## Romanian Verb Handbook

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## Chapter 1 . Introduction and Basic Stem-types

## I. Introduction

This guide to Romanian conjugation is meant to convey the process by which stems and endings are combined and modified by system-wide rules, resulting in the actual verb forms of the language. It differs from the usual listing of large numbers of paradigms in its attempt to keep the number of basic units as small as possible. Since the same number of verb forms ultimately results from this system as from the usual paradigmatic listing, one may ask how a small number of basic units can achieve this. The answer lies in the fact that this system explicitly states the rules which cause base units to change into other units when they conform to certain environmental conditions. Furthermore, since the full paradigmatic listing of Romanian verbs is rather lengthy and complex, it is obvious that many rules are required to operate on the simple system of base forms in order to transform it into the actually occurring paradigmatic verb forms of the language.
Therefore, it is hoped that this Romanian verb handbook can present a structural picture of rules which operate on a minimal number of basic units, which can help the reader appreciate the structural basis of the conjugation process. It is not necessarily aimed at making Romanian conjugation easy to learn, although that may be the result for those familiar with the operation of base forms and rules. This handbook will not attempt to justify why specific basic units are posited, but will simply lay out the system as a whole, focused first on the basic stems and endings, and then on the rules for their combination.

## II. The process of conjugation.

The essence of conjugation is the addition of a grammatical ending to a stem, together with the ensuing changes in the shape of the stem and ending, conditioned by a body of rules. The stem refers to the particular lexical entity that represents the specific verb in question, while the endings are the fixed set of obligatory grammatical possibilities which apply to all verbs of the language. Romanian verbal stems consist of an optional prefix, plus an obligatory root and verbal suffix. Traditional treatments are very vague about whether the verbal suffix is really part of the stem or the grammatical ending, but this approach clearly differentiates between the two. In order to maintain as clear a presentation as possible, hyphens will be used to separate the morphemes with either the stem or grammatical ending, but a plus sign will be used to separate the stem from the grammatical ending. For example, cântam ('sing', $1^{\text {st }}$ pers. sg./pl. impf.) can be represented as kînt-a+á-m-u prior to its conjugation. The specific morphemes will be explained in the sections which introduce the basic stem types and grammatical endings.

## III. Stem-types.

One of the most controversial areas of Romanian conjugation is the establishment of the inventory of basic types. If one takes the approach of considering any conjugational differences as basic, the result is an incredibly large inventory of verb types. An example of this approach can be found in the morphological dictionary of Lombard and Gădei (1981:II75-II1 04), in which a total of 667 verbs are listed, all with at least some small difference of suffix or morphophonemic alternation. The approach to be
followed here is the diametric opposite of this. I assume that the Romanian verb can be best treated as consisting of three basic groups of stem-types, corresponding to the stem-final suffixes -a, -e, and -i, and that all other types can be regarded as predictable subtypes, conditioned by specific phonological or lexical properties, which shall be stated more precisely below. More importantly, I will introduce a uniform set of grammatical endings, which apply to all stem-types. Generally speaking, the phonological properties of the stem-final are subject to rules which account for the ultimate conjugational differences in predictable ways. This is an alternative to setting up large numbers of conjugational types which must simply be memorized as such. Of course, a considerable number of rules are needed to generate the 667 verbs in question, but they capture far more generalizations than a mere memorizing of all the verb types. I will frequently make reference to the difference between basic forms and surface forms. Basic forms (stems, suffixes, endings, etc.) refer to the structures which do not yet contain predictable differences which are eventually introduced by rules. Surface forms are transcriptions or actual spellings of verbs that occur in the language, i.e. after all of the relevant rules have been applied. Of course, if we count surface forms, we may get the astronomically large numbers of units which were cited for the work of Lombard and Gădei; at the other extreme are the small numbers of basic units.

Guţu Romalo (1968:198) produced a master list of 38 verb types, which she eventually reduced to ten (page 203-5), based on considerations of predictability. Since it would be too cumbersome to show how basic forms can reduce the huge number of 667 verb types, it will be more efficient to start by considering the moderately complex list of ten types in the work of Guţu Romalo.

We will then proceed to consider the rules that are required to produce the major paradigmatic forms of the ten verb types. Let us start with the following chart, based on the ten proposed conjugational types of Guţu Romalo.

| Present | Imperfect | Perfect | Participle | Infinitive | Gerund |
| :--- | :--- | :--- | :--- | :--- | :--- | | 3rd Plural |
| :--- |
| Syncretism |



Table 1. Graphic illustration of Guţu Romalo's 10 conjugation classes

[^0]The vowels on the chart, under the headings of the various grammatical forms, refer to the surface forms found following the verbal root, after the application of the rules. For example, if one looks at the column under "Gerund," it is immediately apparent that there are three realizations of this ending, corresponding to the verbs listed in the far left column for each respective gerundial ending. This is apart from the question of basic type, of course. In the case of the gerund, as most other grammatical morphemes, I believe that it is sufficient to establish just one single basic form. The final column to the right, refers to a difference of syncretism which splits the entire Romanian verb system into two halves, based on whether there is identity between the third person singular and plural, or between the first person singular and third person plural. In the usual approach, no explanation is provided for the difference of syncretism, beyond such arbitrary factors as Conjugation I vs. the other conjugation types. According to my approach, the difference of syncretism is directly related to the choice of theme vowel. One can readily see that one type of syncretism (on the right of the chart) is almost always paired with non-front vowels (on the left side), while the other type is paired with front vowels. This leads to my conclusion that morphophonemic rules can best explain the difference of syncretism, as I will demonstrate below.

According to Guţu Romalo's methodology, each of the ten classes includes several more types with differing phonological stem properties, which are said to condition various automatic changes in the stem and in the use of conjugational endings. As alluded to above, the verb hotarî is said to be in the same group as isprăvi, although the verb hotarîhas the additional rule of backing
any vowel which follows the stem-final -r. Since this is a phonological rule, Guţu Romalo groups both in the same category. In a similar procedure, the verbs ara 'plow' and afla 'find out' both belong to category one, but the consonant cluster of afla conditions the word-final retention of -u , which is dropped in the verb ara, leading to the 1 sg forms ar, but aflu.

The structure of the ten types listed in table 1 can be more readily understood by grouping the types in terms of the theme vowel which follows the root. On this basis, the ten types can be divided into the following categories:

1. Non-extended vocalic theme vowels -a, -e, and -i, which follow the root and appear in stem-final position. This includes the verbs ara 'to plow',2 începe 'to begin', and sări 'to jump', as listed on the chart, and which can be represented as ar-a+, în-cep-e+, and sar- $\mathbf{i}+$. The vowel of sări is represented as a since an unstressed a is predictably lowered to ă (i.e. [ə]), except in lexically marked items, such as loan words. Verbs with the so-called -ea theme really can be treated as a subtype of the -e theme, in which the accent happens to fall on the theme vowel, rather than the root vowel, since an -e theme automatically undergoes diphthongization to -ea when stressed in word-final position. This applies to the verb părea 'to seem', which would have the basic stem par-e+ in our system. Of course, the stress would have to be placed on the theme vowel, in order for us to know that it ultimately changes to -ea. A special section below will be devoted to the rules of stress placement in Romanian conjugation. Thus,

[^1]the four verbs ara, începe, sări, părea all fit in the category of the basic three suffixes, which directly follow the root, rather than coming after stem extensions, such as those to be introduced next.
2. Extended suffixes come in four subtypes, exactly corresponding to the four basic suffixes ( $-\mathrm{a},-\mathbf{i},-\hat{1},-\mathrm{e}$ ), since each suffix has its own particular stem extension. All stem extensions are present in certain paradigmatic forms, but totally absent in others. The vocalic extended suffixes (-ez, -esk, and -ăsc) can appear either with the theme vowel or in forms in which the theme vowel is deleted. However, the extended suffix must always bear the stress or it gets deleted. Thus, when a theme vowel is used together with an extended suffix, the theme vowel is unstressed. Since unstressed theme vowels undergo a change to mid vowels, the extended suffixes can only co-occur with theme vowels that have been changed to mid, e.g. /ucrează, 'work', 3rd pers. sing.; ispraveşte 'complete', hotărăşte 'decide' 3rd pers. sing. The abstract basic form will be written with the extension in parentheses, followed by the theme vowel. The theme vowel -a is paired to the extended suffix -ez, e.g. lucra, lucrez 'to work, I work', which has the basic stem lukr-(ez)-a+. The -i theme vowel uses the extended suffix -esk, e.g. isprăvi, isprăvesc ('to complete, I complete'), with the basic stem isprăv-(esk)-i+. Next, the -î theme vowel uses the extended suffix -ăsk, e.g. hotarî, hotărăsc ('to decide, I decide', with the basic stem hotar-(ăsk)-i+ and a rule which backs the theme vowel - $i$ when the extension is deleted and the theme vowel is directly preceded by -r). The -ez, -esk, and ăsk extended suffixes all share the same basic rule for occurrence and non-occurrence: they occur when stressed and are deleted when unstressed. They normally obtain their stress by a default rule which places the stress on the pre-theme vowel. Since the
theme vowel itself can either remain or be deleted in such cases, the invariably stressed extended suffixes can occur either when theme vowels are deleted (e.g. lucréz) or unstressed (lucreză).

The -e theme vowel has a rather different sort of extended suffix, which I will refer to as -s, e.g. prinde 'to take', prinsei'l took', simple perfect, 1 st pers. sing.), having the basic stem prind-(s)-e+. The -s suffix has an occurrence which is based on grammatical tense: it is dropped in the present and imperfect tenses, but appears in the simple perfect and the participle. Furthermore, the -s suffix has a significant effect as a trigger of accentual rules; when it is deleted, stress moves leftwards, to the root vowel, but when it is retained, the accent moves rightwards, onto the theme vowel. As indicated, each of the three extended suffixes is associated with a particular regular suffix; basic stems will indicate both the extended and regular suffix; the extended suffixes will be enclosed in parentheses, to indicate that they are subject to being dropped in specific accentual and morphological positions. Table 1 contains not one, but two verbs with the extended -s suffix, prinde and also rupe 'to tear'. Guţu Romalo included both, due to the fact that they have different realizations of the participial ending, i.e. prins, but rupt. In both cases, we see the $-s$ extended suffix followed by the $-t$ participial ending. However, when a labial consonant precedes the -s-t sequence, the -s is deleted, leaving such forms as rupt. A non-labial conditions the loss of the -t , leaving results such as prins. For the purposes of this paper, both verbs have a similar basic stem, with extended -(s)-e+: prind-(s)-e+ and rup-(s)-e+.
3. The remaining two verb types listed in table 1 belong to minor, or mixed stem types, including the verbs coborî'to descend'
and sui 'to climb'. The essence of these verbs lies in the fact that they do not possess all of the properties of either i -theme or a-theme verbs, but share some of the features of each.
a. The case of coborî, with an î-theme, is restricted to roots ending in $r$ and was the regular phonological result of a backing of the theme vowel -i in the post- $r$ position. However, this phonological rule is no longer regular, and we are left with a small number of verbs both in $-r-\hat{i}$, as well as others in $-r-i$. Due to the lack of predictability, I will represent such verbs with a basic theme $-\hat{\imath}-$, in spite of the suggestions of some linguists (such as Ruhlen) that it would be more economical to consider these to be -i- theme verbs in the special post-r environment.
b. The verb sui shares properties of both $-\mathbf{i}$ and $-\hat{i}$ theme vowels, which is characteristic of verbs with roots that end in vowels or glides, as well as some others. Specifically, this verb type behaves as if its -i theme is centralized to -î in paradigmatic forms which have an unstressed (post-tonic) theme vowel. In other words, the conjugation of such verbs agrees with that of $-\hat{i}$ (or -a) theme verbs in forms with a stress to the left of the theme vowel, a fact that will be seen in detail when the conjugation of this verb class is reviewed. The basic stem of su-i+ is itself capable of predicting this, since it manifests a root-final vowel followed by an -i theme, which regularly conditions a change of post-tonic theme vowel -i to $-\hat{i}$. In other examples of this conjugation type, e.g. sprížin-i+ (sprijini'support'), the unique combination of an -i theme with an accentually marked stem conditions a rule which states that the post-tonic theme vowel -i undergoes a mutation to $-i ̂$. In a very small number of instances, such $-i /-i$ mixed verbs have neither of the characteristic features for the operation of this theme vowel switch (i.e. either a root-final vowel or stressed stem),
e.g. oferi 'offer', and would have to be considered irregular or have a special notation to the effect that they are of the mixed theme type. By contrast, the verbs súfer-i+, akóper-i+, trebu-i+ would be immediately recognizable by their stress and or vocalic rootfinal, in combination with the -i theme.

## Chapter 2. The System of Verb Desinences

I. Segmentation of desinences.

The present system of Romanian conjugation departs from others in that I assume that conjugated endings are segmentable into three morphemes, corresponding to tense, number, and person, respectively. The reason for this system is that it interacts with the posited stem-types in a way that is much more regular than the traditional system of non-segmentable endings and provides an explanation for otherwise intractable problems, such as the question of why certain Romanian verb types have one of two types of syncretism, rather than the other. Every posited morpheme occurs in its recognized meaning in at least one Romanian verb form, so that no fictitious or historical morphemes are posited simply to make the system work properly. There is a considerable use of the zero morpheme, but in every instance the zero corresponds to the absence of an overt morpheme which occurs elsewhere.

## II. Three-part vs. two-part desinences.

There is a major structural difference between the desinences of the personal, or conjugated verb forms, and those of the nonconjugated, or non-finite forms. The former are inflected for person and include the present, imperfect, simple perfect, subjunctive, and pluperfect paradigms. The non-conjugated, or impersonal forms, which are not conjugated for person, include the infinitive, verbal substantive, gerund, and participle. Since the
various forms of the future, and conditional do not form separate paradigms by means of affixing endings to the basic stem, they will not be dealt with as such. Likewise, the imperative is not of special interest to this study, since the imperative singular is regularly identical to either the 2 sg or 3 sg verb form, but the choice is not easily captured by morphological rules. The choice of 2 sg or 3 sg is often said to be related to syntactic features: the 2 sg present form coincides with intransitive imperatives, while the 3 sg is normally used as the imperative of transitive verbs (Guţu Romalo 1968:174). The other paradigms will be discussed with the primary goal of illustrating the rules needed to combine basic stems with grammatical endings in the paradigms of interest.

I assume that the desinences of conjugated paradigms can be segmented into three morphemes, corresponding to tense, number, and person, in that order. There are no differences of conjugation type; i.e. the set of present tense, imperfect, or other endings is the same, regardless of the verb stem and the particular phonological shape of the stem-final or theme vowel. To a large extent, the individual desinential morphemes I posit are also uniform across the system. For example, the tense morphemes are always - $\varnothing$ (zero) for present, stressed -á for the imperfect, and -ú for the simple perfect; the person morphemes are always -u for first person, -i for second person, and - $\varnothing$ for third person. However, the middle morpheme of number is not as uniform. In the present tense, singular number is uniformly - $\varnothing$, but the morpheme of plural number can take various forms and only can be defined as being non-zero, in opposition to the zero of the singular. In paradigms other than the present tense, there is also a lack of consistency in the number morphemes, which will be illustrated for each paradigm.

In the non-conjugated paradigms, the morpheme of person must be absent, by definition. In the two morphemes which do occur, the first is strongly suggestive of the very same first position tense morphemes which occur in the conjugated verbs. For example, the zero of the infinitive agrees with that of the present tense, the stressed central -î of the gerund is parallel to the stressed central -á of the imperfect, and the -ú of the participle is same ending as found in the tense morpheme of the simple perfect. Thus, one might tentatively conclude that the nonconjugated forms have desinences which begin with a tense morpheme. The second morpheme of non-conjugated forms appears to indicate the part-of-speech and does not directly correlate with endings of conjugated verbs.

