# DIALECT PRETERITES AND PAST PARTICIPLES IN THE <br> NORTH CENTRAL STATES AND UPPER MIDWEST: <br> A GENERATIVE ANALYSIS 

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The principles of generative-transformational grammar may be used to characterize any aspect of a particular dialect. Here, those principles are applied to the non-standard inflection of preterites and past participles reported by Virginia McDavid in Verb Forms of the North Central States and Upper Midwest (1957). Other works of importance to the study of verb inflection include "English Verb Inflection," by Bernard Bloch (1947), The Sound Pattern of English, by Chomsky and Halle (1968), and "English Verb Inflection: A Generative View," by Griggs and Rulon (forthcoming).

Chomsky and Halle have asserted that a variety of surface forms may be derived from the same, or nearly the same, abstrict underlying representation. Readjustment and phonlogical rules operate on the underlying representation to produce the surface structure. A lexicon of the dialect forms reported by Menavid is included to give each surface form and the rules required to produce it.

Griggs and Revlon have observed that certain combinations of readjustment mas es divide standard verb paradigms into seven classes: regular, weak, mixed, and three strong classes.

Dialect verb paradigms may be classified in the same manner. McDavid's data rarely repores complete paradigms. It is possible, however, to postulate a complete paradigm, which may then be classified, from the derivation of a single form. A second lexicon is included to give the possible paradigms and their classifications for each form in McDavid's data.

Problem forms such as pleonastics, invariable paradigms, and intransitive-transitive pairs require some adjustments in the derivational process; but in general, the evidence shows that Chomsky and Halle were correct: different surface forms may be derived from essentially the same underlying representation. Two lists are included: one to show the number of dialect classifications for a single verb, the cther to show the number of paradigms in each classification. Since strong Class II paradigms are the nost numerous, it appears that for these data, at least, speakers in the North Central States and Upper Midwest characteristically produce leveled preteritepast participle combinations.

DIALECT PRETERITES AND PAST PARTICIPLES IN THE NORTH CENTRAL STATES AND UPPER MIDWEST:

## A GENERATIVE ANALYSIS

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## CMMTER

## INTRODUCTION

1.1 Earlier generative models. Dialect verb forms, those which are not generally considered standard in educated speech, have always been an interesting phonological problem in Eng. lish. They are interesting because their principal parts show various forms of vowel gradation, consonant modification, and, occasionally no apparent change at all. They are a problem because there at first seems to be little system in these changes. Recent theories of descriptive gramar, however, have observed some systematic relationships among the forms of dialect verbs. Bloch has proposed an item and arrangement grammar to analyze standard English verb inflection by examining "every inflected form as a combination of morphemes in a particular order" (1947:244). Item and process grammar, however, comes the closest to capturing the systematic inflection of pandialectal verb forms.

Such a grammar has been devised by Noam Chomsky and Morris Halle in the Sound Pattern of English (1968). It is assumed that the reader has a certain degree of familiarity with this work (hereafter SPE) and with the cerminology of transfor-maticnal-generative grammar. It would bo useful at this point, however, to explain some of the basic aspects of item and process gramar upon which this study rests.

According to Chomsly (1968), the syntactic component of the grammar of any language generates abstract lexical representations. Conventional orthography comes remarkably close to the spelling of the lexical representations in English. Chomsky and Halle note, "The fundamental principle of orthography is that phonetic variation is not indicated where it is predictable by general rule" (1968:49). Readjustment rules and phonological rules operate on the lexical representation to produce the final phonetic form.

The generative processes that produce standard forms of English irregular verbs have been described by Griggs and Rulon in "English Verb Inflection: A Generative View" (forthcoming). They posit certain lexical features to be inserted into an underlying syntactic segment. English verbs may be marked with one of the following lexical features: tregular, ten, and $\pm m i x e d$. Within the $+e n$ category are three classes. This classification produces seven potential types of English verbs. Each class is characterized by a distinctive lexical marking of each of the forms of the verb paradigm: present, preterite, and past participle. It is the lexical marking that determines the structure of any surface form. Chomsky points out that a single lexical representation may surface as any of several phonetic forms: "It should be observed that very different dialects may have the same or a very similar system of underlying representations" (1968).

This paper will describe in some detail the processes of derivation and consequent classification of certain dialect verb forms. The dialect forms, most of them irregular, have been supplied by "Verb Forms of the North Central States and Upper Midwest," by Virginia McDavid (1957).
1.2 Description of source. McDavid's study is modeled after a previous one by E. Bagby Atwood, A Survey of Verb Forms in the Eastern United States (1953). Atwood's verb forms were gathered by linguistic atlas fieldworkers in the Middle and South Atlantic States. McDavid explains, "In order to facilitate comparison with Atwood's book, I have followed quite closely his order and classification of verb forms" (1957:10). She uses Atwood's system of description, classifying the forms as he does, under the headings "Tense Forms," "Personal Forms of the Present Indicative," "Number and Concord," "Negative Forms," and "Infinitive and Present Participle." Both studies focus on the regional and social distribution of individual verb forms.

Two Iinguistic atlas projects furnish the material for Virginia McDavid's study: the Linguistic Atlas of the North Central States and the Linguistic Atlas of the Upper Midwest (now in press). The former, directed by Albert H. Marckwardt, then of the University of Michigan, includes survey material from Wisconsin, Michigan, Ontario, Illinois, Indiana, Kentucky, and Ohio. The Linguiscic Atlas of the Upper Midwest, directed by Harold B. Allen of the University of Minnesota, includes
survey material from Minnesota, Lowa, North Dakota, South Dakota, and Nebraska.
1.3 Scope of present study. This paper is confined to that portion of McDavid's study labeled "Tense Forms." It includes preterites and past participles. Other forms that she reports are beyond the scope of this study. Attributive past participles are also systematically excluded, since the derivational processes are different for the past participle and the attributive past participle. McDavid reports the preterite form of twenty-six verbs, the past participle form of four verbs (attributives excluded), and both forms of seven verbs. When both the preterite and the participle are given for a single verb, she 1 ists them separately in order of frequency of occurrence.

This paper will propose a generative analysis of McDavid's dialect verb forms. The concepts of Chomsky and Halle as presented in SPE form the framework for this study. The immediate basis of the theory of verb derivation presented here is found in the study by Griggs and Rulon. The background for this paper having been established, it is appropriate to next examine the operation of generative rules.

## CAAFTER II

## THE GENERATIVE FRAMEWORK

2.1 Syntactic structure. The first aspect of verb derivation to be examined is the underlying syntactic structure from which surface structure sentences are derived. Each element in the framework is marked with certain distinctive features. In the following simplified chart, the main syntactic elements are noun phrase (NP), auxiliary (Aux), and verb phrase (VP). The concern of this study is with those forms marked ( +V ). The dialect forms that Virginia McDavid reports are various phonetic manifestations of the forms marked ( +V ), and further, that are syntactically marked with either a past tense marker (+Past) or a perfective marker (+Perf.). Those forms marked (+Past) are referred to as preterites. Those marked (+Perf.) are past participles. The following chart adapted from Jacobs and Rosenbaum (1968), illustrates the syntactic framework from which surface structures are derived.


Fig.1--Syntactic framework

A syntactic form marked ( $+V$ ) is further modified by the addition of lexical markers: ${ }^{ \pm}$regular, $\pm$en, and ${ }^{ \pm}$mixed. The +en group has three distinct classes determined by the nature of the forms in the paradigm. The mixed group has one form of the paradigm marked +regular and the other marked -regular, thereby giving this group two classes. The lexical markings distinguish seven classes of English verbs: +reg., -reg.-en,
-reg. +en Class I, -reg.ten Class II, -reg.ten C1ass III, mixed -en, and mixed ten. The forms of the paradigm in each of these classes are additionally marked with an inflectional suffix. The classes will be more fully described later in the study.

Two kinds of phonological boundaries are important to this study: word boundary (\#) and formative boundary ( + ). Phonological rules may operate across a formative boundary, but not across a word boundary unless it is expressly stated in the rule. Both the past tense marker and the perfective marker are attached in the lexical representation with a word boundary.
2.2 Abstract lexical representation. A sumnary of readjustment and phonological rules (Griggs $\&$ Rulon forthcoming) may be found in the appendix. Lexical representations are modified by readjustment rules. These rules block or trigger the action of certain phonological rules. Each phonological rule operates automatically in a given context. Both sets of rules used here are substantially the same as those formulated by Chomsky and Halle (1968) and expanded by Griggs and Rulon (forthcoming). Readjustment rules are numbered 1 through 17. The phonological rules are numbered 18 through 56.

Underlying lexical representations are given in double phonemic virgules. An intermediate form between the underlying form and the final phonetic form is given in single
virgules. Phonetic reaizations are ziven in square brackets. The underlying requegtation is rocossarily an abstract form, not always fully spocified. The tense markers are // d// and $/ / \mathrm{n} / /$. The inflectional suffix is $/ / \mathrm{d} / /$ in the preterite, whether the verb is regular or irregular. The inflectional suffix for a participle is $/ / \mathrm{d} / /$ in regular verbs and in -en irregular verbs, but is //n// in ten irregular verbs. Both $/ / \mathrm{d} / /$ and $/ / \mathrm{n} / /$ are attached to the verb stem with // \#// in the underlying form. Nasals, clustering with a consonant, are another abstract form that need not be fully specified in the lexical representation, since a phonological rule will convert // N// to the appropriate surface structure. It is the readjustment rules, however, that modify the information provided by the lexical representation for insertion into the system of phonological rules.
2.3 Individual readjustment rules. A few of the major readjustment rules deserve detailed comment here. Rule 1 replaces // \#// with /+/ and does not operate on regular verbs. In most irregular verbs, however, Rule 1 does operate in both the preterite and the participle form. After the application of Rule 1 , the inflectional suffix may be deleted by Rule 3 or Rule 4. Some verbs in which this process operates are preterites blew, came, dove, drank, and froze and participles drunk, drove, ate, grew, and rode. The inflectional suffix may be retained and if it is $/ / \mathrm{d} / /$, may be devoiced later by a phonological rule. When this occurs, the main vowel is
commonly laxed by a phonological rule. Some examples of this derivational path are preterites dreamt and knelt and participle writ. Occasionally, Rule 1 does not apply in some participle forms, thus allowing the vowel to remain tense, as in taken and droven.

The preterites and past participles of some verbs are modified by the application of Rule 9 (Ablaut). Ablaut switches the backness of the vowels shown in the following illustration.

$æ \longleftrightarrow \longrightarrow 0$
Fig.2--Operation of Ablaut

Some forms in which Ablaut applies are preterites blew, brung, clum, drove, ran, and shrunk and participles clum, drunk, irove, rode, and took.

Rule 10 (Lowness Adjustment) operates on some forms to contribute to making them acceptable input for the system of phonological rules. The lowness of certain vowels is switched as shown below.


Fig. 3--Operation of Lowness Adjustment

Some of the forms adjucted by kute 10 are preterites began, brang, canc, swain, and tock and participies drank, droven, ate, rode, and took.

Some forms need still further modification. Rule 11 alters the tenseness of the main vowel in some. Examples are preterites duv, came, and gave and participles druv and driv. Other readjustment rules are necessary to account for all verb forms, but Rules $1,3,4,9,10$, and 11 are the most frequently applied. The charts that follow illustrate the application of the major readjustment rules in both preterites and past participles.

TABLE I
READJUSTMENT RULE APPLICATIONS

| preterites |  |  |  |
| :---: | :---: | :---: | :---: |
|  | blowed | dove | gave |
| Underlying Lexical Representation | $/ / \mathrm{blog}{ }^{\text {W }} \mathrm{d} / /$ | // div\#d// | // giv\#d// |
| Ru1e 1 |  | div + d | giv+d |
| Rule 3 |  | div $+\phi$ | giv+ $\phi$ |
| Rule 9 |  | dūv |  |
| Rule 10 |  | dこ̄v | g æV |
| Rule 11 |  |  | g ¢ $v$ |
| Phonological Form | bloy ${ }^{\text {\% }}$ d | dうv | $g æ{ }^{\text {® }}$ |
| Phonological Rules |  |  |  |
| Phonetic Form | [blowd] | [dowv] | [gēyv] |

TAREE 1 I
READJUSTMENT RULE APPLICATIONS

| PAST PARTICIPLES |  |  |  |
| :---: | :---: | :---: | :---: |
|  | et | druv | wrote |
| Underlying Lexical Representation | // èt\#d// | // drīivn// | // wrīt\#n// |
| Rule 1 | $\overline{\mathrm{e}} \mathrm{t}+\mathrm{d}$ | drivin | wrīt+n |
| Rule 4 |  | $\mathrm{dr} \overline{\mathrm{i}} \mathrm{v}^{+} \phi$ | wrīt+ $\phi$ |
| Rule 9 |  | drūv | wrüt |
| Rule 10 |  |  | wrjt |
| Rule 11 |  | druv |  |
| Phonological Form | $\bar{e} t+d$ | druv | wrot |
| Phonological Rules |  |  |  |
| Phonetic Form | [ec] | [dr^v] | [rowt] |

2.4 Description of lexicon. The lexicon that follows illustrates the uses of readjustment rules in the derivation of the dialect forms reported by Virginia McDavid. The verbs are listed alphabetically in traditional orthography. Beside each is the underlying lexical representation in double phonemic virgules. All of the varients listed under it may be derived from that underlying form. If a variant lexical form must be proposed to account for some dialect forms, it
is labeled "lexical variant," and the forms listed beneath are derived from it.

