'Shona (derivational) Morphology: An Observation in Search of a Theory'

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Abstract

This article concerns a traditional analysis of Shona morphology, which is based on a (positional) classification of affix morphemes into prefixes and suffixes. It posits the hypothesis that the distinction supports the other traditional (but more controversial) distinction between inflectional and derivational affixes, a distinction which is seen by many scholars in the literature as not being a sharp one. What, however, seems to be the case for Shona, and possibly for Bantu as well, is that the distinction is in fact quite sharp, and is based on the simple positional distinction between prefix and suffix. All Shona affixes fall into three classes, namely inflectional, derivational and clitical. The data seems to support the hypothesis.

This study on morphology proceeds on the basis of the following key assumptions. *The morpheme* as the basic notion of *morphology* is uncontroversial, theoretically speaking. Bloomfield's theoretical construct has remained basically the same over the years, and Nida's 1949 definition of morphology as 'the study of morphemes and their arrangements in forming words' is widely accepted in Linguistics. The other key assumptions are that the classification of morphemes into *roots* and *affixes,* the positional classification of affixes, in relation to root morphemes, into *prefixes* and *suffixes* and the fact that morphemes are either *free* or *bound* are no longer controversial issues. Lastly, this article also proceeds on the assumption that *root* morphemes have either a *primary* or *secondary* (i.e. derived) lexical category membership.

These assumptions mean that the following general observations about Shona can safely be made. Shona has roots and affixes, prefixes and suffixes, free morphemes and bound morphemes. The vast majority of Shona morphemes are *bound,* in the sense that each must occur with at least one other morpheme. *Free* morphemes, like ideophones, necessarily constitute monomorphemic 'words'. All Shona affixes are *bound* morphemes. All *free* morphemes in Shona are *roots,* but most Shona root morphemes are also *bound.* A Shona 'word' has the following typical morphological structure (root morphemes in bold):

[1] (a) ka - **rume**   ka - **tete**
          C12 male   C12 thin
                             'a small thin man'

     (b) va - cha - ka - **gum** - an - is - -an - -a ne - **mota**
          C2 FUT C12 hit REC CAUS REC tv with car
                             'They will smash it against a car'

     (c) ma - zi - **kuru** - tu
          C6 C21 big very
                             'very big ones'

What has been controversial over the years is the classification of affixes into *inflectional* and *derivational* affixes. There are many reasons why this has been the case, one of which is the fact that it is a *functional* classification. It involves 'meaning' and 'category', both of which take morphology into the realm of syntax, thereby creating another controversy regarding the distinction between morphology and syntax and the central controversy regarding what a word is, because the syntax-morphology distinction is based on prior acceptance of the concept of 'word'. This has not taken morphology away from its custom of making the distinction between *inflectional* and *derivational* affixes.

As far as Shona is concerned, the morphological distinction between *inflection* and *derivation* (which is the central concern of this article) seems to be very neat and straightforward, and need never have been uncertain. The discussion that follows is based on the distinction, assumed at the beginning, that *root* morphemes are primary members of one lexical category or another. For the purposes of this article, therefore, root morphemes are either *verbs*, *substantives* or *ideophones*. Each category has unique morphosyntactic features that distinguish it from the others. Apart from the ostensive definition, made by the following examples, this classification is also assumed without discussion.

[2] **Verb:** -tuk-,   -famb-,   -gar-,   -sik-,   -p-
                  (scold) (walk, travel) (sit, stay) (create) (give)
[3] **Ideophone:** tomu,   tende,   shaku,   kunja
                  (jumping) (sitting) (falling) (falling)
[4] **Substantive:**
     (a) Noun: -komana, -romo,   -ngwa,   -mbudzi
                  (boy)   (mouth) (bread) (goat)
     (b) Adjective: -kobvu,   -tete,   -fupi,
                  (fat, thick) (thin, narrow) (short, brief)
     (c) Others: -mwe, -oga,   -ese,
                  (one) (alone) (whole)

Primary membership to these three category distinctions forms the basis of my inflection-derivation distinction.