## III. Systems of conjugated desinences.

For reference purposes, my assumptions about the segmentation and morpheme values of a full range of Romanian desinences will be set forth below, in this section. Later sections will deal with the crucial question of how the various stem types interact with these desinential morphemes, i.e. what specific rules of conjugation are necessary.
A. Present.

|  | Singular |  |  | Plural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tense | Number | Person | Tense | Number | Person |
| Person |  |  |  |  |  |  |
| 1. | -Ø | -Ø | -u | -Ø | -m | -u |
| 2. | -Ø | -Ø | -i | -Ø | -t | -i |
| 3. | -Ø | -Ø | -Ø | -Ø | -u | -Ø |

B. Imperfect.

> Singular

Tense Number Person
Person
1.
2.
-á
-m
-u
3.
-á
$-\varnothing$
C. Simple perfect

Singular

Tense Number Person
Plural

Tense Number Person

| Person |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1. | -ú | $(-i-\varnothing)$ | $-u$ | $-u ́$ | $(-r a-m)$ | $-u$ |
| 2. | $-u ́$ | $(-s-Ø)$ | $-i$ | $-a ́$ | $(-r a-t)$ | $-i$ |
| 3. | $-u ́$ | $(-Ø-Ø)$ | $-Ø$ | $-a ́$ | $(-r a-u)$ | $-\varnothing$ |

D. Pluperfect.

Singular

Tense Number Person
Person
1.
-ú-se
$(-\mathrm{m}-Ø) \quad-\mathrm{u}$
2. -ú-se (-s-Ø) -i
3.
-ú-se
$(-Ø-Ø) \quad-\varnothing$

Plural

Tense Number Person
-ú-se $\quad$-ra-m $\quad-u$
-ú-se -ra-t -i
-ú-se $\quad-r a-u \quad-\emptyset$
IV. Non-conjugated desinences.

All four non-conjugated types have similar two-part structure; the first morpheme can begin with a stressed vowel, but not with a consonant. Conversely, the second portion can begin with a consonant, but not a vowel.

The infinitive is a zero form, but with an indication that the previous morpheme gets stressed. Therefore, I posit that the first portion of the infinitive ending is a stressed zero. In order to regularize the structure of the non-conjugated forms into two morphemes, I posit a second zero, as follows, for the infinitive. The following table lists the endings that are assumed for the various non-conjugated forms. Stress is uniformly assumed for the first morpheme of each.

First Morpheme

Infinitive:

Verbal substantive

Participle

Gerund
One could debate whether there should be an underlying or default stress on the latter three non-conjugated forms, since a default stress would fall on the last pre-consonantal vowel of the word. However, in view of the fact that the infinitive desinence
does not contain a consonant, an basic stress would have to be assumed, unless one were to smuggle in historical information, by considering that the infinitive is really a "short" infinitive, and the substantive a "long" infinitive, and that the infinitive is derived from the substantive by a process of subtracting the -re ending. However, I will simply assume that all four non-conjugated types have stressed initial morphemes, as illustrated above.
V. The subjunctive.

As a mood, rather than a tense, we might expect the desinential morphemes of the subjunctive to differ from the threepart structure of the various tenses. In my non-traditional interpretation (see Feldstein 1999:477-8 for details), the subjunctive adds an additional morpheme of mood to the three which are found in the present tense. The essence of the subjunctive is based on the use of endings opposite to the present. Therefore, the result is as follows:

1. In the present tense, the first and second persons have overt personal endings, while the third person uses only zeroes, ending in the bare stem vowel (lowered to mid where possible).
2. The subjunctive morpheme of mood takes the opposite route, with a zero in the first two persons, but a mid vowel in the third person, which is the diametric opposite of the theme vowel's specification of frontness. In other words, the first two persons of the subjunctive result in forms identical to the present, while the third person surfaces with a vowel that is opposite to the theme vowel in the frontness feature. We could refer to this as the minus
alpha frontness of the theme, as in the following table of subjunctive endings:

|  | Singular |  |  |
| :--- | :--- | :--- | :--- |
| Tense | Number | Person | Mood |
| $-\varnothing$ | $-\varnothing$ | $-u$ | $-\varnothing$ |
| $-\varnothing$ | $-\varnothing$ | $-i$ | $-\varnothing$ |

$\begin{array}{llll}\text { 3. } & -\varnothing & -\varnothing & -\varnothing\end{array} \begin{aligned} & \text { theme } \\ & \\ & \\ & \end{aligned}$

|  | Plural |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Tense | Number | Person | Mood |
| Person |  |  |  |  |
| 1. | -Ø | -m | -u | -Ø |
| 2. | -Ø | -t | -i | -Ø |
| 3. | -Ø | -u | -Ø | theme $-\alpha$ front |
| Of course, it is also possible to interpret these desinences in another, more traditional way, saying that the first two person simply agree with the indicative mood, and that the third person agrees with the indicative mood, except for a change of final vowel from front to central $(\mathrm{e} \rightarrow \boldsymbol{\partial}$, orthographically $e \rightarrow \widetilde{a})$ or central to front $(\partial \rightarrow e$, orthographically $\breve{a} \rightarrow e)$. |  |  |  |  |

## Chapter 3 . Stress Placement in the Romanian Verb

I. Stress on grammatical stems and endings.

Both the verb stem and the grammatical ending may each have their own independent accentual markings prior to being combined in the process of combination. Therefore, it is potentially possible for a pre-conjugational construct to have either a single stress mark or two such marks. Part of the conjugational process involves a set of rules that governs the combination of stem and desinential stresses, much as they govern the combination of non-accentual features that are combined. The previous chapter set forth my assumptions about the segmented grammatical endings that occur in a variety of paradigms. This section will look at the accentual properties of those same endings, as well as of a variety of stems, and will look at the rules for combining stem and ending with respect to stress.
II. Stress on the verb's grammatical desinences.

Every Romanian verb ending has one of two accentual possibilities:
A. The first desinential segment, that of tense, can carry an accent mark itself, which is characteristic of paradigms other than the present tense.
B. The entire desinence can lack an accent mark, in which case it is assigned by default to the last preconsonantal vowel of the word. This type is characteristic of the present tense.

Let us now recapitulate the endings listed earlier, with respect to where the stress mark occurs. Note that there is a major accentual opposition between the present tense and virtually all other verb paradigms, due to the fact that the present tense desinence lacks an underlying stress mark on its tense portion, receiving a default stress in all forms, on the vowel which precedes the last consonant of the word. By contrast, virtually all other paradigms possess a stress mark on the initial desinential morpheme, which I consider to be the morpheme of tense.

In order to symbolize present tense stress, the root will be symbolized by CVC and the theme vowel by T. Since no marked accents occur here, all stresses are defaults, winding up either on the root vowel or theme vowel. The major determinant of whether the stress will be on the root or theme vowel is the presence or absence of a consonant in the number portion of the desinence, since that factor determines where the default stress is placed, as follows:

Singular

## Tense-Number-Person

Person
1.
CVC-T+Ø-Ø-u
2. CVC-T+ Ø-Ø-i
3. CVC-T+Ø-Ø-Ø
CVC-T+Ø-Ø-Ø
Person

## Plural

## Tense-Number-Person

$$
\begin{aligned}
& \text { CVC-T́+ } \emptyset-\mathrm{m}-\mathrm{u} \\
& \mathrm{CVC}-\mathrm{T}+-\varnothing-\mathrm{t}-\mathrm{i} \\
& \text { CVC-T+ }-\mathrm{u}-\varnothing
\end{aligned}
$$

If the extended suffix -ez or -esk is used, note that its vowel would qualify as the last preconsonantal vowel instead of the root, in the four above forms which are shown with root vowel stress. The
subjunctive, which shares the zero of the first desinential position, has the same stress placements as the present.

In the other verb paradigms, the initial desinential morpheme has a marked stress. For example, the imperfect desinence has -á as its initial morpheme, the simple perfect, pluperfect, and participle have -ú, the gerund has -î, and the infinitive, together with the verbal substantive, have a stressed zero, -Ǿ. This can be exemplified for the imperfect, as follows:

## Singular

Tense-Number-Person
Person
1.
2.
CVC-T+á-m-u
CVC-T+á-Ø-i
CVC-T+á-Ø-Ø

Plural

Tense-Number-Person

CVC-T+á-m-u
CVC-T+á-t-i
CVC-T+á-u-Ø
III. Stress marks on the verb basic stem.

Stress on the basic stem is similar to that of the desinence in that it occurs in a restricted position, with respect to the theme vowel. When the theme vowel is -e, the stress mark can only occur in the syllable immediately preceding the theme; when the theme is other than -e, i.e. -a (or very rarely -i), the stem stress is placed two syllables to the left of the theme vowel, rather than one. However, when no basic stem stress occurs, the stem does not assign another default stress, as is the case with the desinence. In the absence of such an inherent stem stress, the verb form simply uses the stress assigned to the desinence, either underlyingly or as
a default, as illustrated above for the present tense. The various accentual possibilities for verb stems can be correlated with the various theme vowels and extensions, as follows.
A. Non-extended stems.

As noted, stems marked for stress place the mark either one or two syllables to the left of the theme vowel. When the theme vowel is -a, kúmpar-a+, términ-a+, justífic-a+, the stress is two syllables to the left. For -e, the mark can only be on the syllable which immediately precedes the theme vowel, e.g. fák-e+, bát-e+, încép-e+. Regular -i stems (including their subtype -î) cannot have a stress mark on the stem. They can only have an accentually marked stem when they are not full-fledged -i stems, but of the mixed -i/-a type, i.e. where the theme vowel is -i under stress, but alternates to -a when unstressed. To account for this mixed behavior of an -i stem, a stem which has an accent mark, together with an -i theme vowel, would automatically trigger the change of unstressed -i theme vowels to -a. E.g. sprížin-i+, súfer-i+. However, since there are also accentually unmarked stems which have the mixed -i/-a pattern, the stress mark alone is not enough to indicate all instances of the mixed -i/-a pattern.

## B. Extended stems.

The extended suffixes -ez and -esk exclude the presence of a stress mark on the stems which precede them. Their behavior is very closely tied to the default stress which occurs, however, since they are deleted when unstressed. Since the default stress assigned to them when the consonant of the extended suffix is the last consonant of the word, it turns out that they are retained either
when there is a default stress but no desinential consonant (e.g. dictéz 'I dictate'); but, when the desinence has a default stress and possesses a consonant (dictáţ̧i'you dictated', 2nd pers. plur. impf.), the stress falls on the theme vowel, leading to the deletion of the unstressed extended suffix.

The extended suffix -s-, used only with the -e theme vowel, has rather complex accentual properties, which are also related to its presence or absence in the given form. Generally speaking, the -s- can either remain or be deleted; when deleted, it assigns a stress to the vowel on the immediate left. However, when retained, it can either pass its accent to the left or right, conditioned by the grammatical environment, as follows:

1. In the present tense, imperfect, infinitive/substantive, and gerund of the verb with basic stem pun-(s)-e+ 'put', the extended suffix assigns a stress to the left and drops, which yields pún-e+. Once we have the construct pún-e+, its present tense and infinitive behave just like any other stem-stressed stem without an extended suffix, i.e. like bat-e+. Imperfect puneám, 1 st pers. sing. and plur., and infinitive púne, illustrate the similarity to bat-e+.
2. In the other paradigms, the -s- is retained and the preceding consonant is deleted, but there are two possible accentual consequences:
a. In the pluperfect and the first two persons singular of the simple perfect, the stress passes to the theme vowel -e, which is on its immediate right. E.g. puséi, simple perfect 1 st pers. sing.
b. In the participle and remaining forms of the simple perfect (with some variability of realization), the -s-is retained, but passes its stress to the left. E.g. púse, simple perfect 3rd pers. sing.
IV. Rules for multiple stress marks.

By the rules established above, the desinence always contributes a stress mark to the word, whether underlyingly assigned to a desinence vowel or assigned by default, when there is no desinential vowel with such a stress mark. The stem may or may not have a stress vowel of its own. Therefore, whenever the stem does possess a stress mark, it may produce a situation in which there are to stress marks within the verb form that have to be resolved. In fact, this will happen whenever the stem bears its own stress mark, unless the desinence assigns a default stress which just happens to coincide with the stress mark on the stem. In the case of two stress marks, there is a basic rule for determining which of them is erases and which one gets retained as the stress mark of the resulting verb form.

The rule is based on whether the stress marks are contiguous or non-contiguous and can be stated as follows:

If the two stress marks are in contiguous syllables, the right one is erased and the left prevails; but, if the two stresses are in non-contiguous syllables, the left one is erased and the right one prevails.

It is important to add that stress on a zero desinences must be retracted by one syllable to the left before the determination of
contiguity; however, vowels all remain intact and vowel deletions do not yet remove vowels for the operation of this rule. In other words, it is ordered after the stress retraction from stressed zeroes, but before the deletion of vowels. The following examples illustrate several possible scenarios of dual stresses which are resolved with the use of the stress contiguity rule, starting from the basic stem and basic desinence:

1. Contiguous stresses can be exemplified as follows.
a. Infinitive fák-e+Ǿ-Ø. After the stress retraction and removal of zeroes, the construct fák-é+ remains. Since the stresses are contiguous, the left one prevails, giving the result fáke, which eventually undergoes regular palatalization of $k \rightarrow-c ̌$, yielding the form fáce [fáče].
b. Present tense second person plural fák-e+Ø-t-i. Since the desinence has no stress mark of its own, it assigns a default to the vowel which precedes the final consonant, yielding the construct fák-é+Ø-t-i. Due to the contiguity, only the left stress prevails. After the later reduction of final -i to the glide [j] and palatalizations of $\mathrm{k} \rightarrow-\mathrm{č}$ and $\mathrm{t} \rightarrow \mathrm{t}$, the eventual form is fáceţi [fáčecj].
c. Present tense third person plural términ-a+Ø-Ø-Ø. Default stress placement is conditioned by no stress mark on the desinence, yielding térmín-a+Ø-Ø-Ø, where the basic stem stress is contiguous to the default stress. Due to the contiguity rule, the left stress prevails, yielding términă, where the theme vowel is eventually raised to mid, a rule generally applied to unstressed theme vowels.
2. Examples of non-contiguous stress are as follows.
a. Present tense second person plural términ-a+Ø-t-i. Default stress placement occurs due to no stress mark on desinence, resulting in intermediate construct términ-á+ $\varnothing$-t-i. The two non-contiguous stresses are resolved by removing the left stress and allowing the right stress to prevail. After all phonological rules are applied, the form termináţi results.
b. Imperfect second person plural términ-a+á-t-i. No default stress, due to stress on desinential vowel. Non-contiguous stresses cause left stress to be removed, resulting in termináţi, identical on the surface to the previous example, though structurally different in the base form.
c. Imperfect second person plural fák-e+á-t-i. No default stress, due to desinential stress. Non-contiguous stresses lead to removal of left stress and retention of right stress, even though later phonological rules cause the eventual gliding of $e \rightarrow e$, the palatalization of $k \rightarrow c$, deletion of glide $e_{\lambda}$, and lowering of root unstressed $\mathrm{a} \rightarrow$ ə: făceam [fəčám].
V. Examples of single stresses.