Virginia McDavid (1957:20) uses both ". . . traditional 'dialect spellings' where such exist . . ." and International Phonetic Alphabet transcription. This author has used McDavid's dialect spellings and devised spellings for those she gives in I.P.A.

Beside each dialect form listed in the lexicon are the readjustment rules required for proper input to the system of phonological rules. It is not necessary to list the phonological rules and some of the readjustment rules since they will yield the appropriate form automatically. Occasionally, however, a rule fails to apply, or applies in a manner not stated in the context of the rule. When this is the case, it is noted in the lexical entry. Since regular forms are not affected by readjustment rules, they are marked simply + Reg in the lexicon. The surface structure of each form is given in phonetic transcription to the right. McDavid's I.P.A. has been changed to correspond with Chomsky and Halle's usage in SPE. The lexicon shows the readjustment rules that operate in each of McDavid's reported dialect preterites and past participies. Each form is fully marked for readjustment rules and any idiosyncracies of phonological rules.

$$
2.5 \text { Lexicon. }
$$

1. begin //be+gin//

Preterite // betgin\#d//
a. began $+R 1+R 3+R 10$
[bəgæn]
b. begin + RI +R 3
[bəgin]
c. begun $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9$
[bəg^n]
Preterite // gin\#d// lexical variant
d. gin $+\mathrm{R} 1+\mathrm{R} 3$
2. bite // bīt//

Participle // bīt\#n//
a. bitten +Rl
[biton]
Participle // bit\#d//
b. bit + R1
3. blow //bloy ${ }^{W} / /$

Preterite //bloyW\#//
a. blew $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9$
[blüw]
b. blewed +R 9
[blūwd]
c. blowed + Reg
[blōwd]
4. bring // breNy //

Preterite // breNy\#d//
a. brought $+\mathrm{R} 1+\mathrm{R} 9$
[brラ^t]
b. brang $+\mathrm{RI}+\mathrm{R} 3+\mathrm{R} 10$
[bræゥ]
c. bring $+\mathrm{Rl}+\mathrm{R} 3$
[brion
d. brung $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9$
5. catch // kæxe//

Preterite // kexe\#d//
a. caught $+\mathrm{R} 1+\mathrm{R} 9$
[kラ^t]
b. ketched +R10 [kečt]
c. catched + Reg [ $k æ \check{c} \mathrm{c}$ ]
d. kitched +R10 +R39

Preterite // kæč kæč\#d kæč\#d// lexical variant e. kotch (ed) ( $+\mathrm{R} 1+\mathrm{R} 3)+\mathrm{R} 9$ [käc $(t)]$
6. climb // klīnb//

Preterite // klīnb\#d//
a. climbed +Reg -R24 III
[klāymd]
b. clahm +R1 +R3 +R9 +R10 -R31
[k1ām]
c. clam +R1 +R3 +R10
[klæm]
d. clim $+\mathrm{Rl}+\mathrm{R} 3$
[klim]
e. climb +R1 +R3 -R24 III
[klāym]
f. clome +R1 +R3 +R9 +R10 -R24 III
[k1öwm]
g. clom +R1 +R3 +R9 +R10
[k1う^m]
h. clum +R1 +R3 +R9
[k1.Am]
i. clume +R1 +R3 +R9 +R10 -R24 III double application of R39
[klūwm]
Participle // klinb\#d//
j. climbed +Reg -R24 III
[k1äymd]
Participle // klīnb\#n//
k. clahm +R1 +R4 +R9 +R10 -R31

```
1. clam +RI +R4 +R20
[klæm]
m. clim +Rl +R4
n. climb +R1 +R4 -R24 III
[k1äym]
o. clome +R1 +R4 +R9 +R10 -R24 III [k10wm]
p. clom +R1 +R4 +R9 +R10
[k15^m]
q. clum +R1 +R4 +R9
[kl^m]
r. clume +R1 +R4 +R9 +R10 -R24 III
double application of R39
```

7. come // kum//

Preterite // kum\#d//
a. came $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9+\mathrm{R} 10+\mathrm{RI} 1$
[keym]
b. come +R1 +R3
8. dive // dīv//

Preterite // div\#d//
a. dive $+\mathrm{RI}+\mathrm{R} 3$
b. $\operatorname{div}+\mathrm{Rl}+\mathrm{R} 3+\mathrm{R} 11$
c. dove +R1 +R3 +R9 +R10
d. $d u v+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9+\mathrm{R} 11$
e. dived + Reg
f. divd + R1
9. do // dō $\gamma^{W} \varepsilon / /$

Preterite // dō ${ }^{W} \varepsilon \# d / /$

$$
\begin{equation*}
\text { a. } \mathrm{did}+\mathrm{R} 1+\mathrm{R} 9+\mathrm{R} 39 \tag{did}
\end{equation*}
$$

10. draw // $\mathrm{dror}^{\mathrm{w}} \varepsilon / /$

Preterite // droy ${ }^{W}{ }^{W H} d / /$
a. drew $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9$
b. drawed $\div$ Reg
[drūw]
[drond]
11. dream // drēn//

Preterite // drèm\#d//
a. dreamed + Reg
[drīymd]
b. dreamt +R1
[drempt]
c. drimpt +R1 +R54
[drimpt]
d. drimp +R1 +R54 +R56
[drimp]
12. drink // drink\#d//

Preterite // drink\#d//
a. drank $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 10$
[drænk]
b. drink $+\mathrm{Rl}+\mathrm{R} 3$
[drink]
c. drunk + R1 + R3 + R 9
[dr^nk]
d. drinked +Reg

Participle // driNk\#n//
e. drank +R1 +R10
[drænk]
f. drink $+\mathrm{R} 1+\mathrm{R} 4$
[drigk]
g. drunk $+\mathrm{R} 1+\mathrm{R} 9$
[dr^0k]
Participle // drink\#d//
h. drinked +Reg
13. drive // drīv//

Preterite // drī\#d//
a. drive +R1 +R3

$$
\begin{aligned}
& \text { b. driv +R1 +R3 +RL1 [driv] } \\
& \text { c. drove }+\mathrm{R} 1+\mathrm{R} 3+\mathrm{Rg}+\mathrm{R10} \text { [dröwv] } \\
& \text { d. druv }+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9+\mathrm{R} 11 \quad[\mathrm{dr} \wedge v] \\
& \text { e. drived +Reg } \\
& \text { Participle // driv\#n// } \\
& \text { f. drive +R1 +R4 } \\
& \text { [drāyv] } \\
& \text { g. } \operatorname{driv}+\mathrm{R} 1+\mathrm{R} 4+\mathrm{R} 11 \\
& \text { [driv] } \\
& \text { h. driven }+ \text { RI } \\
& \text { [driven] } \\
& \text { i. druv +R1 +R4 +R9 +R11 } \\
& \text { j. arove(n) }(+R 1+R 4)+R 9+R 10
\end{aligned}
$$

14. eat // ēt//

Preterite // ēt\#d//
a. ate $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 10$
[ēyt]
b. eat $+\mathrm{R} 1+\mathrm{R} 3$
c. et +R 1
[et]
Participle // ēt\#n//
d. ate +R1 +R4 +R10
[ēyt]
e. eat $+\mathrm{R} 1+\mathrm{R} 4$
[īyt]
f. aten +R10
[ēytan]
g. eaten

Participle // ēt\#d//
h. et +RI
[et]
15. fetch //feř//

Preterite // feč\#d//
a. fetched +Reg
[fečt]
b. fotch $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9$
16. fight // fext//

Preterite // fext\#d//
a. fought $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9$
[f5^t]
b. fit +R1 +R3-R32V
c. fout $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9-\mathrm{R} 38$
[fäwt]
17. fit //fit//

Preterite // fit\#d//
a. $£ i t+R 1$
b. fitted +Reg
18. freeze // frēz//

Preterite // frëz\#d//
a. froze $+\mathrm{Rl}+\mathrm{R} 3+\mathrm{R} 9+\mathrm{R} 10$
[frōwz]
b. freezed + Reg
[friyzd]
c. frozed $+\mathrm{R} 9+\mathrm{R} 10$
[frōwzd]
19. give // giv//

Preterite // giv\#d//
a. gave +R1 +R3 +R10 +R11
[gēyv]
b. give +R1 +R3
[giv]
c. gived + Reg
[givd]
20. grow // groy ${ }^{W} / /$

Preterite // groy ${ }^{\text {W }} \mathrm{d} / /$
a. grew $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9$
[grūw]
b. growed +Reg
[growd]
c. grewed + R9
[grūwd]
Participle // groy ${ }^{W} \# n / /$
d. grew $+\mathrm{R} 1+\mathrm{R} 4+\mathrm{R} 9$
e. grown

Participle // groy ${ }^{W} 4 / /$
f. growed + Reg
21. hear //xēr//

Participle // xēr\#d//
a. heard +RI
b. heerd +Reg

Participle // xēr\#n//
c. heern
[hīinn]
22. knee1 // nē1//

Preterite // nē1\#d//
a. kneeled +Reg
b. kne1t +R1
c. knee1 $\div \mathrm{R} 1+\mathrm{R} 3$
d. kneelt +R1 - R24 III
e. knailt +R1-R24 III -R39
[nēy1t]
23. learn // lern//

Preterite // lern\#d//
a. learned + Reg
[1^rnd]
b. learnt +R 1
[1^rnt]
c. larned +R10
[1ä^rnd]
d. $\operatorname{larnt}+\mathrm{R} 1+\mathrm{R} 10$
[1ā^rnt]
24. lie // leye//

Preterite // leye\#d//
a. 1ay $+\mathrm{Rl}+\mathrm{R} 3+\mathrm{RI} 0$
[1ëy]
[1ēyd]
lay // 1æ $\gamma / /$ lexical variant
Preterite // 1æ $\boldsymbol{\gamma}^{\# d / /}$
c. 1ay +R1 +R3
d. 1aid + Reg
25. ride // rīd//

Participle // rīd\#n//
a. ridden +R 1
[ridən]
b. rode +Rl +R4 +R9 +R10

Participle // $\dot{\mathbf{r}} \overline{\mathrm{i}} \mathrm{d} \# \mathrm{~d} / /$

$$
\text { c. rid }+\mathrm{R} 1
$$

[rid]
26. run // run//

Preterite // run\#d//
a. $\mathrm{ran}+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9+\mathrm{R} 10$
[ $\mathrm{r} æ \mathrm{n}$ ]
b. run $+\mathrm{R} 1+\mathrm{R} 3$
c. runned + Reg
27. rise // riz//

Preterite // rīi\#d//
a. rose +R1 +R3 +R9 +R10
b. rised +Reg
c. riz +R1 +R3 +R11
d. raised +R 10
[röwz]
[rāyzd]
[riz]
[rēyzd]
28. see // sēpe//

Preterite // sēpe//
a. saw +R1 +R3 +R9
[s5^]
b. see +R1 +R3
c. seed + Reg
[sīy]
[sīyd]
29. shrink // sřink//

Preterite // srink\#d//
a. shrank $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 10$
[šraenk]
b. shrunk $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9$ [šr^nk]
c. shrinked +Reg
[šrinkt]
30. sit // sit//

Preterite // sit\#d//
a. sat +R1 +R3 +R10
[sae t]
b. sit + R1
c. $\operatorname{sot}+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9+\mathrm{R} 10$
d. set +R1 +R3 double application of R10
set // set// lexical variant
Preterite // set\#d//
a. sat +R1 +R3 +R10
[sæt]
b. sit +R1 +R3 +R39
[sit]
c. sot +R1 +R3 +R9 +R10
[sāt]
d. set +R1
[set]
31. sweat // swet//