The most commonly used characterization of the distinction between derivational and inflectional affixes is that, typically (but not necessarily), derivational affixes change the grammatical class or category of the roots to which they are attached. On the other hand, inflectional affixes are mere 'trappings' of sentences, which do not change the grammatical category of the roots to which they are attached. Inflectional affixes are those that mark such things as number, gender/class, tense, aspect and mood. Thus, it can be asserted at this stage that 'derivational' affixes are those that are non-inflectional.

Before going into some of the more 'original' and possibly controversial observations, the article begins by repeating the often-used distinguishing feature between the inflectional and *derivational* affixes. In addition to the fact that the syntactic category of the root to which *inflection* applies does not change, there are other characteristics. Inflections are characterized by what is sometimes called 'syntactic generality', which means that an inflectional affix will apply to all members of the category to which it can apply. For example, a tense affix is inflectional because it will inflect all verb roots, and all nouns have prefixes as their inflectional affixes. The other characteristic of inflectional affixes is that their application is statable in terms of rules. Because inflectional processes are derived by rules, such as agreement rules and others, they are obligatory processes. All this is true of Shona.

In contrast to inflectional morphology, *derivational* morphology is different with respect to all the features that characterize inflectional affixes. For example, as already stated, derivational affixes, typically (but not necessarily), change the syntactic category of the root to which they apply. Verb roots can be changed into noun stems, while ideophones can be changed into verbs, but the distinguishing feature is that, while inflections have to be carried out as a matter of morphological requirement, there is no root in Shona which has to be derived as a matter of rule. In other words, derivation is not obligatory. Each derivational affix is specific to, or restricted to, certain applications.

For example, a particular verbalizer of ideophones does not apply to all ideophones, nor does it apply as a general verbalizer whenever that derivational productive process is needed. In fact, most verbalizers apply selectively to very restricted sets of roots.

This is also true of Shona, as the Shona morphology sketched below shows. The sketch also serves as background to the general observations and as an illustration of the article's hypothesis. What also needs to be added and emphasized is the fact that what are treated as derivational affixes include those that do not change the syntactic category of the root to

which the derivational affix is added. This means that Shona has two types of derivational affixes: those that change the category of root morphemes, and those that do not. Verbalizers, ideophonizers, and nominalizers, obviously change the categories, while verbal extensions do not change the category of verb roots from being verb roots.

Shona derivational affixes that do not change the syntactic categories of the roots to which they are added have important characteristic features that must be mentioned and illustrated. The first is that, although the category does not change, typically, the new forms, like the extended verb roots, have large meaning changes, as the following examples illustrate:

[5] (a) -sung-   —>   -sung-unur-
          'tie'   'untie'

     (b) -tuk-   —>   -tuk-an-
          'scold'   'scold one another'

     (c) -bik-   —>   -bik-ir-
          'cook'   'prepare love potion'

          -sung- —->   -sung-ir-
          'tie'   'carry out traditional child birth ceremony'

          -famb-   —>   -famb-ir-
          'walk'   'take responsibility'

          -femb-   —->   femb-er-
          'sniff'   'guess'

          -w-   —>   -w-ir-
          'fall'   'get into trouble'

It should be noted that translations of the extended forms are a pale reflection of their full meanings. The applied extension in particular brings with it very large, and many, meaning changes. This links up with another but related characteristic of Shona derivational affixes, which do not change the categories of roots. Derivationally related pairs, such as those under [5], tend to split up or to move away from one another in both meaning and form. For example, to many Shona speakers the verb 'root' pairs in [6] have little or nothing to do with each other (any longer).

[6] sungir-   -bikir-   -fambir-   -fember-   -wir-
     -sung-   -bik-   -famb-   -femb-   -w-

What is perhaps even more interesting about the Shona derivational affixes is that the 'derived' meanings or meaning combinations created are already present lexically in Shona. Once again verbal extension (and other forms) illustrate this point as the following examples show:

[7] (a) -famb-is-   **or** -famb- chaizvo
          walk INT   walk   very much more

    (b) -kavir - irir-   **or** -kavir-   zvakare
          sow seeds REP   sow seeds   again

    (c) -sek - erer-   **or** -sek-   zvakakwana
          laugh PERF   laugh   perfectly

    (d) mu - kuru - tu   **or** mu - kuru   kwazvo
          C1 big very   C1 big very 'very big'
          'very big'

    (e) zvi - shoma - na   **or** zvi - shoma chaizvo
          C8 little   very   C8 little very 'very little'
          'very little'

The above examples conform to all other distinguishing characteristics of derivational affixes. If what has been said so far sounds familiar, this is because it is familiar. Scholars like Bybee (1985) and others have said it all before. What this article is arguing, and what the sketch below illustrates, is that Shona confirms most of it.