The more complicated situation of two competing stress marks has just been presented, where one of the stress marks pertains to the basic stem and the other has been assigned to the desinence. A much simpler situation results when the basic stem has no underlying stress mark and the desinence alone determines the stress, either by a basic desinential stress on the first
desinential component or by a default stress. As noted above, the entire present tense exemplifies the assignment of a default stress, while the other tenses illustrate the presence of a basic desinential stress. The verbs kînt-a+, ved-e+, sar-i+ all are unmarked for stress, so their present tenses are strictly governed by the default stress, which is assigned to the preconsonantal vowel in all of these examples: cântă, véde, sáre. In their infinitive forms, the stressed zero desinence causes a stress to be placed one syllable to the left of the zero, i.e. on the theme vowel. Since there are no competing stresses, it remains there: cântá, vedeá, sărí. The only special rule to note is the phonological rule which converts stressed final -e to the diphthong -ea [ea] in vedea, as well as the rule which lowers the unstressed a in sări.

A number of verbs have roots ending in a vowel, followed by the theme vowels -a and -i. None of them are accentually marked and they use the default stress. However, instead of a default stress which precedes a root-final consonant and falls on the rootfinal vowel, such verbs have a default stress which falls on the penultimate root vowel (if such a syllable exists), due to the absence of a root final consonant. E.g. speri-a+, kontinu-a+, kontribu-i+, trebu-i+ have the default stresses: spéri-a+, kontínu-a+, kontríbu-i+, trébu-i+. In other words, stress ends up on the second vowel which precedes the theme vowel in present tense forms which lack a desinential consonant, such as the third person singular forms, contríbuie, trébuie. ${ }^{3}$ The presence or absence of an automatically inserted glide between the root-final vowel and the theme vowel will have no effect on the assignment of

[^2]default stress, since the intervocalic glide does not count as a consonant for the purposes of the default stress. If the root-final vowel is the only root vowel, the default stress will necessarily be placed on it, rather than two vowels to the left of the theme; e.g. tai-a+, su-i+ have present tense third person singular forms táie, súie. Since prefixes are irrelevant to the process of default stress assignment, no default stress will ever be assigned to the left of the prefix-root boundary. In other words, when verbs with a single root-final vowel receive a default stress, it treats the prefix-root boundary as if it is a word boundary; e.g. în-vi-a+ has the present tense third person singular învíe. The key to placing the correct stress in such situations is the hyphen which marks the prefix-root boundary, since no default stress assignment can cross it.

The class of verbs with root-final vowel and basic theme vowel -i acts like a mixed -i/-a theme type for the purposes of conjugation. As noted in chapter one, the switch of the -i theme to -a is conditioned either by a marked stem stress or a root-final vowel.
VI. Inventory of stress situations by type.

To conclude the section on verb stress, under the heading of each theme vowel, the various accentual are listed. Examples of their full paradigms, including stress indication, will be presented in later chapters.
A. Unextended theme vowel -a.

1. Unstressed basic stem. kînt-a+

In the present tense and subjunctive, default stress in all forms, which places stress on the root-final (stem-penult)
2. Stressed basic stem. términ-a+
B. Unextended theme vowel -e.

1. Unstressed basic stem. ved-e+
2. Stressed basic stem. fák-e+
C. Unextended theme vowel -i.
3. Unstressed basic stem. sar-i+, kobor-i+
4. Stressed basic stem sprížin-i+
D. Extended theme vowel -(ez)-a.

Only unstressed. dikt-(ez)-a+
E. Extended theme vowel -(esk)-i.

Only unstressed. čit-esk-i+
F. Extended theme vowel -(ś)-e+

Only with stress mark on -(ś)- extension. pun-(ś)-e+

## Chapter 4 . Rules of Conjugation

## I. Introduction.

In order to illustrate the process of conjugation, the major rules of combination will be illustrated first. Then, the process of combining the major stem types with desinences will be shown. Since all stems end in one of the theme vowels, conjugation essentially boils down to the addition of a theme vowel to a desinence, either a consonant or a vowel. In the case of a theme vowel being added to a consonant, the expected result is often, though not always, the simple addition of the two, with a minimum of complication. However, when a theme vowel is added to a desinential vowel, one of the vowels is always modified in some way--either deleted or changed into a glide. The exact process depends on the features of the two vowels concerned, including the features of height, front-back, and stress. The details will be given in the following section on vowel combination.
II. Vowel combination rules.

The process of combining the theme vowel with desinential vowels is not the same as the phonetic combination of any two vowels. It is assumed that in each of these cases, the first of the two vowels is in the specific morphological position of theme vowel, represented in our transcriptions with a plus (+) symbol following this vowel.
A. Central vowel+central vowel: deletion of first vowel.

When two central vowels are combined, the first is deleted. This rule is ordered first in the series of vowel combination rules, since central vowels can possess other features (such as height), that may make them seem to be subject to other rules, in which case the correct result is obtained only if the central+central deletion rule is applied first. The central+central rule primarily affects stems with the theme vowel -a, when they are combined with the endings of the imperfect (-á) and gerund (-í). When certain -i theme stems switch to -a or -î, they will also experience the central+central deletion.
B. Unstressed mid vowel+high vowel: deletion of first vowel.

Unstressed mid vowels are deleted in combination with a following high vowel. This can be clearly seen in the behavior of the basic unstressed mid theme vowel -e. When combined with a zero, its true unstressed mid vowel property can be seen (e.g. bát-e+ $\varnothing-\varnothing-\varnothing$, which results in bate). When preceding the various conjugational high vowels, it is deleted: bát-e $+u \rightarrow$ bát $+u \rightarrow$ bát (pres. 1 st pers. sing. and 3rd pers. plur.). When combined with the -ú desinence of the simple perfect or participle, the -e theme is likewise deleted: bat-e+ú-t (note the destressing of the noncontiguous left stress) $\rightarrow$ bat+ú-t - bat+út, resulting in bătút.

One of the more complex, but significant aspects of Romanian conjugation, introduced by this particular system, is the rule by which the various non-mid theme vowels (e.g. -a, $-\hat{i},-\mathrm{i}$ ) change to mid at different points in the conjugational cycle, as they work their way through desinential components one, two, and three. Once they reach the point at which they attain the value of a mid vowel, they observe deletion rules as would any other mid vowel,
getting deleted before a high vowel. Therefore, it is extremely important to be aware of the point at which each of these theme vowels changes to mid. The process, which will be examined individually for the specific verb types in a later chapter, can be summarized by stating that a front theme vowel (i.e. -i) changes to mid at the point it reaches the second desinential component, while the non-front (i.e. central -a and -î) theme vowels undergo this change at the point of being combined with the third desinential component.
C. Unstressed non-mid vowel+high vowel: deletion of second vowel.

When an unstressed non-mid vowel is combined with a high vowel, the second vowel is deleted. For example, in 3 pl kînt-a+ $\mathbf{\varnothing}-\mathbf{u}-\varnothing$, once the first desinential zero is lost and the theme vowel moves to the second desinential position, the combination $-\mathrm{a}+\mathrm{u}$ - results in the loss of the second vowel, which eventually gives us the 3pl cântă.
D. Front vowel+stressed low vowel: front vowel - glide.

This combination depends on having a stressed low vowel which directly follows the theme vowel, a situation that occurs in the imperfect tense. The possible preceding theme vowels are either front $(-i /-e)$ or central $(-a /-i)$. Of course, central theme vowels will just be deleted by the central+central rule, mentioned in section A, above. The front vowels are glided, i.e. they lose their syllabicity: i+á $-\mathbf{i}+$ á, and e+á- eedá. Due to a later rule which changes unstressed high theme vowels to mid, the glide is lowered to e e, which can be seen in the imperfect of both -i and -e theme verbs, e.g. $1 \mathrm{sg} / 1 / \mathrm{pl}$ săreám (inf. sărl), băteám (inf. báte).

Note the deletion of the theme vowels in imperfects cântám (inf. cântâ) and coborám (inf. coborî́).
E. Stressed theme vowel plus desinential vowel: gliding of a following high vowel.

When a theme vowel constitutes the only vowel of the basic stem, it is stressed throughout the conjugation. A following high vowel becomes a glide after such a stressed vowel. E.g. dá 'to give', which has the basic stem d-a+, combines with both of the $-\mathbf{u}$ endings to yield dáu [daú]. Note that the rule which generally converts the -a theme to mid does not apply here, since it only applies to unstressed theme vowels. The $1 \mathrm{sg} / 3 \mathrm{pl}$ form dáu gives us a unique opportunity to see the combination of theme plus desinence without the operation of vowel deletion and change of theme vowel to mid, due to the stress on the theme. It confirms the basis for my assumptions concerning the underlying vowels of the desinence.
III. Change of theme vowels to mid vowel height.

Unstressed theme vowels are subject to a rule which changes them to mid vowel height during the process of conjugation. Obviously, this does not have any effect on the theme vowel which has a basic, underlying value as a mid vowel, i.e. -e, nor on a stressed non-mid vowel theme vowel, which received a default stress due to its location before a consonant (e.g. fug-í+ Ø-m-u fugím 'flee, pres. 1 pl'). The specific rule's application to the applicable unstressed theme vowels, high front vowel -i, high central vowel -î (which is derived from underlying -i after $-r$ ) and low central vowel -a, requires special explanation, due to its
correlation to the three-part segmentation of the verb desinence which has been introduced above.

Specifically, the change of high front -i to mid must be applied at the point at which the theme vowel is combined with the second desinential component, i.e. the desinence of number. However, the change of the central theme vowels (-a and -î) to mid takes place only at the point when the theme vowel is combined with the third desinential component, i.e. the desinence of person. The consequence is that there are four ${ }^{4}$ possible theme vowels at the start of the conjugation process (i.e. $-\mathbf{e},-\mathbf{i},-\mathbf{i},-\mathrm{a}$ ); we then see have three different mid vowel situations at each desinential component, i.e. as each theme vowel makes its way through the first, second, and third morphemes of each verbal desinence in the process called conjugation. It should be emphasized that the reason the change to mid is so critical is that unstressed mid vowels are deleted before high vowels, but the opposite process occurs when a high vowel is preceded by a nonmid vowel. Since it happens that high vowels are most common sort of vowel within the conjugational desinence, in order to know which vowel gets deleted at any point in the process, one must know the mid or non-mid status of a given theme vowel at each of the three desinential stages, corresponding to the segments of the desinence which I have set up above in chapter 2. These differences can be summarized as follows:

[^3]1. Basic mid theme vowel -e is the simplest, since it continues to behave like a mid vowel throughout all three components of the conjugation process, i.e. in combination with all three desinential components. Therefore, it is equally deleted before high vowels at desinential components one, two, and three:
a. Component one: bat-e+ú-... $\rightarrow$ bat $-\notin+$ ú... $\rightarrow$ batú... (e.g. simple perfect 2 nd pers. sing. bătúşi and participle bătút).
b. Component two: bat-e+Ø-u-Ø. After removal of the zero in component one, the theme vowel comes in direct contact with the high vowel of component two: bat $-\dot{+}+\mathbf{u} \rightarrow$ bat $\psi \rightarrow$ bat (bat, pres. 3rd pers. plur.). Note that final unstressed $-u$ itself is deleted, after having caused the deletion of the mid vowel -e theme.
c. Component three: bat-e+ $\varnothing-\varnothing-\mathbf{u}$. After the removal of the zeroes in the first two desinential components, the theme begins its interaction with the high vowel of the third desinential component. The results are the same as with the second component, since the theme vowel counts as a mid vowel in all desinential positions: bat-e+-u $\rightarrow$ bat $-\boldsymbol{q}+\mathbf{u} \rightarrow$ bat $\psi \rightarrow$ bat (bat, pres. 1 st pers. sing.).
2. High front theme vowel -i behaves like a mid vowel for the purposes of deletion, starting only with the second desinential component. As noted above, the critical feature for the specific time when the -i theme becomes mid is its frontness. Therefore, the frontness (or perhaps, -back feature) of the theme vowel -i conditions its change to mid at the second conjugational component. In the following examples $a, b$, and $c$, the various deletions are reviewed, as above for the basic mid theme vowel:
a. Component one: sar-i+ú-... $\rightarrow$ sar-i+ $\boldsymbol{\mu}+\ldots \rightarrow$ sarí... (e.g. simple perfect 2 nd pers. sing. săríşi and participle sărít). Here we can observe that the second vowel (-ú) is deleted, since -i has not attained the status of a mid vowel as yet. The deletion of a stressed vowel causes the stress to move to the next vowel to the left, which is exactly what can be seen here, where the theme vowel -i acquires stress as soon as the -ú is deleted.
b. Component two: sar-i+Ø-u-Ø. After removal of the zero in component one, the theme vowel comes in direct contact with the high vowel of component two and immediately undergoes the change to mid, before any deletions occur. I.e. there must be a rule of the sort:

- stressed
+ front $\quad \rightarrow$-high/___- 2nd desinential component
sar-i+Ø-u $\rightarrow$ sar- $\mathbf{i}+\mathbf{u} \rightarrow$ sar-e $+\mathbf{u} \rightarrow$ sar- $\boldsymbol{\phi}+\mathbf{u} \rightarrow \operatorname{sar} \phi \rightarrow$ sar (sar, pres. 3rd pers. plur.). Note that final unstressed $-u$ itself is deleted, after having caused the deletion of the mid vowel -e.
c. Component three: sar-i+Ø-Ø-u. After the removal of the zeroes in the first desinential component, the second zero is reached and the front vowel theme undergoes the change to a mid vowel -e. It begins its interaction with the high vowel of the third desinential component with the status of mid vowel. The results are the same as when the second component contains $-u$, since the theme vowel counts as a mid vowel in both second and third desinential positions, accounting for the syncretism of those two forms:
 pres. 1 st pers. sing.).

3. High central theme vowel -î and low central theme vowel -a act like mid vowels only for the purposes of combining with vowels of the third desinential segment. Since the common feature of these two vowels is centrality (or non-frontness), that is obviously the critical factor for the change to mid at the third desinential component.
a. Component one: kînt-a+ú-... $\rightarrow$ kînt-a+ (e.g. simple perfect 2 nd pers. sing. cântáşi and participle cântát). Here we can observe that the second vowel (-ú) is deleted, since -a has not attained the status of a mid vowel as yet. The deletion of a stressed vowel causes the stress to move to the next vowel to the left, which is exactly what can be seen here, where the theme vowel -a acquires stress as soon as the -ú is deleted.
b. Component two: at this stage, central vowels are not yet changed to mid. Therefore, they are not deleted before the 3 pl ending $-u$ of the second desinential component; rather, they cause the deletion of the high vowel -u: kînt-a+u...... kînt-a+ kobor $-\hat{\imath}+\mathbf{u} . . . \rightarrow$ kobor $-\hat{\imath}+\hat{\psi}$. When the next desinential position is reached (component 3), central vowels become mid, changing these two forms to kîntə, koborə. Finally, a diphthongization rule applies to the stressed o before mid in the latter form, and the two actual forms are: cântă, coboară. This clearly reflects the fact that the $-u$, rather than the them vowel, was deleted in position two.
b. Component three: kînt-a+ $\varnothing-\varnothing-u$. After the removal of the zeroes in the first two desinential component, the third position is reached and the unstressed central theme vowel theme undergoes the change to a mid vowel -ə. Thus, it begins its interaction with the high vowel of the third desinential component having the status of mid vowel. This implies that central theme vowels are subject to a rule of the sort:
-stressed
-front $\quad \rightarrow$-high/_-_- 3nd desinential component
$k i ̂ n t-a+\varnothing-\varnothing-u \rightarrow k i ̂ n t-a+u \rightarrow k i ̂ n t-\partial+u \rightarrow k i ̂ n t-\not \subset-u \rightarrow k i ̂ n t-u \rightarrow k i ̂ n t \psi$ $\rightarrow$ kînt (cânt, pres. 1 sg ).