Preterite // swet\#d//
a. sweat $+\mathrm{Rl}+\mathrm{R} 3$
[swet]
b. sweated $+\operatorname{Reg}$
[swetad]
32. swim // swim//

Preterite // swim\#d//
a. swam $+\mathrm{Rl}+\mathrm{R} 3+\mathrm{R} 10$
[swæ m]
b. swum $+\mathrm{Rl}+\mathrm{R} 3+\mathrm{R} 9$
c. swim $+\mathrm{R} 1+\mathrm{R} 3$
d. swahm +R1 +R3 +R9 +R11
e. swom +R1 +R3 +R9 +R10
f. swimmed +Reg
33. take // t̄"k//

Preterite // tæ k\#d//
a. took $+\mathrm{R} 1+\mathrm{R} 3+\mathrm{R} 9+\mathrm{R} 10$
b. tuck $+\mathrm{R} 1+\mathrm{R} 3 \underset{\mathrm{R}}{+\mathrm{R} 9+\mathrm{R} 10 \text { reorder }}$
c. take $+\mathrm{R} 1+\mathrm{R} 3$
d. taked + Reg

Preterite // tæ $\mathrm{kn} \# \mathrm{~d} / / \mathrm{lexical}$ variant
e. takened +Reg

Participle // tak\#n//
f. taken
g. took $+\mathrm{R} 1+\mathrm{R} 4+\mathrm{R} 9+\mathrm{R} 10$
h. tuck $+\mathrm{R} 1+\mathrm{R} 4+\mathrm{R} 9+\mathrm{R} 10$ reorder R51 before R39 [t^k]
i. take $+\mathrm{R} 1+\mathrm{R} 4$

Participle // täk\#d//
[tuk]
[t^k]
[tēyk]
[tēykt]
[tēykənd]
[tēykan]
[tuk]
[tēyk]
j．takea + Reg
Participle／／taknd／／iexical variant
k．takened＋Reg
［tēykənd］
34．teach／／tēxe／／
Preterite／／tēxع\＃d／／
a．taught＋R1＋R9
［tラ̄＾t］
b．teached＋Reg
［tiyct］

35．throw／／$\theta$ roy ${ }^{W} / /$
Preterite／／ 日ro $^{W}{ }^{W} \mathrm{~d} / /$
a．threw + R1 + R3 + R9
［өrūw］
b．throwed＋Reg
［日rōwd］

36．wake／／w $\bar{e} \mathrm{k} / /$
Preterite／／wa k\＃d／／
a．woke $+\mathrm{RI}+\mathrm{R} 3+\mathrm{R} 9$
［wōwk］
b．waked＋Reg
Preterite／／w $\bar{a} k n \# d / / ~ l e x i c a l ~ v a r i a n t ~$
c．wakened＋Reg
［wēykend］
37：write／／wrīt／／
Participle／／writ\＃n／／
a．written＋R1
［ritan］
b．wrote＋R1＋R4＋R9＋R10
［rōwt］
Participle／／wrīt\＃d／／
c．writ + R1

## CHAPTER IT

## SYSTEMATIC CONJUGATION

3.1 Classes of standard verbs. The derivational paths of the forms given in the preceding lexicon are fully specified. Every readjustment rule needed to produce the form is given. A more useful lexicon may be compiled, however, if it is observed that certain patterns emerge from the combinations of readjustment rules used to produce each form. These patterns may be used to classify the forms. Griggs and Rulon (forthcoming) have pointed out that certain readjustment rules are characteristic of each verb class. The classes of English verbs are here characterized in some detail.

Regular verbs. -- The inflectional suffix for both the preterite and the past participle is // d// . Rule 1 does not operate as it does in irregular verbs; thus the / $/$ / is retained (though perhaps devoiced) in the surface structure. Rules 9, 10 , and 11 do not operate. The preterite and past participle surface with the vowel stem identical to the present form.

Weak verbs. -- Both the past tense marker and the past participle marker are // d// . These verbs are therefore classified -en. Rule 1 typically operates to replace // \#//
with /+/. Since Rule 1 does operate, one usually finds a devoiced final consonant and a lax vowel in the preterite and past participle.

Strong verbs. -- There are three classes of strong verbs, reflecting three different relationships among the forms of the paradigm. If the stem of the participle and the stem of the present are the same, or differ only in the laxness or tenseness of the vowel, the conjugation is Class I. If the stem of the participle and the stem of the preterite are the same, the conjugation is Class II. If all three stems are different, the conjugation is Class III.

Rule 1 typically replaces // \#// with /+/. Rule 3 usually operates in the preterite to delete/d/. Since the participle marker is $/ / \mathrm{n} / /$, this class of verbs is marked +en.

Mixed verbs. - This classification accounts for paradigms that surface with one form +regular and one form -regular. Since the regular form may be either the preterite or the past participle, there are two classes of mixed verbs. If the regular form surfaces as the past participle, the participle marker wi. 11 necessarily be $/ / \mathrm{d} / /$ and the class is marked +Mxd -en. If the regular form surfaces as the preterite, the participle maxker will necessarily be // n// , and the class is marked +Mxd +en.
3.2 Possible verb paradigms. The following examples may be used to illustrate the possible classifications of the verb bring. These variants of bring are found in McDavid's dialect material.

1. bring bringed bringed
2. bring brought brought
rregular
weak -en
3. bring brang bring bring brung bring

```
strong +en +I
```

strong +en +II
strong +en +III
$+M x d-e n$
$+M x d+e n$

There follows a diagram of the seven classes of English verbs. The verb paradigms are from Virginia McDavid's study. Although she lists preterites and past participles separately in most cases, she does report these paradigms as occurring in the speech of an individual informant.


Fig. 4--The seven classes of English verbs
3.3 List of standard irregular verbs. Griggs and Rulon's list (forthcoming) of irregular verbs in standard academic English, mainly those reported by Bloch (1947), is included here. This list will be expanded later with the addition of dialect forms from McDavid's data. Some verbs have more than one possible conjugation. Parentheses around the word mark an alternate regular conjugation. The whole list of mixed verbs is enclosed in parentheses since they all may have regulax conjugations. Alternate irregular conjugations are marked by the appropriate Roman numeral for a strong conjugation, W for weak, and $M$ for mixed, each in parentheses.

Weak verbs. - bend, (bereave), (beseech), bet, bid (I), bite (I), bleed, (blend), breed, bring, build, (burn), (burst), buy, can, cast, catch, (chide (I)), (cleave (II)), cothe, cost, creep, cut, deal, (dream), (dwell), feed, feel, (fit), Eiee, (gild), (gird), have, hear, hide (I), hit, hurt, kesp, (knel), (knit), lead, (lean), (leap), (learn), leave, Zend, let, (light), lose, make, may, mean, meet, (pen), (plead), put, quit, read, (rend), (rid), say, seek, sell, send, set, shali, shed, shit, (shoe), shoot, shut, sleep, slide, (slit), (smeli), (speed), (spell), spend, (spill), spit (I), (split), (spoti). spread, siand, (sweat), sweep, teach, tell, think, thrust, tread (II), use, (wed), weep, went, (wet), will, (work/wreak).

Strong rerbs, Class I. -- be. (bid (W)), blow, come, do, draw, drive, eat, fall, forsake, give, go, grow, know, rile, rise, run, see, shake, (shrive), take, (thrive), throw, write.

Strong verbs, Ciass II. -- bear, beat, (bide), bind, bite (W), break, (chide(W)), choose, (cleave(W)), cling, dig, (dive(M)), fight, find, fling, freeze, get, grind, hang, (heave), hide(W), hold, lie, (shear (M)), shine, shrink(III), sink(III), sit, sling, slink, smite(l), spack, spin, spring(III), (stave), steal, suck, sting, stink(III), stride(I), strike, (string), swear, (swell(M)), swing(III), teax, (tread $(W)$ ), (wake), wear, weave, win, wind, wring.

Strong verbs, Class III. -- begin, drink, fly, ring, shrink(II), sing, sink(II), spring(II), stink(II), swim, swing(II).

Mixed verbs. - (crow, $i$ ive(ty), hew, lade, melt, mow, proye, rive, saw, sew, shear(II), show, sow, strew, swell(II)).
3.4 Readjustment rule application by classes. Each class of verbs is characterized by certain combinations of readjustment rules. This is reflected in the relationship between the inflectional suffix and the preceding boundary. In some cases Rule 1 operates to replace // \#// with /+/, and in some it does not. The following chart shows the suffixes and preceding boundaries in the major verb classes after the operation of readjustment rules.

TABLE III
INFLECTIONAL SUFFIXES AND PRECEDING BOUNDARIES IN THE MAJOR VERB CLASSES

|  | Preterite | Participle |
| :--- | :---: | :---: |
| Regular | $/ \# d /$ | $/ \# d /$ |
| Strong | $/+d /$ | $/+n /, / \# n /$ |
| Weak | $1+\phi /$ | $/+\phi /$ |
| Mixed | $/+d /$ | $/+d /$ |

Readjustment rules do not normally apply to regular verbs. Rule 1 usually operates in both preterite and participle forms of all irregular verbs. Rule 3 operates in the preterite of the three classes of strong verbs. Rule 9 applies to the preterite of Class I and Class II strong verbs and to the participle of Class II and Class III verbs. Rule 10 applies to the preterite of Class $I$ and Class III strong verbs. Of course, other readjustment rules may apply, but these occur in characteristic combinations. It may be explained in chart form as follows:

TABLE IV
CHARACTERISTIC COMBINATIONS OF READJUSTMENT RULES IN THE MAJOR VERB CLASSES

|  | Preterite | Participle |
| :---: | :---: | :---: |
| Weak Verbs | +R1 | + R1 |
| Strong Class I | $\begin{aligned} & +\mathrm{R} 1 \\ & +\mathrm{R} 3 \\ & +\mathrm{R} 9 \\ & +\mathrm{R} 10 \end{aligned}$ | +R1 |
| Strong Class II | $\begin{aligned} & +\mathrm{R} 1 \\ & +\mathrm{R} 3 \\ & +\mathrm{R} 9 \end{aligned}$ | $\begin{aligned} & +\mathrm{R} 1 \\ & +\mathrm{R} 9 \end{aligned}$ |
| Strong Class III | $\begin{aligned} & +\mathrm{R} 1 \\ & +\mathrm{R} 3 \\ & +\mathrm{R} 10 \end{aligned}$ | $\begin{aligned} & +\mathrm{R} 1 \\ & +\mathrm{R} 9 \end{aligned}$ |

It is possible to classify a form by the combination of readjustment rules used in its derivation. The occurrence of certain combinations is thus a redundant feature of the form's classification. The characteristic combinations have been formulated by Griggs and Rulon (forthcoming) as conjugation rules. These rules, which are listed below, may be read in the conventional manner, with but one exception. Single and double vertical lines separate information given about the three forms of the paradigm. The present form is represented to the left of the single vertical line. Between the double and single vertical lines is the preterite form. The past participle form is to the right of the double line.
3.5 Conjugation rules.
(a)

(b) $\left.\phi \cdots+\mathrm{R} 3 /\left[\begin{array}{c}-\mathrm{reg} \\ +\mathrm{en}\end{array}\right] \quad \underline{W} \right\rvert\, \frac{\mathrm{X}}{\underline{Y}}$
(c) $\left.\phi-\cdots \quad+\mathrm{R} 9 /\left[\begin{array}{l}+\mathrm{I} \\ +\mathrm{II}\end{array}\right] \underline{W} \right\rvert\, \frac{\mathrm{X}}{\underline{X}}$ $\left[\begin{array}{ll|l||l}{[+I I]} & \underline{W} & \underline{X} & \underline{Y}\end{array}\right.$
(d) $\phi \cdots->+$ R10 $\left./\left[\begin{array}{l}+\mathrm{I} \\ +\mathrm{III}\end{array}\right] \underline{W}\left|\frac{\mathrm{X}}{\underline{Y}}\right| \right\rvert\, \quad \underline{Y}$

3.6 Conjugation of incomplete paradigms. The conjugation rules were designed to classify complete paradigms. Complete paradigms are not available, in most cases, from Virginia McDavid's data. However, it is possible to postulate the whole paradigm from the classification of a single form. For instance, McDavid reports the occurrence of drove as a preterite of drive. Drove exhibits the combination of readjustment rules that is characteristic of strong Class I preterites. Since Class I present and participle stems are the same, the participle in this paradigm will surface as driven. An expanded lexicon at the end of this chapter gives the classification of such incomplete paradigms. Most of the forms may be classified in the above manner.