To conclude this discussion of the distinction between derivational affix and inflectional affix, it can be asserted that *all Shona suffixes are derivational, while all inflectional affixes in Shona are prefixal, and vice versa.* Although the other criteria, particularly that of generality, may not absolutely distinguish derivational and inflectional morphology in Shona, the positional distinction in relation to root morphemes should absolutely distinguish the two types of affixes in Shona. This can be demonstrated by using the three root categories of *substantive, verb,* and *ideophone*.

Substantives

The term 'substantive' is used in this article to indicate any one of the following types of construction (ostensive definition): Nouns, Adjectives, Selectors, Enumeratives,[1] Quantitatives, Demonstratives and Pronouns (Mkanganwi 1973, Fortune 1984). Syntactically, 'substantive' may also be defined as a group of words functioning as a noun, including the noun itself. Substantives have an overall similarity in their constructional patterns. They are typically of the pattern *Prefix + Stem,* as the following examples show:

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1   It should, however, be pointed out that the names used are arbitrary. 'Emunerative' has no more to do with counting than 'selector' has to do with selecting. Figures would do just as well.

[8]	Noun	Adjective	Selector	Enumerative
	mu-romo (mouth)	mu-kuru (big)	u-ya	mu-yi
	zvi-ro (things)	zvi-iri (two)	zvi-pi?	zvi-mwe
	ma-saga (bags)	ma-shanu (five)	a-no	ma-mwe

'Stem' here refers to the substantival root, with or without any other morpheme. Except for the so-called 'stem-less' substantives (pronoun and demonstrative), this is all there is to the 'formation' or construction of substantives. It should be clear that what is being described here is the constructional pattern and/or morphology of simple substantival words and the inflectional process rather than word formation in the strict sense of the word.

As already noted, inflection is an obligatory morphological operation. That is, perhaps, why inflections are sometimes referred to as 'grammatical' morphemes. Failure to inflect substantive stems makes Shona ungrammatical. Derivation, compounding, and reduplication only occur when the 'meaning' they bring is needed in the individual's use of Shona.

This study now focuses on *derivation* as something that is different from the formation of simple or primary substantives. Derivation is carried out to add more substantival words and, of course, more 'meaning' than simple constructions achieve. The 'formation' of the following four substantive types clearly involve *derivation* for the two major reasons: they involve suffixing and 'meaning' change. As already argued, Shona derivation is suffixal and changes meaning and/or grammatical category of the morpheme(s) 'derived'. Although the majority of noun stems are simple, primary constituents, Shona morphology also provides for the derivation of roots which 'originally' belonged to other categories. Almost all derived noun stems are formed from verb roots. They are derived by the simple process of suffixing a vowel (tv) to the root. The allomorphs of the derivational vowel suffix are morphologically conditioned by the class of the noun to which the derived root belongs, as the following examples show:

	Class		Root	Suffix	Noun	Meaning
[9]	1	mu-	-gar-	-i	mugari	(one who sits)
	11	ru-	gar-	-e	rugare	(peace, comfortable life)
	7	chi-	gar-	-o	chigaro	(chair, seat)
	6	ma-	-gar-	-o	magaro	(buttocks)
	1	mu-	-bat-	-i	mubati	(worker)
	3	mu-	-bat-	-o	mubato	(work, handle)

The terminal vowel, therefore, seems not to be as problematic as has been thought. It is a suffix *and* derivational.