Since mid and non-mid vowels have different properties of deletion before other vowels, it is critically important to observe the mid or non-mid vowel property of a given theme vowel as it makes its way through the process of conjugation, which I am presenting as a three-stage sequential process of combination with the first, second, and third desinential components of the verb. The ultimate importance of the difference between where the change of theme vowel $\rightarrow$ mid occurs is that it is directly responsible for the differences of syncretism. Romanian verbs are said to be divided into two large groups, in terms of whether there is syncretism between the singular and plural numbers of the third person, on the one hand, or between the first person singular and third person plural forms, on the other. Generally, no reason or explanation is given for this difference and it is just taken as a basic feature of each verb. Therefore, two different conjugation types are necessary. By contrast, I derive the difference of syncretism as a
direct consequence of which theme vowel is used and the differential point at which it is subject to the change to a mid vowel.
IV. Rules for deletion and vowel $\rightarrow$ mid at each stage of conjugation.

Examined in a slightly different way, we can say that any Romanian verb form is subject to the following set of rules as it undergoes conjugation, i.e. as the theme vowel combines with the desinential components at points one, two, and three.

Conjugational Point One: Theme + desinential component one (tense).
Rules of vowel deletion and gliding.
Since this position is a zero desinence in the present, it has no effect of deletion on a theme vowel. In the imperfect, position one is stressed central low vowel -á, where the centrality causes the central theme vowels to be deleted (e.g. coborám, cântám ( $1 \mathrm{sg} / 1 \mathrm{pl}$ ) and the stressed low features of the desinence cause the front themes to be glided (e.g. săreám, băteám).

Conjugational Point Two: Theme + desinential component two (number).

Rule 1. Front theme $\rightarrow$ mid
As noted above, theme vowel -i is lowered to mid at this point in the conjugation process, regardless of the nature of the desinence in component two. Thus, even if the entire desinence consists of zeroes (e.g. 3sg), the -i will be lowered to mid at this point, resulting in a form with [e] instead of [i], e.g. sare.

Rule 2. Rules of vowel deletion and gliding.
Basic stems with theme vowels -e and -i will both have the status of unstressed mid vowels at this point in the conjugation. Consequently, both will be subject to deletion before a high vowel, which occurs in the second desinential component of the $3 \mathrm{pl}(-\mathbf{u})$, as mentioned. Thus, the -e is deleted before the $-\mathbf{u}$. The -u itself remains intact if it is preceded by an obstruent+liquid cluster, a type which exists for basic stems in -e, but does not happen to occur in basic -i stems (e.g. úmple 'to fill', úmplu $1 \mathrm{sg} / 3 \mathrm{pl}$ ). If another consonant type precedes, the final -u is deleted: sar, bat. Non-front theme vowels will not yet be converted to mid at this point and, consequently, cause the deletion of the $3 \mathrm{pl}-\mathrm{u}$ : cấntă, coboară. Stressed theme vowels cause no deletion, but cause the gliding of the -u desinence: dáu, stáu, ştíu.

Conjugational Point Three: Theme + desinential component three (person)

Rule 1. Central theme $\rightarrow$ mid
It is at this point that verbs in -a and -î undergo the change of theme vowel to mid.

Rule 2. Rules of vowel deletion and gliding.
At this point in the conjugation, all four possible unstressed theme vowels have all been converted to mid. Therefore, they all get deleted before both the 1 sg and 2 sg high vowel desinences of person (-i, $-\mathbf{u}$ ) in component three (cf. central 1 sg cânt, áflu, cobór and front sar, úmplu, bat).

To recapitulate, the main value of this system lies in the fact that the actual verb forms appear rather complex on the surface. If we take six examples which have recently been discussed, we have the following forms in the present 1 sg , 3 sg , and 3pl, i.e. the forms which are subject to syncretism:

| Infinitive: | cânta | afla | bate umple | sări | coborî |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1 \mathrm{sg}:$ | cânt | aflu | bat umplu | sar | cobor |
| $3 \mathrm{sg}:$ | cântă | află | bate umple | sare | coboară |
| 3 pl: | cântă | află | bat umplu | sar | coboară |

Recall that the actual three-part basic desinences for each are identical for all of the verb types, but different from each other, as follows:

| 1 sg | $-Ø$ | $-Ø$ | $-u$ |
| :--- | :--- | :--- | :--- |
| 3 sg | $-Ø$ | $-Ø$ | $-Ø$ |
| 3 pl | $-Ø$ | $-u$ | $-Ø$ |

X. Vowels alternations in final position.

1. High vowel changes.

As alluded to previously, the high vowels i and u undergo major changes in word-final position: ${ }^{5}$ [i] is changed into the nonsyllabic glide [j], while final [ $u$ ] is simply deleted. The question of whether the [j] is simply a symbol for the palatalization of the preceding consonant or a separate front glide segment on its own

[^4]has been debated by Romanian linguists. I will consider it to be a separate segment, which can induce a major change in certain preceding consonants (the most important of which are the velar mutations $\mathrm{k} \rightarrow \mathrm{c}$, $\mathrm{sk} \rightarrow \mathrm{s} t \mathrm{and} \mathrm{g} \rightarrow \mathrm{g}$; and the dental changes $\mathrm{s} \rightarrow \mathrm{s}, \mathrm{t} \rightarrow \mathrm{t}$, and $\mathrm{d} \rightarrow \mathrm{z}$. The full range of these consonant mutations is the subject of the next main section.
2. Raising of final stressed -a.

When a stressed -á theme vowel appears either word finally or immediately precedes a word final consonant in a conjugated form, it is subject to being raised to [ə́] (spelled ă). For example, the simple perfect 3 sg of basic stems in the theme vowel -a: e.g. cântắ, as well as present tense 1 pl : cântắm. This also applies to the present tense 3 sg of those verbs which only have a theme vowel, e.g. dắ, stắ. On the other hand, the identical formations do not have this alternation when they belong to the non-conjugated series of infinitive and participle: e.g. cântá inf., cântát part. Note that the 3 sg impf. cântá is an apparent, but not real exception to this rule, since the -á vowel in this case is not the theme vowel, but the imperfect tense desinence, which is not subject to this change.

## XI. Consonant mutations in Romanian conjugation.

Table 1 and 2 summarize the situation of consonant mutation in the Romanian verb. The first table indicates whether the mutation is present for the given type of verb, in the grammatical form indicated. Each separate line indicates a separate mutational type, as do the examples in table 2 , which are keyed to the entries in table 1. The eleven examples mean that there are eleven patterns of mutation, which will be reviewed in this
section, in order to point out the specific individual properties of each. It should be mentioned that the regular mutational types are all found in the core vocabulary of Romanian. However, there are recent words, neologism, and not fully assimilated words which do not have these mutations. As a rule, even if a word lacks the regular full mutational pattern, it will at least have mutation before the 2 sg ending -i (which reduces to [j] in word final position), where: $\mathrm{k} \rightarrow \mathrm{c}, \mathbf{s k} \rightarrow s ̧ \mathrm{t}, \mathbf{g} \rightarrow \mathrm{g}, \mathrm{t} \rightarrow \mathrm{t}, \mathrm{d} \rightarrow \mathbf{z}, \mathbf{s} \rightarrow \mathbf{s ̧}$. For example, mirosi'to smell' lacks the full mutation, found in ieşi (basic ies-i+). Such words would have to be marked in the lexicon as not subject to the regular mutation. Since the mutations of $k / g$ and $t / s / d$ are predictable for core vocabulary, they are represented in basic forms with the velars and dentals, rather than their mutated values, e.g. fak-e+, fug-i+, simt-i+, ies-i+, aud-i+ imply the infinitives face, fugi, simţi, ieşi, auzi.

Front vowels are the cause of the mutations in question. In the case of velars, both the high and mid front vowels (-i and -e) cause mutation, while in the case of dentals it is primarily only the high front vowel -i which has this palatalizing effect. In most cases, the palatalization is ordered after vowel deletion, so that a loss of a front vowel and retention of a back vowel will mean no mutation. However, there is an important exception to this in the case only of stems in voiced final dental consonant -d, in contrast to stems in the voiceless dentals -t and -s (compare the participles crezút ('believe, part.') from kred-e+, but bătút and ţesút 'weave, part.').

## A. Velar stems.

The first group of mutating verbs listed is that of velars. They have mutation in all instances before the two front vowels -i and -e, but
only when they are not deleted. Before the imperfect -á ending, there also is mutation, which requires comment. In the derivation, the combination $-\mathrm{k}-\mathrm{e}+$ á first produces gliding of the $\mathrm{e} \rightarrow \mathrm{e}$, as well as the mutation of velars: -čéá. However, the glide is lost before the palatals [č, ğ], leading to such forms as [fačám, fuğám]. This represents the only case in which velars mutate but the evidence of a front vowel has been lost. The orthography does write the front vowel plus -á, in such cases, however: făceam, fugeam.
B. Voiceless dental stops.

Across the board, it is the high front -i desinences that condition the mutation in a preceding $t \rightarrow t$. One important point must be made about this, concerning the status of the -i theme before the imperfect -á desinence. In the orthography and literary pronunciation, both -e and -i themes result in the mid front glide [e] before the -á ending, spelled -ea in both cases, e.g. băteam, simţeam. However, the difference of mutation indicates that the at the point of combination with desinential position one, of tense, the combinations should be considered to be t-e+á and t-i+á, respectively, especially in view of the earlier rule established about the fact that the high front vowel -i only becomes mid at the second desinential position. The fact of a differential mutation at the first desinential position is a confirmation of the correctness of this rule. Therefore, at the point of the combination with desinential position one and the concomitant consonant mutation, the difference between unstressed high and low is still present. At a later point in the conjugation, unstressed non-theme vowels all generalize mid vowel height, including both vowels and glides.

There is a special rule which applies to sigmatic verbs with roots ending in -t (i.e. basic ad-mit-(s)+e). They manifest the mutation of $t \rightarrow t$ in the gerund form, i.e. admiţând, while the nonextended bát-e+ has unmutated bătând. This can be treated either as an exception, an influence of the -s- itself on the preceding -t, or a part of the pattern found regularly in -d verbs, which do have this mutation before gerunds. That is a general exception to the rule that velars mutate before high and mid vowels, but dentals only before high. In the case of a few isolated forms before underlying mid -e, both sigmatic -t and -d do experience mutation.
C. Voiced dental stops.

As just alluded to, the main difference of voiced dental stops, as compared to the unvoiced, is that they have mutations in both gerund and participial forms. However, these need to be further qualified, based on phonological environment.

The d-e+ acts almost the same as t-e+, except that those in -d stems regularly have consonant mutation before the -î of the gerund (before which the theme -e is deleted), e.g. crezând, pierzând, in contrast to bătând. However, even -d verbs themselves differ in terms of whether they have mutation in the participial form in -út and the related simple perfect forms beginning in -ú-. When -d verbs are preceded by a single consonant (e.g. cred-e+), they are subject to both the gerund and participial mutations, but in cases where a consonant precedes the -d, the gerund has the mutation, but it is blocked in the participle (pierzând, but pierdut). In the imperfect, all of the dental types are alike not having the mutation after -e theme vowels
(before -á), but having it after the -i theme (credea, pierdea, but auzea, i.e. kred-e+á $\rightarrow$ krędeá, pierd-e+á $\rightarrow$ pierdéá, but aud-i+á $\rightarrow$ auziá $\rightarrow$ auzéá $)$.
D. Voiceless dental fricative.

Stems in -s are very few in number, e.g. ţese (ţes-e+), ieşi (ies-i+), and are regular in following the rule that mutation only occurs before -i, but not -e. Therefore, gerunds and participles with deleted -e have no mutation (ţesând, ţesut), in contrast to the situation mentioned above for stems in final consonant -d.

Table 1. Consonant mutation in Romanian verbs.

| Pres.-Subjunct. | Imperfect | Infinitive |  | Gerund |
| :---: | :---: | :---: | :---: | :---: |
| -e+ -i | e+á i+á | $e+\varnothing$ i $+\varnothing$ | e+înd | i+înd |
|  |  |  | $\rightarrow$ ind | $\rightarrow$ ind |

Partic./Simp. Perf./Pluperf.
e+út i+út
$\rightarrow$ út $\rightarrow$ ít

## Stem-final

Velar
$-(\mathrm{s}) \mathrm{k},-\mathrm{g}+\quad+\quad+\quad+\quad+\quad+\quad-\quad+$

Voiceless
Dental
-t - +
(-t-(s)-e+
Voiced
Dental -d
(-Cd-e+

## Fricative

Example list:

| Velar | e: sk-e | fak-e+ <br> kresk-e+ | i: fug-i+, |
| :---: | :---: | :---: | :---: |
| Voiceless |  |  |  |
| Dental | e: | bát-e+ | $\mathrm{i}: ~ s i m t-i+$ |
|  | -(s)-e: | admit-(s)-e+ |  |
| Voiced |  |  |  |
| Dental | e: | cred-e+ | i: aud-i+ |
|  | CC-e: | pierd-e+ |  |
| Dental |  |  |  |
| Fricative | e: | ţes-e+ | i: ies-i+ |

To complete this section on consonant mutation, the relevant paradigmatic forms will be given (orthographically) for the eleven verbs exemplified above.

Present tense

| 1 sg | fác <br> bát <br> créd <br> ţés | crésc <br> admít <br> piérd <br> iés | fúg símt aúd | 1 pl | fácem <br> bátem <br> crédem <br> ţésem | créştem <br> admítem <br> piérdem <br> ieşím | fugím simţím auzím |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2sg | faci báţi crézi ţéşi | créşti <br> admíţi <br> piérzi <br> iéşi | fúgi <br> símţi <br> aúzi | 2 pl | faceţi <br> báteți <br> crédeți <br> ţéseţi | créşteţi <br> admíteţi <br> piérdeţi <br> ieşíţi | fugíți simțíţi auzíţi |
| 3 sg | fáce báte créde ţése | créşte <br> admíte <br> piérde <br> iése | fúge símte aúde | 3 pl | fác bát créd ţés | crésc <br> admít <br> piérd <br> iés | fúg símt aúd |

Subjunctive

| 1 sg | fác | crésc | fúg |
| :---: | :---: | :---: | :---: |
|  | bát | admít | símt |
|  | créd | piérd | aúd |
|  | ţés | iés |  |
| 2sg | faci | créşti | fúgi |
|  | báţi | admíţi | símţi |
|  | crézi | piérzi | aúzi |
|  | ţéşi | iéşi |  |
| 3sg | fácă | creáscă | fúgă |
|  | bátă | admítă | símtă |
|  | creádă | piárdă | aúdă |
|  | ţeásă | iásă |  |



Imperfect


Participle (similar stem for Simple Perfect and Pluperfect)

| făcút | crescút | fugít |
| :--- | :--- | :--- |
| bătút | admís | simțít |
| crezút | pierdút | auzít |
| țesút | ieşít |  |

XII. Comments on vowel alternations in conjugation.

Many vowel alternations have already been discussed as they pertain to the morphemes of theme vowel and desinence. These grammatical morphemes, along with the theme vowel extensions, participate in regular vowel alternations. As far as roots are concerned, they are splits into native and non-native vocabulary in terms of a large number of phonological and morphophonemic rules of the language. Since the notion of native and non-native may not be obvious and may even be inconsistent across native speakers, a dictionary or word list would have to assume that the phonological rules are applied, unless a word is exempted, as we have seen above in the case of some of the consonant alternations. In the following sections, some of the major series of vowel alternations will be presented in terms of the basic vowel of the series.