Some forms, however, lack one or more rules required to meet any classification. Driv, also reported as a preterite of drive, uses Rules 1,3 , and 11: not the proper combination for any class. The solution to the problem presented by such forms is suggested by McDavid's comment on frequently occurring preterite-past participle combinations. She says of
the verb climb, "The forms for the past participle are substantially the same as those for the preterite, and occur in the same proportions and with the same distributions. The same form is generally used for both, i.e., climbed-climbed or clum-clum" (1957:26-27).

This is not to imply that an individual speaker would use only one paradigm. Certainly an individual might use a variety of alternate forms for both the preterite and the participle form. However, the speakers of this dialect appear to have a tendency to produce leveled preterite-past participle combinations. McDavid states, "What doubtless occurs is the leveling of preterite and past participle, with the consequent use of did and done, saw and seen, or took and taken for either preterit or past participle" (1957:72-73). Accordingly, this paper will assume a leveled paradigm for both preterite and past participle forms that do not fit the conjugation rules for a particular class.

Thus, if the weak preterite et is the only form given for a paradigm of eat, it may be assumed that the past participle is also et. A regular past participle may be postulated to accompany a regular preterite. A strong past participle will accompany a strong preterite, producing a strong Class II paradigm. Further justification for this classification is provided by Griggs and Rulon (forthcoming), who have found Class II to be the prevailing class of strong verbs in standard usage.
3.7 Description of lexicon. An expanded lexicon appears at the end of this chapter. It provides more information about the dialect forms given in the first lexicon. It gives their classification and postulated paradigm. The structure of this lexicon is similar to that of the first. The verbs are listed alphabetically. Beside each is the underlying lexical representation. Any lexical variation is listed above the forms derived from i.t. Directly beneath the lexical representation is the standard academic paradigm of the verb (Griggs and Rulon forthcoming) and its phonetic notation. The standard paradigm is included to provide comparison with McDavid's dialect forms. The dialect forms and their classifications are listed next. The form of the paradigm that is postulated from the evidence is given in parentheses. Thus, some paradigms may appear twice, with a different form in parentheses each time.

Like the conjugation rules, specific information about the forms of the paradigm is given between vertical lines. General information that applies to all three forms is given to the left of a colon. A lexical entry has the following form:

1. verb // underlying lexical form//

$$
\text { standard paradigm class pres. } 1 \text { pret. Il part. }
$$

a. dialect paradign class general: pres. |pret.\|part.
[phonetic form]
// lexical variant//
b. dialect paradigm class pres. |pret. \|part.
[phonetic form]

In the preceding illustration, the abbreviations pres., pret., and part. stand for present form, preterite form, and participle form, respectively. Many paradigms, of course, fit the conjugation rules precisely, so that it is not necessary to give special information about one paradigm form.

Special information about a single form must be given in the lexical entry when the derivation involves a violation of the conjugation rules or an idiosyncracy of readjustment or phonological rules. For instance, most weak verbs do not show Ablaut. However, brought, a preterite of bring, is clearly a weak form, though it does have Ablaut. It is marked -en +R 9 in the lexicon. Note that conjugation rule (c) makes it possible to mark only the preterite of weak verbs and strong II verbs for certain rules. In these cases, it is understood that since the preterite is marked, the participle will be also.

Several special problems come up in the derivational processes recorded in the lexicon. These special problems will be discussed in the next chapter.

### 3.8 Lexicon．

1．begin／／bergin Esginitd betcinhiz／／
begin began begun ten＋ilI［bagin bagan bagan］
a．begin began（begun）ten＋III［bəgin bəgæ $n$ bəg＾n］
b．begin began（begin）ten＋II 1－R9［bagin bagin bagin］
c．begin begun（begun）ten
／／gin gin\＃d gin\＃n／／
d．gin gin（gin）＋en＋II l－R9［bogin gin gin］
2．bīte／／bīt bīt\＃d bīt\＃n／／
bite bit bitten＋en＋II
［bäyt bit bitan］
a．bite（bit）bitten＋en $+I I$
［bāyt bit biton］
／／bīt bīt\＃d bīt\＃d／／
b．bite（bit）bit－en

3．blow／／bloy ${ }^{W}$ bloy $\# d$ bloy ${ }^{W} n / /$
blow blew blown＋en＋I 1－Rlo［blōw blüw blōwn］
a．blow blew（blew）＋en＋II｜II + R4［blöw blūw blüw］

$$
/ / \text { bloy }{ }^{W} \text { bloy }{ }^{W} \text { \#d bloy }{ }^{W} d / /
$$

b．blow blewed（blewed）$+\mathrm{Mxd}-\mathrm{en}$ I + R9 $\quad 11+R 9$
［blōw blūwd blūwd］
c．blow blowed（blowed）＋Reg
［b1ōw b1ōwed blowd］
4．bring／／breNy breNy\＃d breNy\＃d／／
bring brought brought－en $1+\mathrm{R} 9$［brin br亏̄＾t br亏̄＾t］
a．bring brought（brought）－en $1+\mathrm{R} 9[$ brin br亏̈＾t brō＾t］
／／breNy breNy\＃d breNy\＃n／／
b．bring brang（brung）ten＋III Pbrin bræn branl
c. bring bring (bring) ten $\underset{i-R 9}{+T G} \quad[b r i n$ brin brin]
d. bring brung (brung) +en +II [brin br^ŋ br^ŋ]
5. catch // kaexє kaexє\#d kaexe\#d//
catch caught caught -en 1+R9 [kæc kJ^t kJ^t]

b. catch ketched (ketched) + Mxd -en $1+\mathrm{R} 10$
$11+\mathrm{R} 10$$\quad[\mathrm{k} æ \stackrel{v}{c}$ kečt kečt]
c. tafch catched (cathed) +Reg [kaer kae $\mathrm{c} t \mathrm{kar}$ čt]
d. catch kitched (kitched) +Mxd -en I R10 +R39 1। +R10 +R39 [kac kict kict]
// kae č kae č\#d kae č\#d// lexical variant
e. catch kotch(ed) (kotch(ed)) +Mxd

$$
\begin{aligned}
& \text {-en } 1(+\mathrm{R} 1+\mathrm{R} 3)+\mathrm{R} 9
\end{aligned}
$$

6. climb // K1īnb klīiNb\#d klīnb\#d//

$$
\begin{aligned}
\text { climb climbed climbed }+ & \operatorname{Reg} \\
- & -R 24 I I: \quad[k 1 a ̄ y m ~ k l a ̄ y m d ~ k l a ̄ y m d] ~
\end{aligned}
$$

a. climb climbed (c1imbed) $\begin{array}{r}\text { +Reg } \\ - \text { R24II: [k1āym k1āymd k1āymd] }\end{array}$
b. climb (climbed) climbed + Reg
-R24III: [klāym klāymd k1āymd]
// klīNb klīNb\#d k1inb\#n//
c. climb clahm (climb) +en +I -R24III 1-R31 ||-R24TII
[k1āym klām k1āym]
d. climb clam (clum) +en +III
-R24III | |l+R11 [kläym klaem kl^m]

[klāym klim klim]
f. climb climb (climb) +en +II
-R24III : 1-R9 [klāym k1āym k1āym]

```
g. climb clome (climb) ten +I
    -R24IIX: [kIāym klowm klāym]
```



```
i. climb cIum (clum) +en +II
    -R24III | +R11 [k1äym k1am klam]
j. climb clume (climb) ten +I
    -R24III : l double application
                                    of R39 [k1ãym klüwm klayym]
k. climb (clahm) clahm +en +Il
    -R24III 1 +R10 -R31 || -R31 [k1äym k1äm kläm]
1. climb (clam) clam +en +lI
    -R24III l-R9 +R10[klāym klæm klæm]
m. climb (clim) climn ten +ll
    -R24III 1 [klāym klim k1im]
n. climb (climb) climb ten +II
        -R24III:l-R9 [k1äym k1ãym k1ãym]
o. climb (clome) clome +en +II
                -R24III:1 +R10 [k1äym klöwm klōwm]
p. climb (clom) clom +en +II
        -R24III 1+R10 [k1äym k15^m k15^m]
q. climb (clum) clum +en +II
[klaym kl^m kl^m]
r. climb (clume) clume ten +II
                        -R241II:1+R10
    double application of R39 1/
    double application of R39
7. come // kum kum\#d kum\#n//
    come came come +en +I +Ril [k^m kēym k^m]
a. come came (come) +en +I +R11 [k^m kēym k^m]
b. come come (come) fen +II | -R9 [k^m k^m k^m]
```

8. dive // dive dīv\#d div\#n//
dive dove dove +en +II 1+810 [däyv dōwv döwv]
a. dive dive (dive) +en +II 1 -Rg
[dāyv dāyv dāyv]
b. dive div (div) +en +II $1-\mathrm{Rg}$ + R11 $11+$ R4
[dāyv div div]
c. dive dove (diven) +en +I
[dāyv dōwv diven]
d. dive duv (duv) +en + II $1+$ R11
[dāyv d^v d^v]
// dīv dīv\#d div\#d dīv\#d/
e. dive dived (dived) + Reg
[dāyv dāyvd dāyvd]
f. dive divd (divd) -en $1+\mathrm{R} 8 \quad 11+\mathrm{R} 8$
[dāyv divd divd]
9. do $/ /$ do $^{W}{ }^{W} \varepsilon$ do ${ }^{W} \varepsilon \# d$ do ${ }^{W}{ }^{W} \varepsilon \# n / /$

$$
\begin{aligned}
& \text { do did done +en +I 1-R3 -R10 } \\
& \text { +R39 |। } 1 \text { R25 } \\
& \text { [dūw did d^n] } \\
& / / \mathrm{do} \gamma^{\mathrm{W}} \varepsilon \mathrm{do} \gamma^{\mathrm{W}} \varepsilon \# \mathrm{~d} \text { do }{ }^{\mathrm{w}} \varepsilon \# \mathrm{~d} / / \\
& \text { do did (did) -en } 1+\mathrm{R} .8+\mathrm{R} 9+\mathrm{R} 39 \\
& 11+R 8+\text { R39 } \\
& \text { [dūw did did] }
\end{aligned}
$$

10. draw // droy ${ }^{W} \varepsilon$ droy ${ }^{W} \varepsilon \# d \operatorname{dro\gamma }{ }^{W} \varepsilon \# n / /$
draw drew drawn +en $+I$
[drō^ drūw drō^n]
a: draw drew (drew) + en $+\begin{gathered}\text { II } \\ \mid 1+R 4\end{gathered}$
[drōn drūw drūw]
$/ / \operatorname{dro}^{W} \varepsilon \mathrm{droy}^{\mathrm{W}} \varepsilon^{\# \mathrm{~d}} \mathrm{dro} \mathrm{\gamma}{ }^{\mathrm{W}} \varepsilon \# \mathrm{~d} / /$
b. draw drawed (drawed) +Reg
11. dream // drēm drèm\#d drēm\#d// dream dreamed dreamed + Reg
[drīym drīymd drīymd]
a. dream dreamed (dreamed) + Reg
[drīym drīymd drīymd]
b. dream dreamt (dreamt) -en
[driym drempt drenpt]
c. dream drimpt (drimpt) -en $1+\mathrm{R} 54$

11+R54 [driym drimpt drimpt]

[driym drimp drimp]
12. drink // driNk driNk\#d driNk\#n//
drink drank drunk +en +III [drink draenk drank]
a. drink drank (drunk) ten +III [drink draenk dr^nk]
b. drink drink (drink) +en +II $1-R 9$ [drink drink drink]
c. drink drunk (drunk) +en +II [driŋk dr^ŋk dr^nk]
d. drink (drank) drank +en +II 1-R9 +R10 $11+$ R4 [drink drae ok drae ok]

[driok driok driok]
f. drink (drunk) drunk +en +II
[drigk drank drank.]
// driNk driNk\#d driNk\#d//
g. drink drinked (drinked) +Reg [drink drinkt drinkt]
h. drink (drinked) drinked + Reg [drink drinkt drinkt]
13. drive // drīv driv\#d drīच\#//
drive drove driven +en +I [drāyv drōwv driven]
a. drive drive (drive) +en +II

