in a phonologically symmetrical relationship to other vowel word classes gives rise to numbers of questions.

#### HISTORICAL CONSIDERATIONS AND GENERAL QUESTIONS:

1) Was the historical makeup of this small word class (or any others) originally this way or was it (were they) decreased (or increased) or shaped in any way during the processes of the Great Vowel Shift?

- 2) Why didn't this very small set (or any others) just merge into one of the other vowel sets during the Great Vowel Shift?
- 3) Did this set maintain its viability (or vigor) because of the number of words in it which are, still today, so productively prevalent in daily use: could, should, would, look, put etc.
- 4) Was this word class as historically productive (utilitarian) and prevalent as today? -more? -less?
- 5) Did it remain viable because of a certain psychological tense/lax symmetry as "viewed" by speakers of the language?  
-what of marking considerations?
- 6) Was its viability due to the combination tense/lax symmetry and productivity (utilitarian use)?
- 7) Are such small word classes intuitively or unconsciously "viewed" by native speakers as indeed such a small class (somehow remarkable)?  
-if not, why not -if so, why? if neither why?
- 8) How small a set of items does a language (or speakers of a language) allow to "compete" on the same psychologically real level as other more pervasive sets?  
-what about small sets in other languages?  
-what about historical mergers, losses etc.?  
-have some been more viable than others? Why/not?
- 9) What is the relationship between psychologically real levels?
- 10) Can there in fact be psychologically real levels or is there only one level of psychological reality?  
-if so, would all such sets constitute undifferentiated modules which may or may not be in any form of competing relationship?
- 11) Does a psychologically real concept of such a word class actually exist or is it a factor at all?  
-Is the psychological perceptual "reality" of the relatively non-utilitarian diminutive (non-vowel) [sf-] set: "sphere, sphincter, sphynx" the same as or in some form of competition with the more "utilitarian" but still very small [spl-] set: "splendid,

splinter, splash?"

\* although the former is not very much larger than the latter in terms of actual number, it is in terms of proportion.

12) What about the theoretical "overload" factor whereby there are limits to the number of vowels (and other items) possible?

13) What about the "ratio" factor: whereby there is a relationship between the number of vowels in a language and the number of its consonants?

#### LANGUAGE LEARNING QUESTIONS:

1) Given the comparative complexity (or the relatively high number) of vowels in English compared to certain other languages, is there an affect on acquisition sequencing?

2) Would a high number of monosyllabic vowel (and vowel length) differentiated words have any effect on learning strategies by children or, for that matter, by non-native speakers?

-in second language acquisition could such strategies be influenced, modified or affected by teaching?

-could a teaching methodology be devised for this?

3) Assuming that psychological reality exists, is there a difference between native and non-native speakers regarding the psychological reality of such word classes?

-if there is a difference in psychological reality, in what way is it different from native speakers and does the reality vary from

-one non-native speaker to another (same language)

-one non-native language group to another

4) If phonemic and phonetic items that are beyond the domain of one specific language (as non-existent front-rounded vowels in English) are psychologically "oblivionized" after a certain learning stage is reached, as is suggested by some psycholinguists (Taylor, 1990), does that mean a certain amount of "consciousness raising" is necessary in order for non-native speakers to recognize and produce vowels alien to them?

#### ADDITIONAL QUESTIONS RELATED TO LANGUAGE AS A SYSTEM:

1) How independent (or interdependent) from each other are



- > systematic elements of a language,
- > their numbers as they systematically occur in a language,
- > their psychological reality to
  - native speakers of a language
  - (and to non-native speakers),
- > their frequencies of occurrence.

2) What, if any, relationship can be established between:

- > systematic elements of a language,
- > their numbers as they systematically occur in a language,
- > their psychological reality to
  - native speakers of a language
  - (and to non-native speakers),
- > their frequencies of occurrence.

3) Could some theoretical model be constructed to accommodate questions 1) and 2)?

4) What about questions 1) and 2) as they apply to artificial languages?

5) If a theoretical model could predict an event like the Great Vowel Shift, what minimal amount of data would be necessary?