1. Basic -e and -o series.

The vowel -e is one of the most complex units, since the alternation has several subtypes, depending on whether the preceding consonant is a labial, husher, $\mathbf{r}-$, or another, neutral value. The most important examples of the basic e series are indicated in the following table. It is useful to keep them in a broader context. Earlier, we saw that unstressed desinential vowels tend to be changed into mid. This brings a degree of redundancy to unstressed vowels. Thus, if mid vowel height is identified with unstressed position to at least some degree, it is logical that stressed mid vowels might be impelled to go in a non-mid direction. Of course, that is precisely what they do, but on the condition that they are stressed mid followed by yet another mid
vowel in the next position, where the stressed mid changes to a low vowel preceded by a mid vowel glide.

A conflicting tendency occurs when a labial or -r precedes the front mid vowel -e. In this case, it backs to -ă [ə] in certain environments. For labials, this is only the environment preceding a non-palatal consonant, while for the trill it happens in all environments. Later, upon diphthongization, such labials and trills acquire a hypothetically derived *әa diphthong, which must lose its schwa component and, therefore, ends up with the vowel -a in vadă, arată, since it cannot appear as the phonologically expected *văadă/*arăată. A similar change occurs after hushers, which might be logically expected to have the *sseadă combination; however ea $\rightarrow$ a after hushers, such as ş-, leaving a again instead of the diphthong which would have been expected, based on analogy with the neutral environment of non-labials, non-trills, and nonhushers, shown first in the table. The result is that the student must memorize the considerable morphophonemic variation which results from four different kinds of initials splitting the single pie of diphthongization, instead of only the single pattern of plec-a+. On the other hand, o-diphthongization is much simpler and regular than that of e. In fact, not a single one of the e-types show the perfect symmetry of the o-type, in which diphthongization occurs before both front and back mid vowels, but not in closed position.

| Basic Vowel | Before final plain | Before final palatal | Before back mid vowel | Before front mid vowel |
| :---: | :---: | :---: | :---: | :---: |
| e: |  |  |  |  |
| Neutral+e | plec | pleci | pleacă | plece |
| Labial+e | văa | vezi | vądă | vede |
| Husher+e | şed | şezi | şadă | şade |
| $r+e$ | arăt | arăţi | arată | arate |
| O: |  |  |  |  |
| Neutral+e | cobor | cobori | coboară | coboare |

Although there are many lexical exceptions, the -o series also can include an alternation to -u in unstressed position, which may alternate not only with stressed -o, but stressed -oa as well, e.g. putea 'be able, inf.', pot 1 sg , poate 3 sg ., in which the first root vowel is unstressed, the second is stressed before a final consonant, and the third is stressed before a mid vowel, accounting for the three allomorphs. If the consonant mutation $t \rightarrow t$ before the $-i$ ending is considered ( $p o t ̧ i 2 \mathrm{sg}$ ), yet another allomorph of the same root can be seen, thus illustrating four forms within these examples. In one instance (roade 'gnaw, inf.'), the basic stem is rod-(s)-e+. When the present tense or infinitive stress falls on the root $\mathbf{o}$, preceding a mid vowel in the next syllable, the $0 \rightarrow 0$, as seen in the infinitive and 3 sg roade. But note $1 \mathrm{sg} / 3 \mathrm{pl}$ rod, 2 sg rozi.

The -e series also includes an important alternation to ea in absolute word-final position or preceding a final glide $-\mathbf{u}$. This can be seen in the realization of the infinitive of basic b-e+, i.e. basic b-e+ $+\varnothing \rightarrow$ beá 'drink', $1 \mathrm{sg} \mathrm{b}-\mathrm{e}+\varnothing+\varnothing+\mathrm{u} \rightarrow$ beáu.
2. The -a series.

This series refers to the numerous instances when a root -a appears under stress, but it gets raised to -ă when the stress moves to another syllable, either due to a consonant in the ending, which causes default stress to fall on a later syllable, or due to the fact that a basically stressed vowel, such as imperfect -á, appears in the ending. For example, under stress we have báte, bát, bátem, báteţi, but outside stress, the root changes to băt-, as in băteam, bătút, bătấnd, bătúi, etc. Note that initial a-does not participate in the alternation of stressed -á and unstressed -ă, e.g. ará 'plow, inf.', ár 1 sg .
3. The -i series.
a. Stressed i , unstressed e.

In a small number of verbs, especially vení'come' and its compounds, a basic i appears under stress, but is lowered to a mid vowel (e) when unstressed. The basic form is vin- $\mathbf{i}+$, but since the unstressed $\mathfrak{i} \rightarrow e$ rule does not apply across the board, this verb would require a lexical indication to the effect that such a minor rule applies. E.g. 3 sg víne, 1 pl vením. The rule recalls the change of unstressed $\mathrm{a} \rightarrow \mathrm{\partial}$, as seen in báte, but bătút, in that both cases present non-mid vowels under stress, which alternate to mid in unstressed position. Of course, this is also the general rule that applies to theme and ending in conjugation. When it applies to roots, there are lexical exceptions, in contrast to the obligatory nature of the rule in conjugation.
b. Backing of i after labial.

Previously, it was noted that e often backs to $\partial$ when preceded by a labial and not followed by a front vowel in the next syllable (e.g. vede but văd when no front vowel follows). This post-labial backing rule can also apply to the high vowel $i$, as seen in a small number of verbs, e.g. vinde 'sell, 3sg' with following front vowel, but vând 1 sg , with no following front vowel.
4. Backing and fronting of mid vowels after glides.

The front glide [j] can only be followed by the front mid vowel [e], not [ə]. Therefore, if the regular ending calls for [ə], the vowel is fronted to [e]. E.g. the theme vowel -a is regularly changed to mid [ə], when unstressed in the process of conjugation, as in cântă, inf. cântá. However, when a [j] happens to precede this vowel, it changes to mid [e], rather than [ə]: táie 'cut', inf. tăiá. In like manner, the back glide [w] cannot be followed by the front mid vowel and must substitute [ə] instead. Regular cânta forms $3 \mathrm{sg} / 3 \mathrm{pl}$ subjunctive cânte, but inf. ploua 'rain' has subj. plouă.

## Chapter 5. Conjugation of the Major Verb Types

## I. Introduction.

This chapter returns to the basic ten verb types of Guţu Romalo, which were first introduced in the first chapter. The ten examples, first in basic stem notation, next in the usual infinitive form of dictionaries, are as follows:

| Basic Stems | Infinitives |
| :--- | :--- |
| ar-a+ | ara |
| lucr-(ez)-a+ | lucra |
| kobor-î+ | coborî |
| su-i+ | sui |
| sar-i+ | sări |
| is-prav-(esk)-i+ | isprăvi |
| par-e+ | părea |
| în-cép-e+ | începe |
| prind-(s)-e+ | prinde |
| rup-(s)-e+ | rupe |

Of course, Guţu Romalo meant these examples to represent ten different conjugation types, which implies ten different sets of grammatical endings. The idea which I have presented herein is that the ten types all can use their basic stems plus a system of rules, rather than ten separate systems of endings. The basic stem types contain features which the student should learn to recognize, in order to properly conjugate, i.e. to predict virtually all of the verbal paradigm. One by one, each of the verbs will have its paradigm presented and comments will be provided about which rules must be applied to derive the various parts of each paradigm. Particular attention will be paid to how each verb differs from the other, especially for similar verbs, which
may differ only by the presence of an extended suffix. After the listing of the ten major types, some of the most important irregular formations will be discussed.

The basis for classification is the theme vowel in the basic stem. Each of the three major theme vowels is further subdivided into a plain type and extended suffix type, yielding six major types, plus the minor type in theme -î, in its non-suffixed and suffixed varieties. These eight types really should be sufficient as a listing of major types, since the additional four basic types added by Guțu Romalo have particular phonological stem properties. Here are some of the ways in which the ten types could be further reduced on the basis of phonological predictability.

1. When an -i theme is preceded by a root final vowel, rather than consonant (e.g. su-i+), certain predictable differences occur in the regular pattern of -i theme verbs, related to the backing of the theme when it is unstressed. This backing also occurs in -i theme verbs which have marked root stress on the second pre-theme syllable (e.g. sprijini), plus a few isolated verbs which do not have these special phonological characteristics.
2. An extended -s suffix has different behavior when it is preceded by labial or dental consonant. E.g. prind-(s)-e+ will not use have a -t as its participial ending (cf. prins), but rup-(s)-e+ will (rupt). The situation becomes more complex when a velar precedes the extended suffix, since some velars change to labials in preconsonantal position (e.g. kok-(s)-e+), while others do not (e.g. duk-(s)-e+). Since there is no obvious way to distinguish these two types of velars, verbal roots which end in velars that change to labials must be lexically specified.
3. The difference between părea and începe can be explained by a simple stress difference, since the final stress of părea is what causes its -e theme to diphthongize to ea in the infinitive, while the root stress of incepe means that the stem vowel will not be diphthongized in the infinitive.

## II. Format.

For each of the ten basic verbs to be covered in this chapter, the following sections will be presented:

1. The basic verb stem is provided, together with the "dictionary" form, i.e. the infinitive, in regular orthography.
2. Each stem is then shown combined with the basic declensional set of the major grammatical paradigms and forms, with the addition of a correct stress mark in each form. This abstract representation is referred to as the "basic paradigm." In the category of conjugated endings, this includes the paradigms for present, subjunctive, imperfect, simple perfect, and pluperfect. For the non-conjugated set, this includes the infinitive, verbal substantive, gerund, and participle.
3. Immediately following are the same paradigmatic forms in normal orthography, except for the fact that stress is represented. This is referred to as the "orthographic paradigm."
4. After each such paradigm, comments will then follow about the procedure of conjugating each stem in the given paradigm, with special reference to vowel deletions and other major changes. In the interest of space, the comments will not repeat identical operations; i.e. if the same rules of deletion occur both in the first illustrated verb and a later one, they will only be explicitly pointed out the first time.

## Listing of Ten Basic Verb Types and Their Derivation

I. Non-extended -a theme. Basic stem: ar-a+. Infinitive: ará 'plow'.

1. Present


## 2. Subjunctive ${ }^{6}$

[^5]
## Basic Forms

Singular
Person
1.
ár-a+Ø-Ø-u-Ø
ar-á+ Ø-m-u-Ø
2.
ár-a+Ø-Ø-i-Ø
ar-á+ - $-\mathbf{t - i}-\varnothing$
3.
ár-a+Ø-Ø-Ø-e
ár-a+Ø-u-Ø-e

## Orthographic paradigm

Singular
Plural
Person
1.
ár
arắm
aráţi
3.
áre
áre

In the present and subjunctive a default stress mark will have to be assigned.
The other paradigms have a stress mark in the desinence and do not require any further default stress. In the third person of the subjunctive, the actual ending is a mid vowel of the minus alpha frontness of the theme.

When we come to the actual conjugation of the present tense, there are only three somewhat complicated combinations, in the $1 \mathrm{sg}, 2 \mathrm{sg}$, and 3 pl , since these are the only instances in which we get a vowel+vowel combination in the present. In the 1 sg and 2 sg , this occurs at desinential position three, meaning that the theme first must undergo the change to mid, i.e. $\partial$. The combination then turns out to be $\partial+u$, and $\partial+i$, respectively. Based on the major vowel deletion rule, an unstressed mid vowel is deleted before a high, so the theme vowel is deleted in both instances, leaving final high vowels $-u$ and $-i$. In final position, $\mathbf{u}$ is deleted after the single consonant shown here ( $a r u \rightarrow$ ar and aramu $\rightarrow$ aram), while $-i$ is reduced to the glide $-j$ (ari $\rightarrow a r j$ ). In the 3 pl ,
the vowel+vowel combination occurs at desinential position two, meaning that the theme vowel status is still that of a low vowel, not mid. Therefore, in this instance of $a+u$, the second vowel will be deleted, leaving the theme vowel -a intact (i.e. ara, later $\rightarrow$ arə, ară). This makes it identical to, or syncretic with the 3 sg form, since here the theme vowel only interacted with zeroes. However, when the third desinential position is reached, the theme vowel of both 3 sg and 3 pl undergoes its change to mid, leaving the eventual -ă ending: ară. In the 1 pl form, stressed á is lowered to ə́, which happens to a stressed theme vowel á in either final position (as in the 3sg simple perfect) or pre-m position of the 1 pl , but not the pre-glide position of 2 pl (cf. arăm, but aráţi). Since this lowering of a stressed á theme vowel only takes place in conjugated forms, it affects the present, but not the infinitive (note final á in ará). Note the regular 2 pl palatalization of $\mathrm{t} \rightarrow \mathrm{t}$ before j , which occurs once the final $-\mathrm{i} \#$ gets reduced from a vowel to a glide.
3. Imperfect

## Basic Forms

Singular
Person
1.
ar-a+á-m-u
ar-a+á-Ø-i
$a r-a+a ́-\varnothing-\varnothing$
3.

Plural
2.
ar-a+á-t-i

Singular

## Orthographic paradigm

Person
1.
arám
arái

Plural
arám
aráţi

> 3. ará aráu

In the imperfect, the major complication is identical in all six personal forms, since it involves the theme vowel plus the tense morpheme -á. Due to the deletion of a central vowel before another central vowel, the a+á $\rightarrow$ á. We know that the first, rather than the second vowel is the one being deleted, based on such similar combinations as $\hat{i}+$ á $\rightarrow$ á. In the 3 pl , the combination of a stressed low vowel plus high causes the gliding of the second: á-u $\rightarrow$ áu. Notice that when the a is unstressed, this combination results in the deletion of the $u$, as seen in forms of the simple perfect following theme vowel a , as well as in the 3 pl of the simple perfect, in which basic ra-u $\rightarrow \mathrm{ra}$, which eventually reduceds to [rə].

## 4. Simple perfect ${ }^{7}$

## Basic Forms

## Singular

Plural

## Person

1. 

$$
\operatorname{ar}-\mathrm{a}+\mathrm{u}-(\mathrm{i}-Ø)-\mathrm{u}
$$

$$
a r-a+u ́-(r a-m)-u
$$

2. 

$$
a r-a+u ́-(s-Ø)-i
$$

$$
a r-a+u ́-(r a-t)-i
$$

3. 

$$
a r-a+u ́-(Ø-Ø)-\varnothing
$$

$$
a r-a+u ́-(r a-u)-\varnothing
$$

## With Combined morphemes:

[^6]> Singular Plural

Person
1.
$a r-a+u ́-i-u$

$$
\mathrm{ar}-\mathrm{a}+\mathrm{u}-\mathrm{ram}-\mathrm{u}
$$

2. 

ar-a+ú-s-i
ar-a+ú-rat-i
3.
ar-a+ú-Ø-Ø
ar-a+ú-ra-Ø

## Orthographic paradigm

Singular
Plural
Person
1.
arái
arárăm
2.
aráşi
arárăţi
3. ară
aráră

In the simple perfect, the analogous combination also repeats in all six forms, but here I assume it to be a+ú $-\frac{\text { á. Notice that the deletion of a stressed vowel causes }}{\text { a }}$ a concomitant leftward movement of the stress. Since the stressed -á here is a theme vowel, when it winds up in -_(C)\# position, it undergoes a change to mid: -á ${ }^{-3}$ á; thus the 3 sg simple perfect of $\mathrm{ar}-\mathrm{a}+$ is ará̃. Note that the 3 sg imperfect is ará, with no lowering of the final stressed vowel, since it is a desinential vowel, rather than a theme vowel.