1-R9 11+R4
[drāyv drāyv drāyv]
b. drive driv (driv) +en + II I-R9 +R11 11+R4 [drāyv driv driv]
c. drive drove (driven) +en +I [drāyv drōwv drivən]
d. drive druv (druv) +en +II 1+R11 ll+R4 [dräyv dr^v dr^v]
e. drive (drive) drive +en + II 1 -R9 I 1 +R4 [drāyv drāyv drāyv]
f. drive (driv) driv +en +II 1-R9
+R11 || +R4 [drāyv driv driv]
g. drive (drove) driven ten +I [drāyv dröwv drivon]
h. drive (druv) druv +en + II $1+$ R11 $11+R 4$ [drāyv drav drav]
i. drive (drove) drove(n) +en +II $\quad \begin{aligned} & 1+\mathrm{R} 10 \text { 1i( }+\mathrm{R} 1) \text { [drāyv drōwv drōwv(on)] }\end{aligned}$ // drīv drīv\#d drīv\#d//
j. drive drived (drived) +Reg [drāyv dräyvd dräyvd]
14. eat // ēt ēt\#d ēt\#n//
eat ate eaten +en +1 -R9 $11-\mathrm{RI}$ [iyt ēyt iytan]
a. eat ate (et) +en III $\mid 11+R 4-R 9$ [iyt eyt et]
b, eat eat (eat) +en +II $1-R 9$
$11+R 4 \quad[i y t$ iyt iyt]

d. eat (eat) eat +en $+I I 1-R 911+R 4$ [īyt iyt ijyt]
e. eat (ate) eaten +en $+\begin{array}{r}I-R 9 \\ \mid I-R 1\end{array}$
[īyt èyt īytən]
//et et\#d et\#d//
f. eat et (et) -en [īyt et et]
g. eat (et) et-en [īyt et et]
15. fetch //feč feč\# feč\#d//
fetch fetched fetched + Reg
[ $f e^{v}$ fect $^{v}$ fect
a. fetch fetch (fetched) +Reg [fec fect fect]
$/ / \mathrm{fec}^{v}$ feč\#d feč\#n//
b. fetch fotch (fotch) +en +II
16. fight // fext fext\#d fext \#n//
fight fought fought +en +II
a. fight fought (fought) +en +II
b. fight fout (fout) +en +II

1-R38 11-R38 [fāyt fāwt fāwt]
// fext fext\#d fext\#d//
c. fight fit (fit) -en $1-\mathrm{R} 32 \mathrm{~V}$

11-R32V
[fāyt fit fit]
17. fit // fit fit\#d fit\#d//
fit fit fit -en
[fit fit fit]
a. fit fit (fit) -en
b. fit fitted (fitted) +Reg
[fit fit fit] [fit fitad fitad]
18. freeze // frēz frēz\#d frēz\#n//
freeze froze frozen ten +II

$$
1+\text { R10 } \mid 1-\mathrm{R1} \quad \text { [frīyz frōwz fröwzən] }
$$

a. freeze froze (freezen) +en +I
| $11-\mathrm{Rl}$
[frīyz frōwz frïyzon]
// frèz frēz\#d frēz\#d//
b. freeze freezed (freezed) +Reg [frīyz frīyzd frīyzd]
c. freeze frozed (frozed) $\begin{array}{r}+\mathrm{Mxd}-\mathrm{en} \\ 1+\mathrm{Rg}+\mathrm{R} 10 \\ 1 \\ \hline \text { R9 }+\mathrm{R} 10\end{array}$

$$
\begin{array}{r}
+\mathrm{R} 9+\mathrm{R} 10 \\
1+\mathrm{R} 9+\mathrm{R} 10
\end{array}
$$

[frīyz frōwzd frōwzd]
19. give // giv giv\#d giv\#n//
give gave given +en $+\mathrm{I} \quad 1-\mathrm{R} 9+\mathrm{R} 11$ [giv gēyv given]
a. give gave (given) +en +I |-R9

$$
\begin{aligned}
& \text { RKy } \\
& + \text { R11 }
\end{aligned}
$$

b. give give (give) +en +II $\mid-\mathrm{Rg}$ $11+\mathrm{R} 4 \quad$ [giv giv giv]
// giv giv\#d giv\#d//
c. give gived (gived) +Reg [giv givd givd]
20. grow // groy ${ }^{W}$ groy $^{W}$ \#d groy $^{W} \# n / /$
grow grew grown +en +I [grōw grüw grōwn]
a. grow grew (grew) ten +II $1 \quad 11+\mathrm{R} 4$ [grōw grūw grūw]
b. grow (grew) grew +en $+I I|1|+R 4$ [grōw grūw grūw]
c. grow (grew) grown ten $+I$ [grōw grūw grōwn] $/ /$ gror $^{W}$ groy $^{W} \# \mathrm{~d}$ groy $\# \mathrm{~d} / /$
d. grow growed (growed) +Reg [grōw gröwd grōwd]
e. grow (growed) growed +Reg [grōw grōwd grōwd]
f. grow grewed (grewed) +Mxd -en 1 + R9 । । +R9 [grōw grūwd grūwd]
21. hear // xēr xēr\#d xēr\#d//
hear heard heard -en
[hī^r h^rd h^rd]
a. hear (heard) heard -en
[hīnr h^rd h^rd]
b. hear (heerd) heerd +Reg
[hīnr hīnrd hīnrd] // xēr xēr\#d xēr\#n//
c. hear (heerd) heern $+\mathrm{Mxd}+\mathrm{n}$
[hīin hīnrd hīnrn]
22. kneel // nē1 nē1\#d nē1\#d//
kneel kneeled kneeled +Reg [nīyl niyld nīyld]
a. kneel kneeled (kneeled) +Reg [nīyl nīyld nīyld]
b. kneel knelt (knelt) -en [niyl nelt nelt]
c. kneel kneelt (kneelt) -en
1-R24III ll-R24III [niyl nīylt niyylt]
d. kneel knailt (knailt) -en 1-R24III -R39 ||-R24III -R39 [níyl néylt nēylt] // nēl. nē1\#d nē\#\#//

23. learn // lern lern\#d lern\#d//
learn learned leamed + Reg [1^rn 1^rnd 1^rnd]
a. learn learned (learned) + Reg [1^rn $1 \wedge$ rnd $1 \wedge r n d]$
b. learn learnt (learnt) -en [1^rn l^rnt l^rnt]


24. lie // leye leyc\#d leyfin//
lie lay lain +en +II -R9 +R10 [1āy lēy lēyn]
a. lie lay (lain) ten +II 1 -R9 +R10 [1āy lēy lēyn]
// leyع leyع\#d leyع\#d//


c. Iay laid (laid) +Reg

d. lay 1ay (1ain) +en +II 1-R9
[1ēy lēy lēyn]
25. ride // rīd rīd\#d rīd\#n// ride rode ridden $+e n+I$ [rāyd rōwd ridən]
a. ride (rode) ridden ten +I [rāyd rōwd ridən]
b. ride (rode) rode ten +II 1+R10 [rāyd rōwd rōwd]
$/ /$ rid rid\#d ríd\#d//
c. ride (rid) rid -en [rāyd rid rid]
26. rise // rïz rīz\#d riz\#n//
rise rose risen +en +1
a. rise rose (risen) $+\in n+I$
// rīz rīz\#d rīz\#d//
b. rise rised (rised) + Reg
c. rise riz (riz) -en
d. rise raised (raised) + Mxd -en $1+$ R10 $\quad 11+$ R10
27. run // run run\#d run\#n// run ran run ten $+I$
a. run ran (run) ten +I
b. run run (run) ten +II -R9
$/ /$ run run\#d run\#d//
c. run runned (runned) + Reg
28. see $/ / \operatorname{sē} \gamma \varepsilon \operatorname{sē} \neq \# d \operatorname{sē} \notin \# n / /$
see saw seen ten +I 1 |l-R1 [sīy s亏̄n sīyn]
a. see saw (saw) ten +II
b. see see (see) $+\in n+$ II $1-\mathrm{R} 9$

c. see seed (seed) +Reg
29. shrink // šrink šriNk\#d šriNk\#n// shrink shrank shrunk +en +III [šrink šræ ok srınk]



c. shrink shrinked (shrinked) + Reg [šrink šrinkt šrinkt]
30. sit // sit sit\#d sit\#n//
sit sat sat +en +1I $1-R 9+R 10$ $11+\mathrm{R} 4 \quad[\mathrm{sit} \mathrm{sæc} \mathrm{t}$ st]

b. sit sit (sit) -en [sit sit sit]
c. sit sot (sit) +en +I $\mid \|+R A \quad[$ sit sāt sit]
d. sit set (set) +en + II 1-R9
double application of R10
+R4 double application of R10 [sit set set]
// set set\#d set\#n// lexical variant

f. set sit (sit) +en +II I-R9
+R39 11 +R4 +R39 [set sit sit]
g. set sot (sot) +en +I $\mid 11+R 4$ [set sãt sāt]
h. set set (set) -en [set set set]
31. sweat // swet swet\#d swet\#d//
sweat sweat sweat -en [swet swet swet]
a. sweat sweat (sweat) -en [swet swet swet]
b. sweat sweated (sweated) +Reg [swet swetəd swetəd]
32. swim // swim swim\#d swim\#n//
swim swam swum ten +III [swim swæ m swam]
a. swim swam (swum) +en +III [swim swæm swam]
b. swim swum (swum) ten +II [swim sw^m swam]
c. swim swim (swim) ten +II I-R9 [swim swim swim]
d. swim swahm (swahm) +en +II 1+R11 [swim swā^m swā^m]
e. swim swom (swim) +en +I [swim sw亏̄^m swim]
// swim swim\#d swim\#d//
f. swim swimmed (swimmed) +Reg [swim swimd swimd]

take took taken +en +1 | $\mid 1$-R1 [tèyk tuk tēykan]
a. take took (taken) ten +I I II-R1 [tēyk tuk tēykən]
b. take tuck (taken) +en +I I reorder R51 before R39 ||-R1 [tēyk tak tëykən]
c. take take (take) +en +II I-R9 11+R4 [tēyk tēyk tēyk]
d. take (took) took +en +II I+R10 [tēyk tuk tuk]
e. take (tuck) tuck +en +II $1+$ R10
reorder R51 before R39
11 reorder R51 before R39 [tēyk tak t^k]
f. take (took) taken +en +I I l|-RI [tēyk tuk tuk]
g. take (take) take +en +II

1-R9 11+R4 [tēyk tëyk tēyk]
// t离k $\mathrm{t} \overline{\mathrm{a}} \mathrm{k} \# \mathrm{~d} \cdot \mathrm{t} \overline{\mathrm{a}} \mathrm{k} \# \mathrm{~d} / /$
h. take taked (taked) +Reg [tēyk tēykt tēykt]
i. take (taked) taked +Reg [tēyk tēykt tēykt]
// täkn takn\#d täknd// lexical variant
j. take takened (takened) +Reg [tēyk tēykənd tēykand]
k. take (takened) takened +Reg [tēyk tēykənd tēykənd]
34. teach // tēx $\varepsilon$ tēxq\#d tēxモ\#d//

$$
\text { teach taught taught -en } 1+R 9 \text { [tỉyč tōnt tōnt] }
$$


b. teach teached (teached) +Reg [tiyy tiyč tiyct]
35. throw // $\theta$ roy ${ }^{W}$ өroy ${ }^{W}{ }^{\# d}$ d $\theta$ roy ${ }^{W}{ }^{\# n / /}$ throw threw thrown +en +I [日rōw $\theta$ rūw $\theta$ rōwn]
a. throw threw (threw) ten +II
[ $\theta$ rōw $\theta \mathrm{rū}$ w $\theta \mathrm{rū}$ ]

b. throw throwed (throwed) + Reg [ $\theta$ rōw $\theta$ rōwd $\theta$ rōwd]
 wake woke woke(n) +en +II 1 11 (-RI) [wēyk wōwk wēykən]
a. wake woke (woke) +en +II // wāek wa k\#d wāe k\#d//
b. weyk waked (waked) +Reg [wēyk wēykt wēykt]
// wāe kn wäe kn\#d was kn\#d// lexical variant
c. waken wakened (wakened) +Reg [wēykən wēykə̣nd wëykənd]
37. write // wrít wrīt\#d wrīt\#n//
write wrote written +en +I [rāyt rōwt ritən]
a. write (wrote) written ten $+I$ [rāyt rōwt ritan]
b. write (wrote) wrote +en +II
$1+$ R10 [rāyt rōwt rōwt] // wrīt wrīt\#d wrít\#d//

## CHAPTER IV

## SPECIAL PROBLEMS

## 4.1 pleonastic forms. Several kinds of problems arise

 in the derivations of dialect forms. Two main problem groups are treated in this chapter, pleonastic forms and invariable paradigns. Several individual problem forms are also discussed.Some forms appear to fit more than one classification. Pleonastic forms retain the // \#// before the dental suffix, a characteristic of regular verbs, but they also show vowel gradation, a characteristic of strong irregular verbs. Ten such pleonastic forms appear in McDavid's data. They are blewed, ketched, kitched, kotched, frozed, grewed, larned, larnt, laid, and raised. Rule 1 does not apply to these forms, so underlying $/ / \mathrm{d} / /$ is retained as the tense marker. Rules 9, 10, and 11 or a combination of these do apply, therefore vowel gradation takes place. Pleonastic forms may be considered + mixed, since they contain features common to both regular and irregular verbs. Mixed, as earlier defined, refers to elements of a paradigm. However, it may be extended to refer to the features of those elements themselves.