Adjective stems are derived by suffixing adjectival suffixes /-tu/, /-ana/, /-sa/, etc., to indicate the heightened or more intense degree of the quality expressed by the adjective, as in the following examples:

[10] -kuru-tu (too/very big)   cf   -kuru (big)
      -shom-ana[2] (very few)   -shoma (few, little)
      -kobvu-sa (very fat, too fat)   -kobvu (fat, thick)

The 'formation' of the 'stem-less' substantives, demonstratives, and pronouns fits what can be regarded as simple derivational processes. Pronouns and demonstratives are very special types of words because they have no 'roots'. All there is to them are the gender concord series. Their morphology fits into the derivational structure of all Shona 'words', because they are just like other Shona 'words'. Pronouns and demonstratives are similar in that they use the suffixal vowel as a derivational morpheme. Table 1 below reveals differences, which, however, will not be discussed here, but which demonstrate, at least, two things: First, the 1st and 2nd person and class 1 forms of the pronoun do not need to be 'derived' because they are already 'words', and secondly, for phonological reasons, both forms need a 'prefixal' stabilizing vowel (not included in the table).

Reduplication is a form of derivation because its sole function in the formation of substantives, particularly adjectives, appears to be the same as the other function of suffixing, which is to indicate a heightened or more intense degree of the quality expressed by the root or stem reduplicated. That is why reduplication can be seen as a form of 'suffixing' which involves both root and affix morphemes. Reduplication, in this case, is a logical process, by which a root morpheme or a suffix morpheme is repeated, thereby creating a substantival word with a different meaning. In other words, reduplication is suffixal because it is derivational. This is consistent with the claim maintained in this article that all derivational operations in Shona are 'suffixal'.

The number of times the root or affix is repeated is not important because it simply corresponds (in meaning) to the degree or intensity of the quality expressed by the root or affix, as demonstrated below:

[11] (a) Noun   class 1   -ana (puppy)   > -mbwa-ana-ana (puppy)
                class 17a zasi (below, down)   > -zasizasi (very far down/
                                                 below)

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2.   /-ana/ is also a noun stem of class 1 which can also be used as a derivational suffix to indicate 'child of' or 'young of', e.g. imbwa (dog)> mbwa+ana (puppy), dongi (donkey) > dhongi+ana (young of donkey), rume (male)> rume+ana (boy, son).

class 17a mberi (ahead)   > -mberimberi (very far in front)

class 3   -soro (head)   > -kumusorosoro (very far above)

class 6   meso (eyes)   > -mesomeso (loose morals)

b) Adjective: -shoma (few)   > -shoma-ana-ana (very very few)

-kuru (big)   > -kuru-kuru (very big)
-shoma (few)   > -shomashoma (very few)
-doko (small, little)   > -dokodoko (very small)
-fupi (short)   > -fupifupi (very short)
-nyoro (soft)   > -nyoronyoro (very soft)

Table 1: 'Stem-less' Substantives (Demonstratives and Pronouns)

Class/ Persn	Type A Demonstratives		Type B.Demonstratives		Pronouns	
	Class Affix	Suffix	Class Affix	Suffix		
Is	—	—	~	—	Ini	
Ip	—	—	—	—	Isu	
Iis	—	—	~	—	Iwe	
Iip	—	—	—	—	Imi	
1	u-	-u	u-	-o	u-	-o
2	va-	-a	va-	-o	va-	-o
3	u-	-u	u-	-o	u-	-o
4	i-	-i	i-	-o	i-	-o
5	ri-	-i	ri-	-o	ri-	-o
6	a-	-a	a-	-o	a-	-o
7	chi-	-i	chi-	-o	chi-	-o
8	zvi-	-i	zvi-	-o	zvi-	-o
9	i-	-i	i-	-o	i-	-o
10	dzi-	-i	dzi-	-o	dzi-	-o
11	ru-	-u	ru-	-o	ru-	-o
12	ka-	-a	ka-	-o	ka-	-o
13	tu-	-u	tu-	-o	tu-	-o
14	hu-	-u	hu-	-o	hu-	-o
15	ku-	-u	ku-	-o	ku-	-o
16	pa-	-a	pa-	-o	pa-	-o
17	ku-	-u	ku-	-o	ku-	-o
18	mu-	-u	mu-	-o	mu-	-o
19	svi-	-i	svi-	-o	svi-	-o
20	k(w)u-	-u	k(w)u-	-o	k(w)u-	-o

For obvious semantic reasons, the more intense or heightened degree of the quality expressed by some adjectival roots can be 'multiplied' by being repeated as many times as the speaker feels the need for that degree or intensity, e.g.