## 5. Pluperfect

Basic Forms
Singular
Plural

## Person

1. ar-a+(ú-se)-(Ø-m)-u
ar-a+(ú-se)-(ra-m)-u
2. $a r-a+(u ́-s e)-(\varnothing-s)-i$ $a r-a+(u ́-s e)-(r a-t)-i$
3. $a r-a+(u ́-s e)-(Ø-Ø)-\varnothing$
$a r-a+(u ́-s e)-(r a-u)-\varnothing$

With Combined Morphemes:

| Person Singular | Plural |
| :--- | :---: |
| 1. ar-a+úse-m-u | ar-a+úse-ram-u |
| 2. ar-a+úse-s-i | ar-a+úse-rat-i |
| 3. ar-a+úse-Ø-Ø | ar-a+úse-ra-Orthographic paradigm <br> Plural |
| Person | arásem |
| 1. | aráserăm |
| 2. aráseşi | aráserăţi |
| 3. aráse | aráseră |

In the pluperfect, there are no complications beyond those of the simple perfect, since the contact between theme and tense vowel is the same instance of $a+u$ ú $\rightarrow$ á.

## 6. Non-conjugated Types ${ }^{8}$

| Basic and Orthographic Forms |  |
| :---: | :---: |
| Infinitive: | ar-a+Ǿ-Ø $\rightarrow$ ará |
| Verbal substantive: | ar-a+Ǿ-re $\rightarrow$ *aráre |
|  | (arat is normally used instead of this theoretical form.) |
| Participle: | ar-a+ú-t $\rightarrow$ arát |
| Gerund: | ar-a+î-nd $\rightarrow$ arấnd |

In addition to the present and subjunctive, the infinitive and verbal substantive are the other parts of the paradigm which use an initial zero morpheme. In those instances, the major rule is the loss of the stressed zero and the passing of the stress leftwards, onto the theme vowel, as seen in the infinitive, ará. Note that in conjugated forms, a stressed theme -a- which winds up in word-final position gets raised to [ə] (e.g. ară, 3 sg simple perfect), but this does not happen in the infinitive, since such a final stressed theme -a-is not raised in non-conjugated forms, such as the infinitive. The participle and gerund recapitulate the vowel combination and deletion situations of the simple perfect and imperfect, respectively. In the participle, the vowel is the same ú as seen above. In the gerund, it is î, rather than á, but undergoes the same rules which cause deletion of central vowels before central.

[^7]II. Extended -(ez)-a theme. Basic stem: lukr-(ez)-a+. Infinitive: /ucrá 'work'.

1. Present

|  | Basic Forms |
| :--- | :--- |
| Singular | Plural |

Person

1. lukr-éz-a+Ø-Ø-u lukr-ez-á+ Ø-m-u
2. lukr-éz-a+Ø-Ø-i lukr-ez-á+Ø-t-i
3. 

lukr-éz-a+Ø-Ø-Ø lukr-éz-a+Ø-u-Ø

Orthographic paradigm
Singular Plural
Person

1. lucréz
2. lucrézi
3. lucreáză lucreáză

If we compare the -a- theme with extended suffix -ez- with the simple -a-type, the main point to observe is the loss of the extended suffix in the 1 pl and 2 pl forms. This is simply a result of the loss of this suffix when it is unstressed. The stress of such verbs is of the default type; i.e. it falls on the vowel which precedes the stem-final consonant. Thus, if a desinential consonant follows the extended suffix, as in the 1 pl and 2 pl , the theme-vowel $-\mathrm{a}-$ gets the stress. However, if no such post-theme consonant occurs, the vowel of the extended suffix -ez- receives the default stress, which means that it will not be deleted. Furthermore, when the stressed -e-of the
suffix precedes final schwa, as in 3sg and 3pl, the mid vowel [e] undergoes diphthongization to [ea].

## 2. Subjunctive

|  | Singular | Basic Forms |
| :--- | :--- | :--- |
| Plural |  |  |

3. Imperfect

## Basic Forms

Plural
Person

1. lukr-ez-a+á-m-u lukr-ez-a+á-m-u
2. 

lukr-ez-a+á-Ø-i lukr-ez-a+á-t-i
3.
lukr-ez-a+á-Ø-Ø
lukr-ez-a+á-u-Ø

## Orthographic paradigm

Singular
Plural
Person

$$
1
$$

lucrám
lucrám
2.
lucrái
lucráţi
3. lucrá lucráu

It might be noted here that the extended suffix -ez- only appears in the present and subjunctive forms, since there is no underlying desinential stress and the default stress can fall on the extended suffix itself, which is the condition for the suffix not being deleted. On the other hand, the past tenses (imperfect, simple perfect, and pluperfect) are all distinguished by the important feature of desinential stress, meaning that the extended suffix does not surface in any of these forms. Thus, it must be remembered that the presence of the extended vocalic suffixes -ez- and -esk- in the basic form only implies that they will actually occur in the present and subjunctive forms.
4. Simple perfect

|  | Basic Forms |
| :--- | :--- |
| Singular | Plural |

Person
1.
lukr-ez-a+ú-(i-Ø)-u lukr-ez-a+ú-(ra-m)-u
2.
lukr-ez-a+ú-(s-Ø)-i lukr-ez-a+ú-(ra-t)-i
3.
lukr-ez-a+ú-(Ø-Ø)-Ø lukr-ez-a+ú-(ra-u)-Ø

With Combined morphemes:

| Person | Singular | Plural |
| :--- | :--- | :--- |
| 1. | lukr-ez-a+ú-i-u | lukr-ez-a+ú-ram-u |
| 2. | lukr-ez-a+ú-s-i | lukr-ez-a+ú-rat-i |
| 3. | lukr-ez-a+ú-Ø-Ø | lukr-ez-a+ú-ra-Ø |
| Person | Singular | Orthographic paradigm |
| 1. | lucrái | lucrárăm |
| 2. | lucráşi | lucrárăţi |
| 3. | lucrắ |  |

## 5. Pluperfect

$$
\begin{aligned}
& \text { Basic Forms } \\
& \text { Plural }
\end{aligned}
$$

Person

1. lukr-ez-a+(ú-se)-(Ø-m)-u lukr-ez-a+(ú-se)-(ra-m)-u
2. lukr-ez-a+(ú-se)-(Ø-s)-i lukr-ez-a+(ú-se)-(ra-t)-i
3. lukr-ez-a+(ú-se) -(Ø-Ø)-Ø lukr-ez-a+(ú-se) -(ra-u)-Ø

With Combined Morphemes:

## Singular

Plural
Person

1. lukr-ez-a+úse-m-u lukr-ez-a+úse-ram-u
2. lukr-ez-a+úse-s-i
lukr-ez-a+úse-rat-i
3. lukr-ez-a+úse-Ø-Ø
lukr-ez-a+úse-ra-Ø

## Orthographic paradigm

Singular

## Person

1. lucrásem
2. lucráseşi
3. lucráse

Plural
lucráserăm
lucráserăţi
lucráseră

## 6. Non-conjugated Types

> Basic and Orthographic Forms
> lukr-ez-a+Ǿ- $\emptyset \rightarrow$ /ucrá

Infinitive:

Verbal substantive: lukr-ez-a+Ǿ-re $\rightarrow$ /ucráre

Participle: lukr-ez-a+ú-t $\rightarrow$ /ucrát

Gerund:
lukr-ez-a+î-nd $\rightarrow$ /ucrấnd
III. (-r)-î+ theme. Basic stem: kobor-î. Infinitive: coborî́ ‘descend'.

1. Present

|  | Basic Forms |
| :--- | :--- |
| Singular | Plural |

Person
1.

> kobór-î+Ø-Ø-u
kobor-í + Ø-m-u
2. kobór-î+Ø-Ø-i kobor-î $+\varnothing-\mathbf{i}-\mathbf{i}$
3. kobór-î+ Ø-Ø-Ø kobór-î+ Ø-u-Ø

Orthographic paradigm
Singular Plural
Person

| 1. cobór | coborấm |
| :--- | :--- | :--- |
| 2. cobóri | coborấţi |
| 3. coboáră | coboáră |

In these present tense forms it should be noted that the rules of vowel combination result in the very same deletions as seen in the verbs with theme-vowel -a-. The reason relates to the common phonological feature of $-\hat{\imath}-$ and $-a-$, which can be described as non-frontness or centrality. According to the system I have elaborated above, a central theme vowel becomes mid only at conjugational position three, while a front theme vowel undergoes this process at position two. A common deletion rule results in a shared pattern of syncretism, so -a- and -î- verbs share the identity of 3 sg and 3 pl , while front vowel -i - and -e- verbs share the syncretism of 1 sg and 3 pl .

## 2. Subjunctive

$$
\begin{array}{ll} 
& \text { Basic Forms } \\
\text { Singular } & \text { Plural }
\end{array}
$$

Person

1. kobór-î+ $\varnothing-\varnothing-\mathrm{u}-\varnothing$ kobor-í+ $\varnothing-\mathrm{m}-\mathrm{u}-\varnothing$
2. kobór-î+ $\varnothing-\varnothing-\mathbf{i}-\varnothing$ kobor-íi $+\varnothing-\mathbf{t}-\mathbf{i}-\varnothing$
3. kobórî+ $\varnothing-\varnothing-\varnothing-e \quad$ kobór-î+ $\varnothing-u-\varnothing-e$

Orthographic paradigm
Singular Plural
Person
1.
cobór
2.
cobóri
3.
coboáre
coboáre
3. Imperfect

| Singular | Basic Forms |
| :--- | :--- |
| Plural |  |
| kobor-î+á-m-u | kobor-î+á-m-u |
| kobor-î+á-Ø-i | kobor-î+á-t-i |

3. kobor-î+á-Ø-Ø kobor-î+á-u-Ø

## Orthographic paradigm

Singular Plural
Person
1.
coborám
coborám
2.
coborái
coboráţi
3.
coborá
coboráu

The loss of the theme -î- before the -á desinence is due to the rule which causes a central vowel to be deleted before another central vowel. It applies equally to the imperfect of -a-verbs.
4. Simple perfect

## Basic Forms

Singular
Plural
Person
1.

> kobor-î+ú-(i-Ø)-u kobor-î+ú-(ra-m)-u
2.
kobor-î+ú-(s-Ø)-i kobor-î+ú-(ra-t)-i
3. kobor-î+ú-(Ø-Ø)-Ø kobor-î+ú-(ra-u)-Ø

With Combined morphemes:

Singular
Plural

Person

1. kobor-î+ú-i-u kobor-î+ú-ram-u
2. kobor-î+ú-s-i kobor-î+ú-rat-i
3. kobor-î+ú-Ø-Ø kobor-î+ú-ra-Ø

## Orthographic paradigm

Singular Plural
Person

1. coborấi
coborấrăm
2. coborấşi
coborấrăţi
3. 

coborî́
coborấră

The posited desinence of the simple perfect is stressed -ú and the rules for deletion before such high desinential vowels specify that only unstressed mid vowels are deleted; otherwise, the high desinential vowel itself is deleted. In this case, the preceding high theme-vowel -î- means that the -ú- will be deleted and pass its stress leftwards to the theme.

## 5. Pluperfect

Basic Forms
Singular
Plural
Person

1. kobor-î+(ú-se)-(Ø-m)-u kobor-î+(ú-se)-(ra-m)-u
2. kobor-î+(ú-se)-(Ø-s)-i kobor-î+(ú-se)-(ra-t)-i
3. kobor-î+(ú-se)-(Ø-Ø)-Ø kobor-î+(ú-se)-(ra-u)-Ø

With Combined Morphemes:

|  | Singular | Plural |
| :---: | :---: | :---: |
| Person |  |  |
| 1. | kobor-î+úse-m-u | kobor-î+úse-ram-u |
| 2. | kobor-î+úse-s-i | kobor-î+úse-rat-i |
| 3. | kobor-î+úse-Ø-Ø | kobor-î+úse-ra-Ø |
|  |  | Orthographic paradigm |
|  | Singular | Plural |
| Person |  |  |
| 1. | coborấsem | coborấserăm |
| 2. | coborấseşi | coborấserăţi |
| 3. | coborấse | coborấseră |

6. Non-conjugated Types

> Basic and Orthographic Forms
> kobor-î+ $\dot{\emptyset}-\varnothing \rightarrow$ coborî̀

Infinitive:
Verbal substantive: kobor-î+Ǿ-re-coborấre

Participle:
kobor-î+ú-t $\rightarrow$ Coborất

Gerund:
kobor-î+î́-nd $\rightarrow$ coborấnd
IV. Mixed -i/-î theme in verbs with roots that end in a vowel: su-i+. The stem functions as if it has the -i theme when the theme is stressed, but a backing to an -î theme otherwise. These differences will not be indicated in the basic forms, since they are predictable, but, of course, are reflected in the resulting orthographic forms. Note that by assuming an underlying -î theme in an unstressed environment (rather than -e), we are able to account for the pattern of syncretism which agrees with regular central vowel -î and -a themes, and which I have attributed to the morphophonemic properties of central theme vowels in contrast to the front vowel themes $-\mathbf{i}-$ and $-\mathrm{e}-$.

1. Present

## Basic Forms

Singular
Plural
Person
1.

$$
\begin{aligned}
& \text { sú }-\mathbf{i}+\emptyset-Ø-u \\
& (\text { súi } i-\hat{i}+\varnothing-Ø-u)
\end{aligned}
$$

su-í+Ø-m-u

$$
\left(s u i_{-}-i ́+\emptyset-m-u\right)
$$

2. 

$$
\begin{aligned}
& \text { sú }-\mathbf{i}+\emptyset-Ø-i \\
& (\text { suni } i-\hat{i}+\emptyset-Ø-u)
\end{aligned}
$$

su-í+Ø-t-i
(suí-í+Ø-t-i)
3.

$$
\begin{aligned}
& \text { sú-i+Ø-Ø-Ø } \\
& \text { (súi-î+Ø-Ø-Ø) }
\end{aligned}
$$

sú-i+Ø-u-Ø
(súi-î+Ø-u-Ø)

## Orthographic paradigm

Singular
Plural

## Person

1. 

súi
2.
súi
suím
suíţi
súie

Several phonological comments are in order. In the first place, post vocalic -i causes and epenthetic $i$ to occur before the theme, which is orthographically rendered only when a vowel other than [i] follows. However, the stem can be phonetically considered as sui- $\mathbf{i}+$. According to the special rules of this type (verbs having no underlying rootfinal consonant plus theme -i-), the unstressed theme vowel behaves as if it is central - $\hat{-}$ - for the purposes of deletion and syncretism, although the preceding palatal [i] ultimately causes the following vowel to front. It is easier to trace this process, using a verb of the same class which does not have a preceding [i], such as sprijini'support'. The backing of the theme ( $\mathbf{i} \rightarrow \hat{i}$ ) causes it not to deleted at conjugational position two, allowing it become mid and surface in the 3 pl form, which gives the 3 sg and 3 pl syncretic suie, sprijină, contrasting to 1 sg sui, sprijin, rather than being syncretic with 1 sg . Actually, the frontness or centrality of the theme is irrelevant in the 1 sg and 2 sg , but I interpret it as becoming central here to, due to the much more economical rule, according to which the centralization of the theme in this verb type only occurs when the theme is unstressed. Notably, the two obvious cases in which there is no centralization are the 1 pl and 2 pl , suím, sprijiním; suíţi, sprijiniţi. The syncretic front [e] of sui, in contrast to the syncretic [ə] of sprijini, is simply a result of $\partial \rightarrow$ e after palatals.