In some cases, verbs that appear to be pleonastic may originate from slightly different underlying forms. Thus,
[lēyd] is a pleonastic preterite of lie, from underlying // leye// . However, [lēyd] is a regular preterite of lay, from underlying // læy//. In fact, McDavid does report lay as a variant present tense of lie. Therefore, the preterite [lēyd] may be handled either as a pleonastic form or as a cegular form.

Other apparent pleonastics may also result from a slightly different underlying form. The preterites [tēykend], [wēykənd], and the past participle [wēykənd] are historically similar and may form a natural class. For these, it is reasonable to posit an underlying form that includes $\underline{n}$ before the word boundary. The underlying forms are: // tæ $\mathrm{kn} / /$ and // w $\overline{\mathscr{E}} \mathrm{kn} / /$. The preterites and past participle are then regular surface structures of a slightly variant underlying form. Though they are not reported by McDavid, it is reasonable to assume the existence of present tense waken and taken.
4.2 Invariable paradigms. Several preterite and past participle forms found in McDavid's study have the same surface structure as the present form. These invariable forms may be handled in one of several ways. One possible way to handle the problem is to posit a fourth class of strong verbs. Since the arrangement of forms in each of the strong verb classes is what distinguishes one class from
another, it would be possible to set up a fourth class on that basis. Class IV would specify that both the preterite and the past participle have the same structure as the present form. However, this system is too similar to the conjugation of regular verbs to provide a distinctly different class. It is possible, then, that invariable forms should be classed as regular forms with the inflectional suffixes deleted. This would require the formulation of a new phonological rule to delete the suffix. However, the most likely classification is strong Class II. In this case, the only adjustment that need be made is to block the operation of Ablaut that, according to conjugation rules, occurs in Class II. Accordingly, these forms are marked ten $+I I$ in the lexicon. There are nineteen such forms reported by McDavid. They are preterites; begin, bring, climb, come, dive, drink, drive, eat, give, kneel, run, see, swim, take, and participles; climb, drink, drive, eat, and take.
4.3 N-Preterites. Another group of problem forms that McDavid reports are preterites that exhibit // $n / /$ as the past tense marker. There are nine such forms done, driven, eaten, gin (preterite of give), grown, seen, taken, thrown, and woken. Evidently there are conditions under which //n// may be used as the past tense marker. However, since complete paradigms are not available from individual dialect speakers, and since there is no correlate in standard usage to which
one may turn for comparison, it is difficult, if not impossible, to determine just what conditions those are. Therefore, the nine $n$-preterites have been excluded from the lexicon. 4.4 Intransitive-transitive pairs. McDavid reports several individual problem forms that deserve discussion here. Two intransitive verbs are reported with present tense variants that are only transitive in standard speech. The intransitive verb sit has as a present tense variant transitive set. Lie, an intransitive verb, also has a transitive present tense variant, 1ay. The context recorded in linguistic atlas materials for the first pair is, "Sit down." Set, as used here in the present tense, is probably not a surface variant of the same underlying form from which sit is derived, since an inordinate manipulation of the rules is required to produce it. It appears, then, that informants who use set in the above context recognize two distinct intransitive verbs with the same semantic interpretation. There is sit, intransitive, and set, which may be either intransitive or transitive.
likewise, lay, though it may be derived from the same underlying form as lie, is more probably a distinctly different verb. It is recorded in the context, "I'm going to lie down." Lay, like set, may be either intransitive or transitive. It is unfortunate that no data is reported on transitive lay and set from which linguists could ascertain whether or not these have intransitive variants.
4.5 Gin. Gin, as a preterite variant of begin, presents a problem until one considers that begin is possibly an inchoative form. The verb become may be analyzed as inchoative "come to be." Likewise, begin may be analyzed as "gin to be." It is not unreasonable, then, to assume deletion of the prefix and treat preterite gin as one would treat preterite begin. Gin may therefore be considered a strong Class II form without Ablaut (-R9).
4.6 Tuck. Tuck, as either the preterite or past participle of take is a problem form. The rules as they are presently formulated will not produce it. However, one fairly simple adjustment may be made that solves the problem. Rule 51 (u-Laxing) may be reordered in this particular case to come before Rule 39 (Vowel Shift). The derivational path for tuck, then is the following:

TABLE V
COMPLETE DERIVATION OF TUCK

| Lexical representation | // tax k\#d// |
| :---: | :---: |
| R1 \# Elision | /tæ $\mathrm{k}+\mathrm{d} /$ |
| R3 d Elision | $/ t \overline{\text { e }} \mathrm{k}+\phi /$ |
| R9 Ablaut | /tうk/ |
| R10 Lowness Adjustment | /tōk/ |
| R51 ù Laxing | /tok/ |
| R40 Roundness Adjustment | /tak/ |
| Final phonetic form | [tık] |

4.7 Fit. Fit, as the preterite of fight, may be derived from either of two underlying lexical representations, // fext\#d// or // fit\#t// . The derivation is simpler from the latter, but // fext\#d// is the form required to produce the other two preterite variants, fought and fout. Therefore, // fext\#d// is the form given in the lexicon. Rule 32 V , it should be noted, must be prevented from operating to produce fit.
4.8 Additional phonological rules. Several late phonological rules deserve special attention here. The first three, Rules 52, 53, and 54, are discussed by Griggs and Rulon, though not formalized in their summary of rules. Rule 52 (Chomsky and Halle 1968:401) specifies nasal assimilation. Thus, // N// becomes [ 0 ] in bring. Rule 53 (Voiced Stop Elision) is designed to delete a voiced stop that occurs after non-coronal nasals and before a word boundary. Thus, the final //b// in climb is elided. Rule 54 (e-Raising) optionally raises a front mid vowel to a front high vowel before a nasal. Thus, // e// goes to [i] in bring.

Rule 55 (Homorganic Consonant Epenthesis) inserts an epenthetic [p] in [drempt], [drimpt], and [drimp]. It also inserts an extra [t] in such forms as [ment+t] and [pent+t], but this problem may be adequately resolved by reordering Rule 37 (Identical Consonant Elision) to follow Rule 55. The unwanted [t] would be thus deleted.

Rule 56 (Jones 1972:54) optionally simplifies a final consonant cluster. The form [arimp] is simplified from [drimpt] and must therefore be marked +R 56 .

## GHAPTER V

## CONCLUSION

5.1 Possible conjugations of a single verb. It appears from the evidence that Chomsky and Halle were correct in observing that a variety of surface variants may be derived from the same, or at least very similar, underlying lexical forms. The rules used in the derivation may then be used to systematically classify each surface form. With the processes of derivation and classification in mind, it is then possible to accurately describe the major characteristics of any particular dialect. Tables VI and VIl render a full derivation of the reported preterite and past participle variants of climb. The rest of Section 5.1 demonstrates how those variants may be classified in regular, strong, weak, and mixed paradigms. On the basis of the derivation and classification of climb and other verbs reported by McDavid, Sections 5.2 through 5.4 of this chapter describe the major dialect characteristics, in regard to verb forms, of speakers in the North Central States and Upper Midwest.

TMBLE VI
COMPETING PRFTERITE DERTVATIONS

| CLIMB |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lexical | // k1 $\mathrm{i}^{\mathrm{Nb}} \# \mathrm{~d} / /$ | // klin ${ }^{\text {a }}$ \#d// | // kJiNb\#d// | // klīNb\#d// | // klinNb\#d// |
| R1 |  | $\mathrm{kli} \mathrm{i} \mathrm{Nb}+\mathrm{d}$ | $\mathrm{k} 1 \overline{\mathrm{i}} \mathrm{Nb}+\mathrm{d}$ | $\mathrm{k} 1 \overline{\mathrm{i}} \mathrm{Nb}+\mathrm{d}$ | $\mathrm{k} 1 \overline{\mathrm{i}} \mathrm{Nb}+\mathrm{d}$ |
| R3 |  | k1 $\overline{\mathrm{i}} \mathrm{Nb}+\varnothing$ | k1 $\overline{\mathrm{i}} \mathrm{Nb}+\phi$ | k1 $\bar{i} N \mathrm{~N}+$ ¢ | k1 $\bar{i} N \mathrm{~N}+\phi$ |
| R9 |  | k 1 u Nb |  | k 1 u Nb |  |
| R10 |  |  |  | k 15 Nb | $\mathrm{k} 1 \bar{\infty} \mathrm{Nb}$ |
| R24 | -R24 | kluNb | kIiNb | -R24 | $\mathrm{k} 1 æ \mathrm{Nb}$ |
| R36 | kİ̄yNb\#d |  |  | k15wNb |  |
| R39 | klæ $\mathrm{a} \mathrm{Nb} \# \mathrm{~d}$ | kloNb |  | k1owNb |  |
| R40 |  | $\mathrm{k} 1 \wedge \mathrm{Nb}$ |  |  |  |
| R41 | klāyNb\#d |  |  |  |  |
| R52 | klāymb\#d | klanb | klimb | k10̈wmb | $\mathrm{k} 1 æ \mathrm{mb}$ |
| R53 | k1äymø\#d | $\mathrm{k} 1 \wedge \mathrm{~m} \phi$ | k1imø | k1owm ¢ | kl æ m ${ }^{\text {d }}$ |
| Surface | [klãymd] | [ $\mathrm{k} 1 \wedge \mathrm{~m}$ ] | [kIim] | [k1owm] | [k1æm] |

TABLE VI－Contimued
COMPETING PRETERITE vERTVATIONS

| CLIMB |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Lexical | ／／klinb\＃d／／ | ／／k1ins ${ }^{\text {a }}$ d／／ | ／／k1innb\＃d／／ | ／／kİinb\＃d／／ |
| R1 | k1īnb + d | k1 $\overline{\mathrm{i}} \mathrm{Nb}+\mathrm{d}$ | $\mathrm{kli} \mathrm{i} \mathrm{Nb}+\mathrm{d}$ | klind + d |
| R3 | kl $\overline{\mathrm{i}} \mathrm{Nb}+\phi$ | $k l \overline{\mathrm{i}} \mathrm{Nb}+$ ¢ | $k l \bar{i} N \mathrm{~b}+\phi$ | $k 1 \mathrm{i} N \mathrm{C}+\phi$ |
| R9 | klūnb | klünb | klūnb |  |
| R10 | kl亏Nb | kl亏Nb | k15Nb |  |
| R24 | klっNb | klaNb | －R24 | －R24 |
| R31 | －R31 | k1oNb |  |  |
| R32 |  | kıへNb |  |  |
| R35 |  | k1ã ${ }^{\text {a }}$ |  |  |
| R36 |  | k1āwNb | k15wNb | kliy ${ }^{\text {i }}$ |
| R38 |  | k1āuNb |  |  |
| R39 |  | k1āoNb | klūwNb <br> （Twice） | $\mathrm{k} 1 \overline{\text { ® }} \mathrm{yNb}$ |
| R40 | klaNb | k1כ＾Nb |  |  |
| R41 |  |  |  | klāyNb |
| R42 | k1ānb |  |  |  |
| R52 | klämb | $\mathrm{k} 15 \wedge \mathrm{mb}$ | k1ūwmb | k1āymb |
| R53 | klām¢ | k1亏＾n¢ | k1ūwm¢ | k1āym¢ |
| Surface | ［klām］ | ［k15＾m］ | ［klūwm］ | ［klāym］ |