[12] -kurukurukurukurukuru... (much more than extremely big)
      -dokodokodokodokodoko... (infinitesimal)
      -tetetetetetetetete... (extre - e - emely thin)

Verbs

Primary members of this category have already been illustrated in example [2] above. The inflectional, which is the same as saying the prefixal, morphemes occur before the verb root in the form of subject concords, tense formatives, aspect and mood morphemes, and object concords. Table 2 illustrates the inflectional morphology of a typical finite verb.

Table 2: Morphology of the Verb

NEG	AGR	TENSE	ASP	MOOD	OPRO	STEM	GLOSS
ha-	va-	-cha-	-∅-?	-∅-?	-mu-	-on-i	they will not see him
-	ti-	-no-	si-	-∅-	-va-	-tuk-a	we used to scold them
ha-	ri-	-∅-	-si-	-∅-	-chi-	-gur-i	it used not to break it
-	ku-	-	-	-	-ndi-	-kur-is-a	to make me grow
-	ri-	-a-	-i-	-∅-	-u-	-rim-a	it used to plough it
-	-	-	-	-∅-	-	-vuy-a	come!

The purpose of this illustrative Table, which presents the morphemes in the order in which Bybee (1985) claims to be universal, is not to show the intricacies of the inflectional morphology of Shona, but to show that all inflections occur *before* the verb root. 'Stem' rather than 'root' is used in the Table because both primary (i.e. monomorphemic) and secondary (or derived) forms must be inflected.

It has already been established that elements and constructions which are classifiable as primary members of one category may be found in another category as secondary or derived members, as in the following examples:

[13] **Verbal**   **Substantial**   **Ideophonic**
      -gar- (sit)   -gar-o (chair, seat)   gar-e (sitting)
      -kur- (grow)   -kuru (big)   kur-e (growing)
      -famb- (walk)   -famb-i (traveler)   famb-e (walking)

Without worrying about the directionality in the derivational process affecting certain roots, it is already very clear from this very limited selection of examples that the suffixal vowel is a derivational morpheme.

As has been argued above, all derivational affixes are suffixal. The prediction which this claim makes is that all polymorphemic 'stems' in Shona inflexional morphology are 'derived' constituents. The same morphological facilities that have been demonstrated to apply to substantival morphology are also applicable to the Shona verb.

There is only one complication though. It has to do with the morpheme that has already been shown to perform a derivational function on the verb root to form derived noun stems. The morpheme has traditionally been treated as a 'verbal' morpheme. Here, it has been 'logically' treated as a derivational affix, both because it is a suffix and also because it actually 'derives' noun stems from verbs. The question now is: if it is the same morpheme which is now seen in the 'citation forms' of verb stems, as demonstrated in the following examples, what is it now doing?

[14] -da   (love)
      -nzwa   (hear, feel, taste, smell)
      -tora   (take)
      -sunga   (tie, arrest)
      -pupura   (witness, testify)
      -imba   (sing)
      -taura   (talk, speak)

The presence of the terminal vowel makes perfect phonological sense because the stem becomes syllabically pronounceable. The problem, however, remains in the interruptability of the 'stem' by morphemes that are commonly known as verbal extensions, as in the following examples:

[15] **-d-an-a**   (love one another)
      -nzw-is-a   (cause to hear)
      -tor-er-a   (take away from)
      -sung-unur-a   (untie)
      -pupur-ir-a   (witness in favour of)
      -imb-iw-a   (be sung)
      -taur-is-an-a (make each other speak)

Harford[3] claimed that what is traditionally regarded as a verb is really not a category at all without the final vowel, which she treated as the 'head'

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3. This observation was made by C. Harford on July 25, 1994, as a theoretical position to support her other observations in her Departmental Seminar paper on 'The Morphology of Negation of Final Vowels in Shona', University of Zimbabwe.

of the phrase. There is no scope in this article to follow this issue through. All that needs to be highlighted is that the behaviour of the final vowel (or terminal vowel) does complicate a few things. This study, having made it a derivational affix which is consistent with its suffixal position, there is little ground to change that. As is known, some scholars, such as Fortune (1985) and Scott Myers (1990), regard the terminal vowel as a discontinuous morpheme which is always found together with, and relating to, other inflecting affixes, as documented below.