## 2. Subjunctive

## Basic Forms

Singular
Plural

## Person

1. 

su-i+Ø-Ø-u-Ø
su-i+Ø-m-u-Ø
2.

$$
s u-i+\varnothing-Ø-i-Ø
$$

$$
s u-i+\varnothing-t-i-\varnothing
$$

3. 

$$
\text { sui }+\varnothing-\emptyset-\emptyset-e
$$

su-i+Ø-u-Ø-e

## Orthographic paradigm

Singular
Plural
Person

$$
1 .
$$

súi
2.
súi
3. súie
3. Imperfect
Singular
su-i+á-m-u
su-i+á-Ø-i
su-i+á-Ø-Ø
3.

Person
1.
2.

Orthographic paradigm
Singular
Person
1.
2.
suiám
suiái

## Basic Forms

Plural
su-i+á-m-u
su-i+á-t-i
su-i+á-u-Ø

Plural
suiám
suiáţi
3.
suiá
suiáu
4. Simple perfect

| Person | Singular | Basic Forms <br> Plural |
| :--- | :--- | :--- |
| 1. | su-i+ú-(i-Ø)-u | $s u-i+u ́-(r a-m)-u$ |
| 2. | $s u-i+u ́-(s-Ø)-i$ | $s u-i+u ́-(r a-t)-i$ |
| 3. | $s u-i+u ́-(\varnothing-Ø)-\varnothing$ | $s u-i+u ́-(r a-u)-\varnothing$ |

With Combined morphemes:

|  | Singular | Plural |
| :--- | :--- | :--- |
| Person | su-i+ú-i-u | su-i+ú-ram-u |
| 1. | su-i+ú-s-i | su-i+ú-rat-i |
| 2. | su-i+ú-Ø-Ø | su-i+ú-ra-Ø |

Singular
Person
1.
suíi

Orthographic paradigm
Plural
Basic Forms
Plural
su-i+ú-(ra-m)-u
su-i+ú-(ra-u)-Ø
su-i+ú-ram-u
su-i+ú-ra-Ø
suírăm
2.
suíşi
3.
suí
5. Pluperfect

Singular
Person

1. $s u-i+(u ́-s e)-(Ø-m)-u$
2. $s u-i+(u ́-s e)-(Ø-s)-i$
3. su-i+(ú-se)-(Ø-Ø)-Ø

With Combined Morphemes:

Singular
Person

1. $s u-i+u ́ s e-m-u$
2. su-i+úse-s-i
3. su-i+úse-Ø-Ø
suírăţi
suíră

## Basic Forms

Plural
$s u-i+(u ́-s e)-(r a-m)-u$
$s u-i+(u ́-s e)-(r a-t)-i$
su-i+(ú-se)-(ra-u)-Ø

|  | Singular | Plural |
| :---: | :---: | :---: |
| Person |  |  |
| 1. | su-i+úse-m-u | su-i+úse-ram-u |
| 2. | su-i+úse-s-i | su-i+úse-rat-i |
| 3. | su-i+úse-Ø-Ø | su-i+úse-ra-Ø |
|  |  | ographic paradigm |
|  | Singular | Plural |

Plural
Person

1. suísem
2. suíseşi
3. suíse
suíserăm
suíserăţi
suíseră
4. Non-conjugated Types

> Basic and Orthographic Forms

Infinitive:
su-i+Ǿ-Ø $\rightarrow$ suí
Verbal substantive:
su-i+Ǿ-re $\rightarrow$ suíre

Participle:
su-i+ú-t $\rightarrow$ suít

Gerund:
su-i $+\hat{\mathrm{i}}-\mathrm{nd} \rightarrow$ suínd
V. Non-extended -i theme. Basic stem: sar-i+. Infinitive: sărí 'jump'

1. Present

|  | Basic Forms |
| :--- | :--- |
| Singular | Plural |

Person

1. sár-i+Ø-Ø-u
sar-í+Ø-m-u
2. 

sár-i+Ø-Ø-i
sar-í+Ø-t-i
3.
sár-i+Ø-Ø-Ø
sár-i+Ø-u-Ø

Orthographic paradigm
Singular
Plural
Person
1.
sár
2. sári
săríţi
3. sáre
sár

## 2. Subjunctive

## Basic Forms

Plural
Person
1.
sár-i+Ø-Ø-u-Ø
sar-í+Ø-m-u-Ø
2.
saŕ-i+Ø-Ø-i-Ø
sar-í+Ø-t-i-Ø

| 3. | sári + Ø-Ø-Ø-e | sár-i+Ø-u-Ø-e |
| :---: | :---: | :---: |
|  |  | Orthographic paradigm |
|  | Singular | Plural |
| Person |  |  |
| 1. | sár | sărím |
| 2. | sári | săríţi |
| 3. | sáră | sáră |

## 3. Imperfect

Singular

## Basic Forms

Plural
Person
1.
sar-i+á-m-u
sar-i+á-m-u
2.
sar-i+á-Ø-i
sar-i+á-Ø-Ø

Orthographic paradigm
Singular
Plural
Person
1.
săreám
săreái
săreám
săreáţi
3. săreá săreáu
4. Simple perfect

| Person | Singular | Basic Forms |
| :--- | :--- | :--- |
| Plural |  |  |
| 1. | sar-i+ú-(i-Ø)-u | sar-i+ú-(ra-m)-u |
| 2. | sar-i+ú-(s-Ø)-i | sar-i+ú-(ra-t)-i |
| 3. | sar-i+ú-(Ø-Ø)-Ø | sar-i+ú-(ra-u)-Ø |

With Combined morphemes:

| Person | Singular | Plural |
| :--- | :--- | :---: |
| 1. | sar-i+ú-i-u | sar-i+ú-ram-u |
| 2. | sar-i+ú-s-i | sar-i+ú-rat-i |
| 3. | sar-i+ú-Ø-Ø | sar-i+ú-ra-Ø |
| Person | Singular | Orthographic paradigm |
| 1. | săríi | Plural |

2. 

săríşi
sărí
3. săríră
5. Pluperfect

Singular
Person

1. $s a r-i+(u ́-s e)-(Ø-m)-u$
2. sar-i+(ú-se)-(Ø-s)-i
3. sar-i+(ú-se)-(Ø-Ø)-Ø

## With Combined Morphemes:

## Singular

Person

1. sar-i+úse-m-u
2. sar-i+úse-s-i
3. sar-i+úse-Ø-Ø

Orthographic paradigm
Singular

## Basic Forms <br> Plural

sar-i+(ú-se)-(ra-m)-u
sar-i+(ú-se)-(ra-t)-i
$\operatorname{sar-i+(ú-se)-(ra-u)-Ø~}$

|  | Singular | Plural |
| :---: | :---: | :---: |
| Person |  |  |
| 1. | sar-i+úse-m-u | sar-i+úse-ram-u |
| 2. | sar-i+úse-s-i | sar-i+úse-rat-i |
| 3. | sar-i+úse-Ø-Ø | sar-i+úse-ra-Ø |
|  |  | ographic paradigm |
|  | Singular | Plural |

Plural
Person

1. sărísem
2. săríseşi
3. săríse
săríserăm
săríserăţi
săríseră
4. Non-conjugated Types

## Basic and Orthographic Forms

Infinitive:
sar-i+Ǿ-Ø $\rightarrow$ sărí
Verbal substantive:
sar-i+Ǿ-re $\rightarrow$ săríre

Participle:
sar-i+ú-t $\rightarrow$ sărít

Gerund:
sar-i $+\hat{i}-\mathrm{nd} \rightarrow$ sărínd
VI. Extended -i theme. Basic stem: is-prav-(esk)-i+. Infinitive: isprăví 'finish'.

1. Present

|  | Basic Forms |
| :--- | :--- |
| Singular | Plural |

Person

1. isprav-esk-i+Ø-Ø-u isprav-esk-i+Ø-m-u
2. isprav-esk-i+Ø-Ø-i isprav-esk-i+Ø-t-i
3. isprav-esk-i+Ø-Ø-Ø isprav-esk-i+Ø-u-Ø

Orthographic paradigm
Singular Plural
Person

| 1. | isprăvésc | isprăvím |
| :--- | :--- | :--- |
| 2. | isprăvéşti | isprăvíţi |
| 3. | isprăvéşte | isprăvésc |

Comment: the presence or absence of the -esk- suffix is governed by stress, the same as in the case of the -ez- suffix; i.e. a stressed -ésk- remains, but an unstressed suffix is deleted.
2. Subjunctive

Singular
Basic Forms
Plural

Person

1. isprav-esk-i+Ø-Ø-u-Ø isprav-esk-i+Ø-m-u-Ø
2. 

isprav-esk-i+Ø-Ø-i-Ø isprav-esk-i+Ø-t-i-Ø
3.
isprav-eski+Ø-Ø-Ø-e
isprav-esk-i+Ø-u-Ø-e

Orthographic paradigm
Singular
Plural
Person
1.
isprăvésc
2.
isprăvéşti
isprăvíţi
3.
isprăveáscă
isprăveáscă
3. Imperfect

Singular
Basic Forms
Plural
Person
1.
isprav-esk-i+á-m-u
isprav-esk-i+á-m-u
2.
isprav-esk-i+á-Ø-i
isprav-esk-i+á-t-i
3.
isprav-esk-i+á-Ø-Ø
isprav-esk-i+á-u-Ø

Orthographic paradigm
Singular
Plural
Person
1.
isprăveám
isprăveám
2.
isprăveái
isprăveáţi
3.
isprăveá
isprăveáu
4. Simple perfect

Singular

## Basic Forms

Plural
Person

1. isprav-esk-i+ú-(i-Ø)-u isprav-esk-i+ú-(ra-m)-u

2
isprav-esk-i+ú-(s-Ø)-i
isprav-esk-i+ú-(ra-t)-i
3.
isprav-esk-i+ú-(Ø-Ø)-Ø
isprav-esk-i+ú-(ra-u)-Ø

With Combined morphemes:

Singular
Person
1.
isprav-esk-i+ú-i-u
isprav-esk-i+ú-s-i
isprav-esk-i+ú-rat-i
2.
isprav-esk-i+ú-Ø-Ø
isprav-esk-i+ú-ra-Ø

Orthographic paradigm
Singular
Plural

Person
1.
isprăvíi
isprăvírăm
2.
isprăvíşi
isprăvírăţi
3.
isprăví
isprăvíră
5. Pluperfect

## Basic Forms <br> Plural

Singular

## Person

1. isprav-esk-i+(ú-se)-(Ø-m)-u
2. isprav-esk-i+(ú-se)-(Ø-s)-i
3. isprav-esk-i+(ú-se)-(Ø-Ø)-Ø
isprav-esk-i+(ú-se)-(ra-m)-u
isprav-esk-i+(ú-se)-(ra-t)-i
isprav-esk-i+(ú-se)-(ra-u)-Ø

With Combined Morphemes:

Singular
Person

1. isprav-esk-i+úse-m-u
2. isprav-esk-i+úse-s-i
3. isprav-esk-i+úse-Ø-Ø

Plural
isprav-esk-i+úse-ram-u
isprav-esk-i+úse-rat-i
isprav-esk-i+úse-ra-Ø

# Orthographic paradigm 

Singular Plural

## Person

1. isprăvísem
isprăvíserăm
2. isprăvíseşi
isprăvíserăţi
3. isprăvíse
isprăvíseră

## 6. Non-conjugated Types

> Basic and Orthographic Forms
> isprav-esk-i+Ǿ-Ø $\rightarrow$ isprăví

Infinitive:

Verbal substantive: isprav-esk-i+Ǿ-re $\rightarrow$ isprăvíre

Participle: isprav-esk-i+ú-t $\rightarrow$ isprăvít

Gerund:
isprav-esk-i+í-nd $\rightarrow$ isprăvínd

Note that in the case of hotărî'decide', the underlying forms would look very much like those of isprăvi, except for the fact that the root-final -r would condition a backing of suffix vowels; e.g. -esk- would back to -ăsk-, as in the present forms:

Singular Plural
Person

1. hotărắsc hotărấm
2. hotărắşti hotărấţi
3. hotărăşte hotărắsc

The problem of linguistic analysis is that some verbs with root-final -r follow this pattern, but others do not (e.g. dori 'desire'), having changed to a more productive pattern of not backing suffix vowels after -r. Therefore the verbs such as hotărî would most likely have to be lexically marked as belonging to the special class of verbs which back front vowels after root-final -r.
VII. Non-extended -e theme. Basic stem: par-e+. Infinitive: părea 'seem'. Often as treated as something other than a regular non-extended -e theme, due to the fact that there the stem lacks stress and the final theme -e is diphthongized to -ea, as seen in the infinitive form.

1. Present

|  | Basic Forms |
| :--- | :--- |
| Singular | Plural |

Person
1.
pár-e+Ø-Ø-u
par-é+Ø-m-u
2.
pár-e+Ø-Ø-i
par-é+Ø-t-i
3.
pár-e+Ø-Ø-Ø
pár-e+Ø-u-Ø

Orthographic paradigm
Singular Plural
Person
1.
pár
2.
pári
păréţi
3.
páre
pár
2. Subjunctive

> Basic Forms
> Plural

Person
1.
pár-e+Ø-Ø-u-Ø
par-é+ Ø-m-u-Ø
2.
pár-e+Ø-Ø-i-Ø

$$
\text { par-é }+\varnothing-\mathrm{t}-\mathrm{i}-\varnothing
$$

3. 

pár-e+Ø-Ø-Ø-a

$$
\text { pár-e+ } \varnothing-u-\varnothing-a
$$

Orthographic paradigm
Singular
Plural
Person
1.
pár
părém
2.
pári
păréţi
3.
páră
páră
3. Imperfect

## Singular

Basic Forms
Plural
Person
1.
par-e+á-m-u
par-e+á-m-u
2.
par-e+á-Ø-i
par-e+á-t-i
3.
par-e+á-Ø-Ø
par-e+á-u-Ø

Orthographic paradigm
Singular
Plural
Person
1.
păreám
păreám
2.
păreái
păreáţi
3. păreá păreáu
4. Simple perfect

## Singular

## Basic Forms

Plural
Person
1.
par-e+ú-(i-Ø)-u
par-e+ú-(ra-m)-u
2.
par-e+ú-(s-Ø)-i
par-e+ú-(ra-t)-i
3.
par-e+ú-(Ø-Ø)-Ø
par-e+ú-(ra-u)-Ø

With Combined morphemes:

Singular
Person
1.
par-e+ú-i-u
par-e+ú-s-i
par-e+ú-rat-i
3.
par-e+ú-Ø-Ø
par-e+ú-ra-Ø

Orthographic paradigm
Singular
Plural

Person
1.
părúi
părúrăm
2.
părúşi
părúrăţi
3.
părú
părúră
5. Pluperfect

Singular
Person

1. $\operatorname{par}-\mathrm{e}+(\mathrm{u}-\mathrm{se})-(\emptyset-\mathrm{m})-\mathrm{u}$
2. par-e+(ú-se)-(Ø-s)-i
3. par-e+(ú-se)-(Ø-Ø)-Ø
par-e+(ú-se)-(ra-u)-Ø

With Combined Morphemes:

## Singular

Plural
Person

1. par-e+úse-m-u
par-e+úse-ram-u
2. par-e+úse-s-i
par-e+úse-rat-i
3. par-e+úse-Ø-Ø
par-e+úse-ra-Ø

# Orthographic paradigm 

Singular Plural

## Person

1. părúsem

> părúserăm
2. părúseşi
părúserăţi
3. părúse
părúseră
6. Non-conjugated Types

> Basic and Orthographic Forms
> par-e+Ǿ-Ø $\rightarrow$ păreá
> par-e+Ǿ-re $\rightarrow$ părére

Infinitive:
Verbal substantive:

Participle:

$$
\text { par-e+ú-t } \rightarrow \text { părút }
$$

Gerund:

$$
\text { par-e+í-nd } \rightarrow \text { părấnd }
$$

VIII. Non-extended -e theme. Basic stem: în-cép-e+. Infinitive: încépe 'begin'. Can simply be treated as the accentual opposite of the previously listed verb, părea, with a difference in stress, in that par-e+ has no inherent stem stress, and winds up with a stressed (and hence diphthongized infinitive ending), while în-cép-e+ has a basic stress on the root, which remains as such even in the infinitive form. In other words, the difference between the verbal types par-e+ and în-cép-e+ is only one of stress, and not really verb type. They are being shown in separate categories since this is the traditional division. Many such conjugational classifications can be dispensed with, however. In this case, if stress is known, two verb types are not necessary.