TABLE VII
COMPETING PAST PARTLCTLE DERIVATIONS

| CLIMB. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lexical | // klinb\#d// | // kliNb\#n// | // kıïNb\#n// | // kIiNb\#n// | //kİNb\#n// |
| R1 |  | $\mathrm{k} 1 \overline{\mathrm{i}} \mathrm{Nb}+\mathrm{n}$ | $\mathrm{k} 1 \mathrm{i} \mathrm{Nb}+\mathrm{n}$ | $\mathrm{k} 1 \overline{\mathrm{i}} \mathrm{Nb}+\mathrm{n}$ | $\mathrm{kli} \mathrm{T} \mathrm{Nb}+\mathrm{n}$ |
| R4 |  | $\mathrm{klinb}+\varnothing$ | $\mathrm{k} 1 \mathrm{inb}+$ ¢ | k1iNb $+\varnothing$ | $\mathrm{kli} \mathrm{i} \mathrm{Nb}+\phi$ |
| R9 |  | k 1 u Nb |  | klūNb |  |
| R10 |  |  |  | k 15 Nb | k 1 æ Nb |
| R24 | -R24 | k1uNb | k1iNb | -R24 | klanb |
| R36 | klỉy $\mathrm{Nb} \# \mathrm{~d}$ |  |  | k15wNb |  |
| R39 |  | kloNb |  | k1öwnb |  |
| R40 |  | $\mathrm{k} 1 \wedge \mathrm{Nb}$ |  |  |  |
| R41 | k1āyNb\#d |  |  |  |  |
| R52 | k1āymb\#d | $k 1 \wedge n b$ | k1imb | k1onwmb | k1æmb |
| R53 | klãym¢\#d | $\mathrm{k} 1 \wedge \mathrm{~m} \phi$. | k1im ${ }^{\text {d }}$ | k1ōwm ${ }^{\text {¢ }}$ | k 1 æe m $\phi$ |
| Surface | [klāymd] | [ k 1 Am ] | [k1im] | [k1ōwm] | [ kl æm] |

TABLE VTI－Contimod
COMPETING PASI PARTYCTPLE DERIVATIONS

| CLIMB |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Lexical | ／／klīnb\＃n | kİNb\＃n | k1立Nb\＃n | k1 $\mathrm{i} N \mathrm{NH} \mathrm{n} / /$ |
| R1 | $k 1 \overline{\mathrm{i}} \mathrm{Nb}+\mathrm{n}$ | $\mathrm{klin} \mathrm{b}+\mathrm{n}$ | $\mathrm{kli} \mathrm{Nb}+\mathrm{n}$ | $k \mathrm{I}$ 立 $\mathrm{Cb}+\mathrm{n}$ |
| R4 | $k 1 \overline{\mathrm{i}} \mathrm{Nb}+\phi$ | $k 1 \mathrm{i} N \mathrm{~b}+\phi$ | $\mathrm{k} 1 \mathrm{i} \mathrm{Nb}+\phi$ | $k l \bar{i} N \mathrm{~N}+\phi$ |
| R9 | $\mathrm{k} \underline{\mathrm{u}} \mathrm{Nb}$ | k 1 u Nb | k 1 u Nb |  |
| R10 | $k 15 \mathrm{Nb}$ | k 15 Nb | k 15 Nb |  |
| R24 | kl .0 Nb | klonb | －R24 | －R24 |
| R31 | －R31 | kloNb |  |  |
| R32 |  | k1可 Nb |  |  |
| R35 |  | klāNb |  |  |
| R36 |  | k1āwNb | k15wNb | $k \mathrm{l} \bar{i}^{\mathrm{y}} \mathrm{Nb}$ |
| R38 |  | k1ăuNb |  |  |
| R39 |  | k1āoNb | k1üwNb （twice） | $\mathrm{kIæ} \mathrm{y} \mathrm{Nb}$ |
| R40 | klaNb | $\mathrm{k} 15 \wedge \mathrm{Nb}$ |  |  |
| R41 |  |  |  | k1āyNb |
| R42 | k1̄̄Nb |  |  |  |
| R52 | k1āmb | k 15 ＾mb | k1ūwmb | k1āymb |
| R53 | k1ām | $\mathrm{k} 15 \wedge \mathrm{~m} \phi$ | $k 1 \bar{u} w m \phi$ | k1ăym ${ }^{\text {¢ }}$ |
| Surface | ［k1ām | $\mathrm{k} 15 \wedge \mathrm{~m}$ | kl ¢ wm | k1äym］ |

All of the verbs surface with more than one possible conjugation. The following chart demonstrates how the variants reported for a single verb (climb) are classified. Though McDavid does not report weak variants for this verb, strong and regular variants are given. Mixed conjugations are likely to occur and are shown here.


Fig:5--Classification of variants of climb
5.2 Classes of dialect verbs. Before the data is interpreted, it would first be asefal to summarize the material presented in the lexicon. The list of standard irregular verbs in Chapter III may be here expanded by the addition of dialect forms. The standard forms are not repeated here.

Since many of the dialect forms are not regular in standard usage, a list of regular forms is included in addition to the irregular verb listings. Almost all of the verbs appear in more than one class. The classifications are recorded, as in the earlier list, with alternate classifications in parentheses. They are: $\underline{W}$ for an alternate weak classification, $M$ for mixed, and Roman numeral I, II, or III for a strong alternate conjugation. When a verb has an alternate regular corjugation, the whole word is enclosed in parentheses. As before, all of the mixed verbs have alternate regular conjugations so the whole list is enclosed in parentheses:

Weak verbs.--bite (II), bring (II) (III), catch (M)), (dive (I) (II)), do, (dream), eat (I) (II) (III), fight (II), (fit), (hear (M)), (kneel (II)), (1earn (M)), ride (I) (II), (rise (I) (M)), sit (I) (II) (III), (sweat), (teach), write (I) (II)

Strong verbs, class I.--(climb (II) (III), come (II), (dive (II) (W)), (drive (II)), eat (II) (III) (W), (freeze (M)), (give (III)), (grow (II) (M), ride (II) (W), (rise (W)
(M)), (run (II)), sit (II) (III) (W), (swim (II) (III)), (take (II)), write (II) (W)

Strong verbs, class II.--begin (III), bite (W), (blow (M)), bring (III) (W), (climb (I) (III)), come (I), (dive (I) (W)), (draw), (drink (III)), (drive (I)), eat (I) (III) (W), (fetch), fight (W), (give (I)), (grow (I) (M)), (kneel (W)), (lie (M)), ride (I) (W), (run (I)), (see), (shrink (III)), sit (I) (III) (W), (swim (I) (III)), (take (I)), (throw), (wake), write (I) (W)

Strong verbs, class III.--begin (II), bring (II) (W) (climb (I) (II)), (drink (II)), eat (I) (II) (W), (shrink (II)), sit (I) (II) (W), (swim (I) (II))

Mixed verbs.--( blow (II), catch (W), freeze (I), grow (I) (II), hear (W), learn (W), lie (II), rise (I) (W))

Regular verbs.--blow (Il) (M), catch (M) (W), climb (I) (II) (III), dive (I) (II) (W), draw (II), dream (W), drink (II) (III), drive (I) (II), fetch (II), fit (W), freeze (I) (M), give (I) (II) grow (I) (II) (M), hear (M) (W), kneel (II) (W), learn (M) (W), Lie (II) (M), rise (I) (M) (W), run (I) (II), see (II), shrink (II) (III), sweat (W), $\operatorname{swim}(I)(I I)(I I I)$, take (I) (II), teach (W), throw (II), wake (II)
5.3 Characterizatign of dialect. There are thirty-seven verbs reported by Virginda mavi: that are analyzed in this study. Since all of the verbs have more than one classification, the total of all the verbs in all the classes will, of course, be higher than thirty-seven. Twenty-seven verbs may surface with regular paradigms. Seventeen verbs have weak classifications. Fifteen may have strong Class I paradigms. Twenty-seven are strong Class II. Eight have strong Class III paradigms. The preponderence of regular and Class II verbs seems to indicate that speakers in the North Central States and in the Upper Midwest tend to regularize verb paradigms. A look at the number of different paradigms recorded for a single verb in each classification will modify this observation somewhat.

One important fact not recorded in the previous listing is the number of different paradigms for each verb in a certain class. As is evident in the lexicon, it is possible for a single verb to have more than one paradigm in a single classification. For instance, bring may surface as either bring brang brang or bring brung brung, both strong Class II paradigms. The following chart displays the total number of paradigms for each verb in each classification.

## PARADIGM CLASSIFICATION

|  | Reg. | Weak | $+e n+I$ | +en+II | +en+III | Mxd. | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. begin | - | - | - | 3 | 1 | - | 4 |
| 2. bite | - | 1 | - | 1 | - | - | 2 |
| 3. blow | 1 | - | - | 1 | - | 1 | 3 |
| 4. bring | - | 1 | - | 2 | 1 | - | 4 |
| 5. catch | 1 | 1 | - | - | - | 3 | 5 |
| 6. climb | 1 | - | 4 | 8 | 1 | - | 14 |
| 7. come | - | - | 1 | 1 | - | - | 2 |
| 8. dive | 1 | 1 | 1 | 3 | - | - | 6 |
| 9. do | - | 1 | 1 | - | - | - | 2 |
| 10. draw | 1 | - | - | 1 | - | - | 2 |
| 11. dream | 1 | 3 | - | - | - | - | 4 |
| 12. drink | 1 | - | - | 3 | 1 | - | 5 |
| 13. drive | 1 | - | 1 | 4 | - | - | 6 |
| 14. eat | - | 1 | 1 | 2 | 1 | - | 5 |
| 15. fetch | $l$ | - | - | 1 | - | - | 2 |
| 16. fight | - | 1 | - | 2 | - | - | 3 |
| 17. fit | 1 | 1 | - | - | - | - | 2 |
| 18. freeze | 1 | - | 1 | - | - | 1. | 3 |
| 19. give | 1 | - | 1 | 1 | - | - | 3 |
| 20. grow | 1 |  | 1 | 1 | - | 1 | 4 |
| 21. hear | 1 | 1 |  |  | - | 1 | 3 |

TABLE VIII-Continued
PARADIGM CLASSIPIGATION

|  | Reg. | Weak | $+e n+I$ | +en+II | +en+III | Mxd. | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22. kneel | 1 | 3 | - | 1 | - | - | 5 |
| 23. learn | 1 | 1 | - | - | - | 2 | 4 |
| 24. 1ie | 1 | - | - | 2 | - | 1 | 4 |
| 25. ride | - | 1 | 1 | 1 | - | - | 3 |
| 26. rise | 1 | 1 | 1 | - | - | 1 | 4 |
| 27. run | 1 | - | 1 | 1 | - | - | 3 |
| 28. see | 1 | - | - | 2 | - | - | 3 |
| 29. shrink | 1 | - | - | 1 | 1 | - | 3 |
| 30. sit | - | 2 | 2 | 2 | 2 | - | 8 |
| 31. sweat | 1 | 1 | * | - | - | - | 2 |
| 32. swim | 1 | - | 1 | 3 | 1 | - | 6 |
| 33. take | 2 | - | 2 | 3 | - | - | 7 |
| 34. teach | 1 | 1 | - | - | - | - | 2 |
| 35. throw | 1 | - | , | 1 | - | - | 2 |
| 36. wake | 2 | - | - | 1 | - | - | 3 |
| 37. write | - | 1 | 1. | 1 | . | - | 3 |
| Total | 29 | 23 | 21 | 53 | 9 | 11 | 146 |

Strong Class II paradigms are by far the most numerous in the data reported by McDavid. This is an observation that can not be made from looking at only the number of verbs in each class. The number of different paradigms in each class is a more accurate indicator of the preference of speakers for certain conjugations. Speakers in the North Central States and the Upper Midwest evidently have a decided preference for strong Class II paradigms. The earlier assertion that these speakers prefer regularized verb paradigms, then, must be modified to say that they prefer leveled preteritepast participle combinations.

The accuracy of this material is largely dependent on the conjugation rules. Though formulated to describe standard English verbs, they work nicely with dialect forms. It is likely that the accuracy of these findings would be corroborated if complete dialect paradigms from individual speakers were available from linguistic atlas materials. It is to be hoped that the gathering of such data would be the goal of future dialect fieldwork. Without such corroborating evidence, however, it is nonetheless possible on the basis of this study to make two general assertions. First, the evidence has shown that dialect verb paradigms are systematic and predictable. Second, on the basis of that predictability, it may be said for the data reported that speakers in the North Central States and the Upper Midwest tend to produce verb paradigms with leveled preterite-past participle combinations.