[16]	vachainda	(they will go)
	havachaindi	(they will not go)
	vainde	(that they may go)

This article's position is that the final vowel is a 'syllabilizer'. All verb roots end in consonants (i.e. (C)(V)C. Because stems and/or citation forms have to have a (C)V syllabic form, which the root does not have, the morphological and phonological structures of Shona do not coincide in the verb. All phonological units larger than a single phoneme must end in a vocalic nucleus.

Phonologically, there are no closed syllables in Shona. The final vowel seems to have a dual morphological and phonological function. On the one hand, it is analyzable as a distinct morphological element quite separate from the verb root and clearly interruptable by the insertion or addition of one or more verbal extensions as [15] shows. On the other hand, it does not seem to have an evident meaning or a grammatical function. Its apparently purely mechanical role seems to be merely phonological. However, it does seem to perform a distinct derivational role. It cannot, therefore, be treated as an inflectional affix.

The approach of this study is one that treats each affix as being uniquely either derivational or inflectional, but not both. There is only the one final vowel, not a case of homophony. The final vowel (tv) either acts alone to 'derive' a primary verb stem or with other verbalizing morphemes to derive secondary verbs from other categories like ideophones, nouns, and adjectives, as evident in the examples below.

[17] (a) without verbalizer
    -tor-a (take)   = primary
    -kur-a (grow)   from /-kuru/ (big)
    -tsvuk-a)redden)   from /-tsvuku/ (red)
    -kwar-a (scratch surface) from /kwaru/ (scratching surface)

  (b) with verbalizer
    -koko-t-a (scrape food)   from noun
    nyoro-v-a (becomes wet or soft) from adjective
    -paru-k-a (crack)   from ideophone

Typically, however, derivation, which changes the category of the root morpheme into a verb stem, involves a distinct verbalizer as the derivational suffix, as example [18] illustrates. [17b] above illustrates the derivation of verbs from nouns and adjectives. The majority of derived verbs come from ideophones. In fact, it is almost true to say that, for every ideophone, there is a corresponding derived verb.

[18]	Ideophone	Verbalizer	Verb Stem
	svetu	-k-	-tomu-k-a (jumps, leap)
	gwada	-m-	-gwada-m-a (kneel)
	kongonya	-r-	-kongonya-ir-a (walk like a baboon)
	dzunga	-ir-	-dzunga-ir-a (walk aimlessly)
	we	-ts-	-we-ts-a (pull out)
	nzve	-ng-	-nzve-ng-a (dodge, avoid)
	ve	-dzeng-	-ve-dzeng-a (cut up to slices)

Because of the very close relation between verbs and ideophones in the sense that, as already noted, for (almost) every ideophone, there is a corresponding or derived verb, verbalizers are very numerous and of an enormous phonological variety. The selection or combination of a particular verbalizer and a particular ideophone seems quite idiosyncratic. Some derived verbs are so strongly lexicalized that the verbalizer and the original ideophone are normally thought of or processed as monomorphemic or primary verb roots, despite the fact that the corresponding ideophone is still distinct and commonly used. The following examples illustrate this point.

[19]	Ideophone	Verbalizer	Verb 'root'
	ju	-ng-	-jung- (pierce)
	nyi	-k-	-nyik- (immerse)
	nzve	-ng-	-nzveng- (dodge)
	ve	-dzeng-	-vedzeng- (slice)
	che	-k-	-chek- (out)

This seems to support Bybee's (1985: 88) meaning-based analysis.