## 1. Present

|  | Basic Forms |
| :--- | :--- |
| Singular | Plural |

Person
încép-e+ $\varnothing-\varnothing$-u
încép-e + Ø-m-u
2.
încép-e+ $\varnothing$ - $\varnothing$-i
încép-e+Ø-t-i
3.
încép-e+ $\varnothing-\varnothing-\varnothing$
încép-e+ $\varnothing$-u-Ø

## Orthographic paradigm

Singular
Plural
Person
1.
încép
încépem
2.
încépi
încépeţi
3.
încépe
încép

## 2. Subjunctive

|  | Basic Forms |
| :--- | :--- |
| Singular | Plural |

Person

1. încép-e+Ø-Ø-u-Ø încép-e+Ø-m-u-Ø
2. încép-e+ $\varnothing-\varnothing-\mathrm{i}-\varnothing$ încép-e $+\varnothing-\mathrm{t}-\mathrm{i}-\varnothing$
3. încép-e+Ø-Ø-Ø-a încép-e+Ø-u-Ø-a

Orthographic paradigm
Singular
Plural
încépem
încépeţi
înceápă
3. Imperfect

## Basic Forms

Plural

## Person

1. 

încép-e+á-m-u
încép-e+á-m-u
2.
încép-e+á-Ø-i
încép-e+á-t-i
3.
încép-e+á-Ø-Ø încép-e+á-u-Ø

## Orthographic paradigm

Singular Plural

## Person

1. 

începeám
începeám
2.
începeái
începeáţi
3.
începeá
începeáu

## 4. Simple perfect

## Basic Forms

Singular
Plural
Person

1. încép-e+ú-(i-Ø)-u încép-e+ú-(ra-m)-u
2. încép-e+ú-(s-Ø)-i încép-e+ú-(ra-t)-i
3. încép-e+ú-(Ø-Ø)-Ø încép-e+ú-(ra-u)-Ø

With Combined morphemes:

Singular Plural
Person
1.
încép-e+ú-i-u
încép-e+ú-ram-u
2.
încép-e+ú-s-i
încép-e+ú-rat-i
3. încép-e+ú-Ø-Ø încép-e+ú-ra-Ø

Orthographic paradigm
Singular Plural
Person
1.
începúi
începúrăm
2.
începúşi
începúrăţi
3.
începú
începúră

## 5. Pluperfect

## Basic Forms

Singular
Plural
Person

1. încép-e+(ú-se)-(Ø-m)-u
încép-e+(ú-se)-(ra-m)-u
2. încép-e+(ú-se)-(Ø-s)-i
încép-e+(ú-se)-(ra-t)-i
3. încép-e+(ú-se)-(Ø-Ø)-Ø
încép-e+(ú-se)-(ra-u)-Ø

With Combined Morphemes:

Singular
Plural
Person

1. încép-e+úse-m-u încép-e+úse-ram-u
2. încép-e+úse-s-i încép-e+úse-rat-i
3. încép-e+úse-Ø-Ø încép-e+úse-ra-Ø

| Singular | Orthographic paradigm <br> Plural |
| :--- | :---: |
| Person |  |
| 1. începúsem | începúserăm |
| 2. începúseşi | începúserăţi |
| 3. începúse | începúseră |

începúseră
6. Non-conjugated Types

Infinitive:

## Basic and Orthographic Forms

încép-e+Ǿ-Ø $\rightarrow$ încépe
Verbal substantive: încép-e+Ǿ-re $\cdots$ încépere

Participle:
încép-e+ú-t $\rightarrow$ începút

Gerund:
încép-e+î-nd $\rightarrow$ începấnd

Note: Types IX. and X. both represent extended -(s)-e+ types. The difference between them lies in the resulting participial ending. The participial ending -t is deleted, leaving only the extended theme -s, following underlying dentals and some velars, as in the case of type IX (e.g. prins, from prind-(s)-e+ 'catch'; dus, from duk-(s)-e+ 'lead, carry'). However, in the case of labials and certain other velars, which alternate with labials, the participial ending -t is not deleted, but causes the extended theme -s to be deleted, as in the case of type X (e.g. rupt, from rup-(s)-e+ 'break'; copt, from kop-(s)-e+ 'bake').
IX. Extended -(s)-e+ type with loss of -t in the participle. Basic stem: prind-(s)-e+, infinitive prinde 'catch'.

1. Present

## Basic Forms

Singular
Plural
Person
1.
prind-(s)-e+Ø-Ø-u
prind-(s)-e + Ø-m-u
2.
prind-(s)-e+Ø-Ø-i
prind-(s)-e+Ø-t-i
3. prind-(s)-e $+\varnothing-\varnothing-\varnothing$ prind-(s)-e $+\varnothing-\mathrm{u}-\varnothing$

Orthographic paradigm
Singular Plural
Person
1.
prínd
príndem
2.
prínzi
príndeţi
3.
prínde
prínd

## 2. Subjunctive

## Basic Forms <br> Plural

Person

1. prind-(s)-e+Ø-Ø-u-Ø prind-(s)-e+Ø-m-u-Ø
2. prind-(s)-e+Ø-Ø-i-Ø prind-(s)-e+Ø-t-i-Ø
3. prind-(s)-e+ $-\varnothing-\varnothing-e \quad$ prind $-(s)-e+\varnothing-u-\varnothing-e$

Orthographic paradigm
Singular Plural
Person
1.
prínd
príndem
2. prínzi
3.
príndă
príndeţi
príndă
3. Imperfect

|  | Basic Forms |
| :--- | :--- |
| Singular | Plural |

Person
1.
prind-(s)-e+á-m-u
prind-(s)-e+á-m-u
2.
prind-(s)-e+á- $\varnothing$ - $i$
prind-(s)-e+á-t-i
3. prind-(s)-e+á-Ø-Ø prind-(s)-e+á-u-Ø

## Orthographic paradigm

Singular Plural
Person
1.
prindeám
prindeám
2.
prindeái
prindeáţi
3.
prindeá
prindeáu
4. Simple perfect

Basic Forms
Singular Plural
Person

1. prind-(s)-e+ú-(i-Ø)-u prind-(s)-e+ú-(ra-m)-u
2. prind-(s)-e+ú-(s-Ø)-i prind-(s)-e+ú-(ra-t)-i
3. 

prind-(s)-e+ú-(Ø-Ø)-Ø prind-(s)-e+ú-(ra-u)-Ø

With Combined morphemes:

Singular
Plural
Person
1.
prind-(s)-e + ú-i-u
prind-(s)-e+ú-ram-u
2.
prind-(s)-e+ú-s-i
prind-(s)-e+ú-rat-i
3. prind-î+ú-Ø-Ø prind-(s)-e+ú-ra-Ø

## Orthographic paradigm

Singular
Plural
Person
1.
prinséi
2.
prinséşi
prínserăţi
3.
prínse
prínseră

## 5. Pluperfect

## Singular

Person

1. prind-(s)-e+(ú-se)-(Ø-m)-u
2. prind-(s)-e+(ú-se)-(Ø-s)-i
prind-(s)-e+(ú-se)-(ra-m)-u
3. prind-(s)-e+(ú-se)-(Ø-Ø)-Ø
prind-(s)-e+(ú-se)-(ra-t)-i
prind-(s)-e+(ú-se)-(ra-u)-Ø

## Basic Forms

Plural

## With Combined Morphemes:

## Singular

Plural
Person

1. prind-(s)-e+úse-m-u
prind-(s)-e+úse-ram-u
2. prind-(s)-e+úse-s-i prind-(s)-e+úse-rat-i
3. prind-(s)-e+úse-Ø-Ø prind-(s)-e+úse-ra-Ø

## Orthographic paradigm

Singular
Plural
Person

1. prinsésem
prinséserăm
2. prinséseşi
prinséserăţi
3. prinsése
prinséseră
4. Non-conjugated Types

Infinitive:
prind-(s)-e+Ǿ-Ø $\rightarrow$ prínde
Verbal substantive:
prind-î+Ǿ-re $\rightarrow$ príndere

Participle:
prind-(s)-e + ú-t $\rightarrow$ prins

Gerund:
prind-(s)-e $+\hat{\mathrm{I}}-\mathrm{nd} \rightarrow$ prinzấnd
X. rup-(s)-e+
IX. Extended -(s)-e+ type with no loss of -t in the participle. Basic stem: rup-(s)-e+, infinitive rupe 'tear'.

1. Present

## Singular

## Basic Forms

Plural
Person
1.
rup-(s)-e $+\varnothing-\varnothing-u$
rup-(s)-e+Ø-m-u
2.
rup-(s)-e+Ø-Ø-i
rup-(s)-e $+\varnothing$-t-i
3.
rup-(s)-e+Ø-Ø-Ø
rup-(s)-e+Ø-u-Ø

Orthographic paradigm
Singular Plural
Person

| 1. rúp | rúpem |
| :--- | :--- | :--- |
| 2. rúpi | rúpeţi |
| 3. rúpe | rúp |

2. Subjunctive

> Basic Forms
> Plural

Person
1.
rup-(s)-e+Ø-Ø-u-Ø
rup-(s)-e+Ø-m-u-Ø
2.
rup-(s)-e+Ø-Ø-i-Ø rup-(s)-e+Ø-t-i-Ø
3.

$$
\operatorname{rup}(s)-e+\varnothing-\varnothing-\varnothing-e \quad \text { rup-(s)-e+Ø-u-Ø-e }
$$

## Orthographic paradigm

Singular
Plural
Person
1.
rúp
rúpem
2.
rúpi
rúpeţi
3. rúpă rúpă
3. Imperfect

## Basic Forms

Plural
Person
1.
rup-(s)-e + á-m-u
rup-(s)-e + á-m-u
2.
rup-(s)-e+á-Ø-i
rup-(s)-e+á-t-i
3.
rup-(s)-e+á-Ø-Ø
rup-(s)-e+á-u-Ø

Orthographic paradigm
Singular
Plural
Person
1.
rupeám
rupeám
2.
rupeái
rupeáţi
3. rupeá rupeáu
4. Simple perfect
$\left.\begin{array}{lll} & \text { Singular } & \text { Basic Forms } \\ \text { Person } & & \\ \text { 1. } & \text { rup-(s)-e+ú-(i-Ø)-u }\end{array}\right]$ rup-(s)-e+ú-(ra-m)-u

With Combined morphemes:
Singular Plural

Person
1.
rup-(s)-e+ú-i-u
rup-(s)-e+ú-ram-u
2.
rup-(s)-e+ú-s-i
rup-(s)-e+ú-rat-i
3.
rup-(s)-e+ú-Ø-Ø
rup-(s)-e+ú-ra-Ø

Orthographic paradigm
Singular
Plural
Person
1.
rupséi
rúpserăm
2.
rupséş
rúpserăţi
3.
rúpse
rúpseră
5. Pluperfect

Singular

## Basic Forms

Plural
Person

1. rup-(s)-e+(ú-se)-(Ø-m)-u
rup-(s)-e+(ú-se)-(ra-m)-u
2. rup-(s)-e+(ú-se)-(Ø-s)-i
rup-(s)-e+(ú-se)-(ra-t)-i
3. rup-(s)-e+(ú-se)-(Ø-Ø)-Ø
rup-(s)-e+(ú-se)-(ra-u)-Ø

## With Combined Morphemes:

## Singular

Plural

## Person

1. rup-(s)-e+úse-m-u
rup-(s)-e+úse-ram-u
2. rup-(s)-e+úse-s-i
rup-(s)-e+úse-rat-i
3. rup-(s)-e+úse-Ø-Ø
rup-(s)-e+úse-ra-Ø

# Orthographic paradigm 

Singular
Plural
Person

1. rupsésem
rupséserăm
2. rupséseşi
rupséserăţi
3. rupsése
rupséseră

## 6. Non-conjugated Types

## Basic and Orthographic Forms

Infinitive:
rup-(s)-e+Ǿ-Ø $\rightarrow$ rúpe
Verbal substantive:
rup-(s)-e+Ǿ-re $\rightarrow$ rúpere

Participle:
rup-(s)-e+ú-t $\rightarrow$ rupt

Gerund:
rup-(s)-e + î-nd $\rightarrow$ rupấnd

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Vasiliu 1965. Fonologie limbii române. Bucharest: Editura ştiinţifică.


[^0]:    ${ }^{1}$ Guțu Romalo (1968:202) includes hotarî in the same class as isprăvi, in spite of the fact that hotarîhas -îăsc in the present, and agrees with type 3 (coborî) in all other features except for syncretism, which is of the $6=1$ type. She does this by considering that type 6 (e.g. isprăvi) has front vowel desinences as basic, with a predictable backing of desinence vowels when the stem ends in $-r$ (e.g. hotari). My proposed system differentiates these two verbs as \{isprav-esk-i+\} on the one hand, and \{hotar-ăsk-i+\}, on the other.

[^1]:    2 Note the absence of the a~ă alternation, found in sări, due to the initial word position. (Guţu Romalo 1968:255).

[^2]:    ${ }^{3}$ Note that a glide normally appears by phonetic rule in intervocalic position in native Romanian words, though not in loans and neologisms (Vasiliu 1965:98).

[^3]:    ${ }^{4}$ Although I am presenting the theme vowel $-\hat{i}$ (as in coborî) as being derived from a basic stem in -r-i (i.e. kobor-i+), the change from high front to high central vowel ( $\mathbf{i} \rightarrow \hat{i}$ ) occurs before conjugation even begins, so that for the purposes of conjugation, we can consider that there are four theme vowels that must be combined with desinences.

[^4]:    5 The changes to final [i] and [u] are blocked when they are preceded by obstruent plus liquid clusters. E.g. kîntu experiences the loss of final [u], but aflu does not.

[^5]:    ${ }^{6}$ For conciseness, I am just indicating the actual value of the third peson ending (ə or e), rather than a minus-alpha symbol. The ending is actually a mid vowel with the opposite frontness of the theme vowel.

[^6]:    7 Parentheses in the desinences of the simple perfect and pluperfect show the internal constituents of the tense and number morphemes. It is assumed that these inner brackets are combined before combination with the theme vowel, i.e. before conjugation per se. The combined morphemes will be shown after their separate treatment for the first verb. Henceforth in this chapter, only the format of combined morphemes will be shown. Note that the bracketed (ra-u) is subject to the regular deletion of u after a.

[^7]:    8 Note that all four non-conjugated types have similar two-part structure; the first morpheme can begin with a stressed vowel, but not with a consonant. Conversely, the second portion can begin with a consonant, but not a vowel. The infinitive is a zero form, but with an indication that the previous morpheme gets stressed. Therefore, I posit that the first portion of the infinitive ending is a stressed zero. In order to regularize the structure of the non-conjugated forms into two morphemes, I posit a second zero, as follows, for the infinitive. The following table lists the endings that are assumed for the various non-conjugated forms. Stress is uniformly assumed for the the first morpheme of each.