- Could a linguistic theory predict the GVS with no data?
- If so, what kind of theoretical model could do this?
- If not, why not?

Thus, if a closer look is taken at this somewhat prosaic aspect of the language, numbers of such questions and speculations begin to crowd into the picture. Due to space and other practical limitations, many of the problems and considerations cannot be elaborated further here. They are included above so that the reader is provided with a general notion of the possible scope of the topic.

Among all these considerations, there is, in my view, one salient issue to come to terms with. That is how a word class that, in a very definite respect, is not like its companion word classes relates to language as it is linguistically viewed as a system. Whatever linguistic stance or philosophy one may take in terms of what type of system any language is, there is something striking and anomalous about the fact that any such word class should be so different in such an overt way. From this viewpoint, this paper will attempt to i) determine the ramifications quantitative numbers might have on qualitative differences for explaining systematic linguistic relationships; ii) determine whether the status of this word class could be considered an "orphaned" form, one that corresponds more closely with those irregular occurrences of language (idioms, irregular forms, archaic carryovers, etc.), or whether it is, in fact, an integral part of its language system; iii) provide an explanatory means by which such asymmetrical aspects of language may be included as structurally viable components of a system by clarifying the nature of linguistic structure as it exists in a dynamic temporal environment, and iv) suggest how a language system may be defined in the general absence of absolute criteria.

This paper is divided into two sections. In section one I will deal mainly with proposing a language system model which is based on relative elements. In section two I will develop the justification of this model in the context of its physical environment and in the context of its structural identity. Since there are synchronic and diachronic comparative linguistic data involved in this study, any historic or structurally related contexts will also be provided in appendix format. In terms of numbers and types, I will include, for comparison, the accompanying data of other word classes in the appendix. In this same respect, to round out the paper, I am not limiting it to the concept of monophthongs as is exemplified by the [ #U ] word class. I am also including the treatment of some diphthongs to demonstrate how a similarly meager word class exists in another distinct but related area. For the sake of expediency and readability, I will unfortunately have to take some liberties with phonological notation system generally used (IPA) and represent the lax high back unrounded vowel throughout this paper by combining the symbol "#" with "U" within extended square brackets: [ #U ].

## SECTION I: ON THE NATURE OF LANGUAGE SYSTEMS

### CHAPTER 1: THE MONOSYLLABIC WORD CLASS

Although it is not very unusual that languages should have linguistic irregularities, the notion which makes the [ #U ] word class a quirk in the English language system becomes more acute when the complexity of the arrangement of English vowels is taken into account. Compared to other languages, (Spanish, Hawaiian etc.) the relatively high number of distinct English vowel sounds is able to provide for a concomitantly greater number of monosyllabic vowel-differentiated words. Although there are quite a few alternating pronunciations and regional differences in vowel qualities, the native speaker of English knows not only a relatively large variety of vowels but also an accompanying variation of their durational manifestations (Lehiste, 1987).

In spite of the fact that English vowels are in a sense somewhat "compressed," and at the same time explained within the limits of the English orthographic system, the relationship between meaning and vowel differentiated phonemes in English is readily demonstrated by the following format of monosyllabic morphemes (Figure 1, page 10).

FIGURE 1: VOWEL DIFFERENTIATED MONOSYLLABIC MORPHEMES

[ɑ]	bock	bod(y)	pock		Poll(y)	fond	stock
[ɛ]	beck	bed	peck	fell	ten	fend	
[i]	beak	bead	peek	feel	peel	teen	fiend
[ɔ]		bode	poke	foal	pole	tone	phoned
[u]			puke	fool	pool	tune	stoke
[ə]	buck	bud	puck		ton	fund	stuck
[æ]	back	bad	pack	pal	tan	fanned	stack
[ɪ]		bid	pick	fill	pill	tin	finned
[ɔ]	balk	bawd		fall	pall		fawned
[ʊ]	book			full	pull		stalk
[ɜ]		bird	perk	furl	pearl	tern	ferned
[eɪ]	bake	bade		fail	pale		feigned
[aɪ]	bike	bide	pike	file	pile	tine	find
[ɔɪ]				foil			
[aʊ]				fowl		town	found