The other morphemes, which occur as suffixes after the verb root, are, clearly, all derivational affixes. What is being referred to here are what are traditionally labeled verbal extensions. These derivational affixes do not involve change of category. When discussing the derivation/inflection distinction earlier, this study used the verbal extensions to illustrate the fact that derivation does not have to change the category membership of the derived root. Verbal extensions are derivations because they involve considerable meaning change and all the other general features discussed

earlier. The other reason is, of course, that verbal extensions are suffixal. As already noted, the meaning of the extended verb root can be expressed in other lexical and/or syntactic ways. There are as many as 13 different extensions all of which cannot be illustrated and discussed in full here. All that can be said is that extensions are derivational and suffixal, as illustrated in the following list of words.

[20]   -pur-(i)w-a (be thrashed)   -passive
        -tuk-an-a (scold one another)   -reciprocal
        -rim-is-a (use to plough)   -causative
        -taur-ir-a (tell)   -applied

Extended verbs can be further extended with cumulative meaning, in the sense that each extension will have its own meaning involved in the total meaning of the verb. For example,

[21]   -tuk-an-is-ir- (cause to scold each other for some reason)
        -gar-is-an-is- (cause to be at peace with each other)
        -tor-er-w- (have something taken away from...)

All of the 'primary' stem, deverbative stem and denominative stem can be reduplicated to form morphologically more complex stems. *Reduplication* here involves both, when the elements combined are at least two occurrences of the same lexical element, as well as when the reduplicated element is a derivational affix or suffix. Reduplication of the verb stem is a very common Shona morphological device, which serves to express the frequency and/or continuation and/or repetition of the action expressed by unreduplicated verb stem, as in the following examples:

[22]   -famb-a-famb-a (walk up and down, etc.)
        -mir-a-mir-a (stand around)
        -tomu-k-a-tomu-k-a (jump on and on, etc.)
        -tuk-an-a-tuk-an-a (scold each other frequently, etc.)

One extension of the verb (the intensive) can also be reduplicated, but only to indicate a heightened or more intense degree of the quality (intensive) expressed by the verbal extension. For example,

[23]   -bat-is-is-is-is-....a (hold very, very... firmly)
        -reb-es-es-es-es-....a (become very, very, very... long)

As in the case of the reduplication of the adjective stem, the repetition of the reduplicated extension is theoretically indefinite, because it depends on

the degree or intensity the speaker wishes to express. The reduplication of the reciprocal extension, which is restricted to C verb roots, seems to be for phonological reasons, since only what would be monosyllabic verb stems are reduplicated to achieve the typical Shona word which has to have at least two syllables.

There is absolutely no meaning difference between the reduplicated and the unreduplicated reciprocal extensions. The following list illustrates this point.

[24] -d-a (love)   -d-an-a,   d-an-an-a (love each other)
     -nzw-a (hear)   -nzw-an-a,   -nzw-an-an-a (be friends)
     -p-a (give)   -p-an-a,   -p-an-an-a (give one another)

Shona verbs, apparently, do not need compounding, after reduplication and other derivation devices. *Compounding*, as a source of the freest, largest (open) class of items, with the richest most specific meaning, seems to be restricted to nominal structures.

Ideophones

Morphologically, the ideophone is a very straightforward word. In its 'primary' form, the ideophone has no internal morphological structure and it is a free root morpheme. The 'secondary' or derived ideophone, however, does have a derivational morpheme acting as an ideophonizer. The close relationship between the verb and the ideophone has already been demonstrated. Some Shona dialects, like Zezuru, permit the derivation of all verb stems into ideophones by means of the final vowel (tv), as has already been shown and as the following examples demonstrate.

[25] che   >   -che-k-   >   chek-e
      tomu   >   -tomu-k-   >   tomuk-e
      dzunga   >   -dzunga-ir- >   dzungair-e
               -gar-   >   gar-e
               -taur-   >   taur-e
               -nhong-   >   nhong-e

This is further evidence that the final vowel is a derivational suffix. Ideophones cannot be inflected, which is the same as saying that no prefixes appear with ideophones.
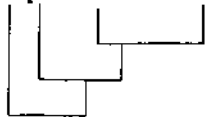
Clitics