## APPENDIX

The rules that follow are divided into readjustment and phonological rules. Rules 1 through 51 are found in Griggs and Rulon (forthcoming) and follow the original enumeration. Rules 52 through 54 , discussed by Griggs and Rulon, are formalized here. Rule 55 is that of the present author. Rule 56 is drawn from the study by Jones. Rules first formulated by Chomsky and Halle are marked with the original rule number in parentheses and with an asterisk, if revised.

Readjustment Rules.
R1. /\#/ Elision

$$
\# \rightarrow \phi /\left\{\begin{array}{lll}
{[+\mathrm{R}} & 1] & \cdots
\end{array}\right]\left[\begin{array}{lll}
+\operatorname{seg}]
\end{array}\right\}
$$

R 2, $/ \varepsilon /$ Elision

$$
\varepsilon \cdots \nmid \ldots+
$$

R 3. /d/ Elision

$$
\mathrm{d} \cdots \phi \quad \phi \quad[+\mathrm{R} 3]+\ldots
$$

R 4. /n/ Elision


R 5. Word Boundary Elision

$$
\# 2 \cdots \phi \quad \phi \quad\left[\begin{array}{ll}
+\mathrm{R} & 5
\end{array}\right]\left(+\left\{\begin{array}{l}
\mathrm{d} \\
z
\end{array}\right\}\right) \ldots \text { to }
$$

R 6. /g/ Elision

$$
g \cdots \quad \phi \quad\left[\begin{array}{c}
v \\
(-h i g h)
\end{array}\right] \cdots m^{H}
$$

R 7. Velar Elision

$$
\left[\begin{array}{l}
- \text { sonor } \\
-\operatorname{ant} \\
- \text { cont }
\end{array}\right] \quad \phi \quad / \quad+\mathrm{d} \#
$$

R 8. [ $\varepsilon$ ] Insertion


R 9. (CH 1) Ablaut

$$
\left[\begin{array}{c}
\mathrm{V} \\
<\mathrm{back} \\
+\mathrm{R} 9
\end{array}\right] \cdots\left[\begin{array}{c}
-<\text { back } \\
-* \text { round }
\end{array}\right]
$$

R 10. Lowness Adjustment

$$
\left[\begin{array}{c}
\mathrm{V} \\
<10 \mathrm{w} \\
+\mathrm{R} 10
\end{array}\right] \quad \cdots\left[\begin{array}{c}
-<1 \mathrm{w} \\
-\mathrm{high}
\end{array}\right]
$$

R 11. Tenseness Adjustment

$$
\left[\begin{array}{c}
V \\
<\text { tense } \\
+R
\end{array}\right] \quad \cdots \quad\left[\begin{array}{ll}
\end{array}\right] \quad[\cdots \text { tense }]
$$

R 12. (* ${ }^{(H)}$ 7) Rule Exemption

$$
\left[\begin{array}{c}
\mathrm{V} \\
-10 \mathrm{w}
\end{array}\right] \xrightarrow{-\cdots}\left[\begin{array}{cc}
-\mathrm{R} & 35 \\
-\mathrm{R} & 38
\end{array}\right] / /^{/}\left\{\begin{array}{c}
1 \\
-\mathrm{r}^{\mathrm{w}}
\end{array}\right\}
$$

R 13. Spirant Stopping

R 14. Nasal Elision.

$$
\left.[+ \text { nasal }] \rightarrow \rightarrow \rightarrow\left[\begin{array}{l}
\text {-sonor } \\
+ \text { cont } \\
- \text { strid }
\end{array}\right]+[- \text { sonor }]\right\}
$$

R 15. Gamma Elision


R 16. 'Wont'
$\left.\dot{i} \rightarrow->\quad[-h i g h] / w \_\right]+n t$

R 17. 'oo' Rule Exemption
$\ddot{0}-\left[\begin{array}{ll}-R & 36\end{array}\right] / \cdots\left\{\begin{array}{l}k \\ t \\ p \\ d\end{array}\right\}$

R 18. Final Cluster Devoicing

$$
[- \text { sonor }]-\rightarrow[\text {-voice }] /[+ \text { cons }]+\ldots
$$

R 19. (Linkage) Contiguous Obstruent Voice Assimilation

$$
[\cdots \text { sonor }]-\rightarrow[<\text { voice }] /\left[\begin{array}{l}
\text {-sonor } \\
- \text {-voice }
\end{array}\right]
$$

R 20. (* CH 12) $|\mathrm{w}|$ Insertion


R 21. ( CH 11) $|u|$ Insertion

R 22. Velar Palatalization


R 23. $r$ Metathesis


R 24. III ( CH 20 III) Cluster taxing
R.25. Voiced Spirant Elision

$$
\left\{\begin{array}{l}
{[- \text { stria }]} \\
{[- \text { cor }]}
\end{array}\right\}
$$

When $\beta$ is + , the rule is blocked unless $\alpha$ is also + . When $\beta$ is -, the rule operates regardless of the value of $\alpha$.

R 26. Chi Labializatiun

$$
x^{W} \cdots \quad f \quad \text { in specific contexts }
$$

R 27. (* ${ }^{(\mathrm{CH}} 22$ ) $\mid \mathrm{gl}$ spirantization $g \longrightarrow[+$ cont $] /\left[\begin{array}{l}+ \text { sonor } \\ + \text { cons }\end{array}\right]$ \#

R 28. Gamma Shift I

$$
\left[\begin{array}{c}
\mathrm{V} \\
-\mathrm{high}
\end{array}\right] \cdots\left[\begin{array}{c}
+\operatorname{cont} \\
-\operatorname{ant} \\
-\operatorname{cor} \\
+ \text { voice } \\
<\text { round }
\end{array}\right]\left\{\begin{array}{c}
\sqrt{y} \\
{[+ \text { cons }]}
\end{array}\right\}
$$

R 29. Gamma Shift II
$e \cdots \wedge / v^{w}\left\{\begin{array}{c}\# \\ {[+ \text { cons }]}\end{array}\right\}$
R 30. Gamma Shift III
$\left[\begin{array}{c}\mathrm{V} \\ -1 \mathrm{low} \\ \text {-round } \\ \text {-tense }\end{array}\right] \cdots\left[\begin{array}{l}\text {-honor } \\ + \text { cont } \\ - \text { strid } \\ + \text { high }\end{array}\right]$

R 31. 101 - 101 Adjustment


In specifiable contexts

R 32. II. (* CH 23 11) Tensing

$$
\nu-->[+ \text { tense }] / \ldots \text { C }[\text { cons }] \#
$$

R 32 III. (CH 23 III)
$u \cdots \bar{i} ;\left\{\begin{array}{l}0 \\ \wedge\end{array}\right\} \quad \cdots \stackrel{\wedge}{\wedge}$ as specified in SPE
R 32 IV. (CH 23 IV)

$$
\mathrm{V} \cdots \operatorname{lotense}^{\#} /\left\{\frac{\#}{\text { etc. } \left.^{\#} \text { as specified in SPE }\right\}}\right.
$$

R 32 V. (*CH 23V)


R 33. Ill Elision
$1 \cdots \quad \phi \quad$ in specifiable contexts

```
R 34. (CH 29) ly| Inisertion
R 35. (CH 30) Wedge Lowering
R 36. (CH 31) Diphthongization
R 37. (CH 28) Identical Consonant Elision
R 38. (CH 32) Glide Vocalization
R 39. (CH 33) Vowel Shift
R 40. (CH 34) Roundness Adjustment
R 41. (CH 35) Backness Adjustment
R 42. (*CH 36) lal Tensing
    [ \begin{array} { c } { a } \\ { + \text { stress} } \end{array} ] \mp@code { - - > } [ \begin{array} { l l l } { [ + t e n s e ] } \end{array}
    R 43. (*CH 38) Glide Elision
        (This rule must be modified to effect w - > \phi / |#__r|.)
```

    R 44. (CH 40) Velar Spirant Conversion
    \(\gamma^{(w)} \rightarrow \phi \quad x^{(w)} \cdots\left\{\begin{array}{ll}h & \text { in specifiable contexts }\end{array}\right\}\)
    R 45. ( CH 41) \(|\varepsilon|\) Elision
        \(\varepsilon \cdots \phi \quad \phi\)
    R 46. la Insertion: Insuectanal

$$
\phi-\cdots /\left[\begin{array}{c}
-\operatorname{son} \theta \\
+\operatorname{cor} \\
<\operatorname{strid} \\
\beta \operatorname{con} t
\end{array}\right] \#\left[\begin{array}{c}
-\operatorname{sonor} \\
+\operatorname{cor} \\
+\tan t \\
<\operatorname{strid} \\
<\operatorname{con} t
\end{array}\right]
$$

If $\alpha$ is -, then $\beta$ must also be -.

R 47. Suffix Voice Assimilation

$$
[\text {-sonor }] \cdots \quad[<\text { voice }] /[<\text { voice }] \#
$$

R 48. (*CH 42) leal Insertion: Syllabic Resonant

$$
\phi \quad \partial /\left[\left\{\begin{array}{r}
+ \text { cons } \\
{[-\operatorname{voc}]} \\
{[\tan t]}
\end{array}\right\}\right] \text { (\#) }\left[\begin{array}{l}
+ \text { cons } \\
+ \text { donor }
\end{array}\right]
$$

R 49. (CH 43) Vowel Reduction

$$
\left[\begin{array}{c}
V \\
- \text { stress } \\
- \text { tense }
\end{array}\right] \quad \cdots
$$

R 50. |r| Coloring


R 51. Iul Laxing

$$
V \ldots[\text { - tense }] / \ldots[\text { cons }]
$$

R 52. Nasal Assimilation

$$
[+ \text { nasail }] \quad-\cdots\left[\begin{array}{cc}
\alpha & \text { ant } \\
\beta & \text { cor }
\end{array}\right] \quad\left[\begin{array}{c}
\alpha \text { ant } \\
\beta \text { cor } \\
C
\end{array}\right]
$$

R 53. Voiced Stop Elision

$$
\left[\begin{array}{l}
- \text { son } \\
- \text { cont } \\
- \text { cor } \\
- \text { ant } \\
+ \text { voice }
\end{array}\right] \quad-->\quad \phi /\left[\begin{array}{c}
+ \text { nasal } \\
-<\text { ant } \\
-\operatorname{cor}
\end{array}\right] \quad \#
$$

R 54. e-Raising

$$
\left[\begin{array}{c}
\text {-high } \\
- \text { low } \\
- \text { back } \\
- \text { tense } \\
v
\end{array}\right] \quad \cdots \quad[\text { high }] \quad \ldots
$$

R 55. Homorganic Consonant Epenthesis

$$
\phi\left[\begin{array}{c}
-\operatorname{son} \\
-\operatorname{cont} \\
- \text { voice } \\
\alpha \operatorname{cor} \\
\beta \text { ant }
\end{array}\right] /\left[\begin{array}{c}
+ \text { nasa } 1 \\
<\operatorname{cor} \\
\beta \text { ant }
\end{array}\right]-\left[\begin{array}{l}
- \text { son } \\
- \text { voice }
\end{array}\right]
$$

R 56. (J 20) Final Cluster Simplification


## BIBLIOGRAFHY

Atwood, E. Bagby. 1953. A survey of verb forms in the eastern United States. Ann Arbor: Univ. of Michigan.

Bloch, Bernard. 1947. English verb inflection. Lg. 23. $399-418$. Cited herein in its appearance in Martin Joos (ed.), 1966. Readings in linguistics $I$ ( 4 tin ed.), 234-54. Chicago, Univ. of Chicago.

Chomsky, Noam and Morxis Halle. 1968. The sound pattern of English. New York: Harper and Row.

Griggs, Silas and Curt M. Rulon. (Forthcoming) English verb inflection: a generative view.

Hockett, Charles F. 1954. Two models of grammatical description. Word 10. 210-234.

Jacobs, Roderick A. and Peter S. Rosenbaum. 1968. English transformational grammar. Waltham, Mass.: Blaisdell.

Jones, Nancy. 1972. Be in Dallas black English. Unpublished doctoral dissertation: North Texas State University.

Koutsoudas, Andreas. 1963. The morpheme reconsidered. International Journal of American Linguistics. 29. 160-170.

Kurath, Hans and others. 1939. Handbook of the linguistic geography of New England. Providence: Brown University.

McDavid, Virginia. 1957. Verb forms of the North Central States and Upper Midwest. Unpublished doctoral dissertation: Univ. of Minnesota.