(peak/foul/peal/pule/pail are also possible)

Except for the consonant cluster example [st-] of the final vertical column above, the lowest number of morphemes in any one column is an impressive nine out of a possible 15. It should be kept in perspective, however, that this is an exemplary schema and as such the above matrix is "skewed" in several ways. First, it can be noted that the full range of vowels is given here including monophthongs and diphthongs. Too, the entries are citation forms and have been taken out of the context of speech. Moreover, the entries above represent some of the more complete multiple comparisons available; it should be observed that there are many others that would not fill out the pattern quite so conveniently. Inserting words in the matrix like "dog," "fish" or "plan" would not create the same profusion. On

the other hand, even limiting factors such as complex consonant clusters will still fill quite a few of the above slots (streak/ stroke/ struck/ strike/). The many/few clustering of words at either extreme of the continuum, could, in fact, be worthy of investigation itself.

But, what is not shown above is the full possible horizontal dimension of the schema. If all possible initial and final consonant combinations and open word class were considered, this of course would include virtually every monosyllabic word possible in the English language. In this same way, the fact that as many as three entries from the word class under consideration appear above (book, full, pull) is also misleading in terms of a complete inventory. If the full horizontal range were given for the [ #U ] monosyllabic word class it would render (as has been mentioned) plus/minus 49 words. This specific class would appear to be, then, somewhat impoverished. A visual inspection (Fig. 2, page 12) of the full list of words in this [ #U ] class will perhaps provide the reader with this sense.

FIGURE 2: [ #U ] MONOSYLLABIC WORD CLASS, TOTAL INVENTORY

book	cook	good	nook	room*	whoop*
brook	coop*	goods	pull	root*	whoosh*
.brook	could	gook*	push	.root*	wolf
broom*	crook	hood	puss	.root*	wood
bull	.crook	hoof*	put	shook	.wood(arch)
.bull	foot	hook	roof*	should	woof*
bush	full	hoop*	rook	soot*	woof*(dog)
bushed	.full	look	.rook	took	wool
					would

Seven of these have separate etymologies and 12 have alternate pronunciations:

broom	coop	gook	hoof	hoop	roof
room	root	soot	whoop	whoosh	woof

and other possibilities may be considered as well:

Butch schnook snook whoops

-----

The above list includes words with more than one meaning as indicated by periods (period + word), in most cases, of independent etymological derivation. The asterisks indicate alternate pronunciations (word + \*). Marked forms as they would be rendered by plurality or tense (3rd person present) are not included. That the list is short is evident, especially when taking into consideration that if the twelve alternately pronounced forms are subtracted the list gets reduced to some 37 words. By contrast a list of its most closely associated "analogous" word class, the [ uw ] tense high back rounded vowel (fool, soup, noon etc.) renders some (+/-) 205 words or, depending

on how the figures are manipulated, four to six times as many (see Appendix A).

There may, of course, be more dialectic alternations than are given above. As a native speaker from southern Wisconsin, I cannot say if I have heard "coop" [k#Up] or "hoop" [h#Up]. It seems I have only heard [kuwp] and [huwp]. I consistently tend to pronounce "root" [r#Ut] instead of [ruwt] and "roof" [r#Uf] instead of [ruwf] even though I generally hear the latter pronounced more than the former. I vaguely remember "broom" [br#Um] but haven't heard it recently. I recall hearing "room" [r#Um] from one speaker not so long ago, someone from Detroit--the Midwest where I am from--but I do not share this pronunciation. Otherwise, I am quite comfortable with alternative pronunciations of the others which include:

hoof gook soot whoop whoops whoosh woof

When comparing the [ #U ] word class to all the other word classes the differences (except for one) are no less striking. There is a controversial aspect of comparing monophthongs with diphthongs and some controversy in what actually constitutes the difference (some of these aspects are covered in the Appendices. To render a comparative idea of word-volume in each word class, Figure 3 below gives a breakdown of the numbers of monosyllable words which appear