Finally, there are Shona morphemes that do not easily fit into the root / affix dichotomy, which this article has operated with. This is a class of bound morphemes, which are neither inflectional nor derivational. They are called

clitics. In fact, clitics are not affixes. They are *bound words*. Their most distinguishing feature is that, while they have to be appended to individual words phonologically, in fact, what they lean on is the entire phrase.[4] The other distinguishing feature is that many of them are already complex morphological structures. For example, the possessive proclitic and the pronominal and demonstrative enclitics are not monomorphemic. In other words, clitics are 'words' which enter syntactic constituent relationships with other words or phrases to form 'phrases' of varying degrees of 'delicacy'. They are the same elements that are called clitics in morphology (Zwicky 1977, Anderson 1988a), when they should really be called 'words' and belong to syntax. They are clitical for purely phonological reasons. Although Shona has two positional types of clitics, those which lean forward in the following word, called *proclitics*, and those which lean backwards on the preceding word, called *enclitics*, which also differ in other respects, their positional status as 'prefixal' and 'suffixal' elements does not involve them in the distinction between inflectional and derivational affixes. This article, therefore, maintains its claim that, in Shona at least, and possibly in Bantu as well, all prefixes are inflectional, while all suffixes are derivational.

Derivation and inflection are strictly morphological processes, while cliticization is a strictly phonological process at the syntactic level. The following are examples of some of the Shona proclitics which have been called 'inflecting affixes' (Fortune 1970 and 1985):

[26] (a)   **sa-pa-**mukomana mukuru (such as at the big boy)

(b)   **se cha-**vana vaviri (like that of two children)
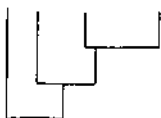
(c)   **yo-mu-**danga guru (of the inside of the big pen)

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4. Matthews (1974: 218) describes clitics as 'intermediate units, word-like in their grammar, but phonologically must lean for support on another word adjacent to them.'

A related issue is whether what is traditionally treated as a noun class prefix of class 2a is really an inflecting affix. It shares a lot with locatives, possessives and other proclitics, such as 'belonging' to what can be claimed to be syntactic structures, and, most striking of all, causing exactly the same tonal changes on their hosts as those caused by the other proclitics. Although it is not the intention here to discuss tonal changes, it is important to illustrate only this point by the following examples of classes 2a and copulatives from one of the Shona dialects.

[27]	mombe	LL	2a:	VáMómbe	Cop:	ímómbe	HHL
	sarudzo	LLL		VáSárúdzo		ísárúdzo	HHHL
	rongedzero	LLLL		VáRóngédzéro		íróngédzéro	HHHHL

Appending /Vá-/ or the copulative proclitic has exactly the same tonal effect.

Conclusion

Shona root-affix morphology seems to be very simple and can be captured by the following diagram:

+	+	+/−
1	2	3
PREFIX	ROOT	SUFFIX
INFLECTION		DERIVATION
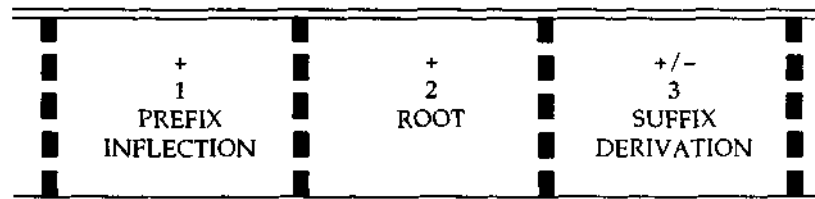
1+2 = INFLECTION or 'primary'words
1+2+3 = 'Secondary' (or derived) words
2+3 = DERIVATION

In other words, +3 means 'derived'. This also means that the so-called 'terminal vowel' and verbal extensions are derivational affixes. Suffixing is also morphologically derivational in the broader sense, which includes not only suffixal affixes but also root morphemes as in the reduplication of adjectives and verbs and the compounding of nouns. This, therefore, means that there is no real morphological difference between the traditional terms 'suffixing', 'derivation' and 'compounding'. Suffixing is *derivational* in the broader sense of a morpheme appearing to the right of a root *in a 'word'* automatically performing a derivational function. The operative phrase here is *in a word*, which excludes clitics which, as argued earlier, are separate 'words', although they are phonologically parasitic. The difference between *morphology* and *syntax* also seems a little clearer.

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