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THIS IS THIS, AND HERE ARE SOME EXAMPLES: VERBALISERS AND EXTENSIONS IN SHONA

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Abstract

After a brief discussion of the goals of scientific theory, especially in Linguistics, the article explores the scientifically arrived at morphological categories, 'verbaliser' and 'extension' in Shona. It reviews existing descriptive accounts of these categories and suggests that, if they were treated as members of a single category rather than as they have been treated traditionally, a variety of previously unanswerable questions could begin to be addressed through new research. The proposed recategorisation would treat 'verbaliser' as the less productive members of the set of toneless derivational morphemes which, otherwise, consists of 'extensions'.

As we engage in the scientific study of language, some of us linguists [in Langacker's (1975) terms, the 'theory people')] are predisposed to focus our efforts on using linguistic data for building theories, and others of us (in Langacker's terms, the 'language people') prefer to direct our efforts towards using theories to understand more deeply the linguistic data we observe. Still, even though we spend much of our time being immersed in theories of one sort or another, we often do not spend much time thinking in general about what scientific theories are or what it is that they do for us — perhaps, more precisely, to us — in our explorations of language and linguistic systems. I want to share some of my thoughts about some of these things.[1]

The general characteristics of scientific theories are well known and accepted. 1) They account for (or describe and explain) precisely and accurately what they are supposed to account for in coherent, internally self-consistent and testable ways; 2) they do not yield information that clashes with knowledge gleaned from related scientific enquiries; and 3) they are marked by simplicity, or 'elegance'. Despite these agreed-upon characteristics, an interpretation of 'scientific theory' is not monolithic,

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[1] I am taking responsibility for this article because its wording and any mistakes in it are mine. Still, it was inspired directly by two Departmental seminars presented in the past year by Mr K. G. Mkanganwi, and indirectly by the on-going work being undertaken by the ALLEX (African Languages Lexical) Project which has produced a general, monolingual computer-aided Shona dictionary (Chimhundu, 1996) as its first step towards documenting the nation's languages. As the article developed, it was fed by insights offered especially by Mr K. G. Mkanganwi, Mr K. Mawomo, Mrs M. Mawema, Mr E. Chabata and Professor N. C. Dembetembe.

and there are a number of different scientific frameworks within which 'what it is' is defined. For my part, I look at 'scientific theory' the way that Popper (1965; 1979) does. According to Popper, in addition to these generally accepted characteristics, an essential characteristic of a scientific theory is that it addresses 'true' problems that cannot be accounted for by existing scientific theories.

He also says that, because it is essential for scientific theories to be testable, it is characteristic of scientific theories to contrast only with beliefs (like those found in fields such as philosophy of science), and not with other, 'non-scientific' theories which, in his view, do not exist. For him, and for me, if a theory is testable in scientific ways, then it is scientific; if it is not, then it is a belief.

But what is at least as important than thinking about their characteristics is thinking about what theories are for — what they are supposed to do. One of the primary goals of scientific theories, at least according to Popper's view, is to yield new facts about what is going on and how things are. My favourite way of showing this is drawn from Geology, in the area of tectonic plate theory. Before tectonic plate theory became accepted in the late 1950s, the facts we had about things geological included descriptive facts regarding the coincidental shape lines of the Eastern coast of Africa and the Western coast of South America. The facts we had about things biological included descriptive facts about shared plants and creatures, plus such speculations as 'the creatures and plants the two continents had in common must have swum or flown across — or been blown or carried across — the ocean that separates them'. After tectonic plate theory became accepted, we had a variety of new facts, facts which explained more about these things, and others as well. Popper would predict that, one day, something, an anomaly, will be discovered through tectonic plate theory that will create a problem for it, and that thinking about the anomaly will inspire a new and better theory that will yield new facts and better explanations of what is going on and about how things are with respect to things like continental drift.

Another primary goal of theories, again according to Popper, is to become refuted — to be proven, through what he calls 'recalcitrant data', as being mistaken. He says that we can only get closer to truth with our scientific facts if we keep getting better and better theories that come closer and closer to being true. In other words, we should aim to have theories that have the potential for being falsified by data, rather than theories which can only be confirmed or theories which, under the mistaken belief that the theories are commensurable with one another, can even distort the data when our goal is to discover a theory that is more 'elegant' than another that accounts for the 'same' things. Further, he says, it is our responsibility as scientists to keep stretching in the

direction of truth, even though we know in advance that we will never be able to actually capture it through combining our data with our theories and treating them in scientific ways, and even though we also know that our theories may not yield any new facts at all and/or that they might be wildly mistaken and/or that they are actually beliefs because they turn out not to be testable against the data we find in the 'real world'. Nonetheless, we remain with our responsibility as scientists to use our minds and our training to get closer to truths that, if they are reachable by people at all, are reachable not by our minds, but by our spirits.

I would also like to make two other observations about theory because of their relevance to the topic of this article, the problematic categorisation of verbalisers and extensions in Shona. One of these is that the theory you have about something at least shapes what you see in that something. The other is probably the same observation, but it is applicable to other contexts: when a theory about something has been accepted, the acceptance itself has an effect on what can be seen in that something by those who have accepted it. I will be using parts of Fortune's (1984) descriptive analysis of Shona verbalisers and extensions to show what I mean by 'accepting a theory has effects on what can be seen about Shona', because Fortune's analyses of Shona, in one way or another, have laid the groundwork for almost all of the work that has been done on the language, and most of the facts we have about Shona have arisen out of Fortune's analyses. For this to have happened, Fortune's work must have been, and must continue to be, both acceptable and accepted by scientists who base their descriptive and theoretical work on the categories he established, and I continue to believe that this groundwork deserves to be so because Fortune's work covers so much, so carefully and in so much detail.

Still, I claim that accepting Fortune's theories about how Shona is structured has consequences. The most important of these consequences, given the influence of the work, is that Fortune's analyses facilitate our seeing certain facts about Shona, and they prevent our seeing a variety of other things that are at least potentially facts.

I suspect that they do so, not only because 'accepting his theory about something constrains what you can see in that something', but also because of his style of presentation, which seems to me to be patterned in such a way that it is easy to believe that whatever he says is received wisdom; that is, it is easy to see his analyses as being correct, as being true, as being what there is to say about the something in question. What he shows us through his work tells us something like 'Here is the name of the category, here is the list of things that fit it perfectly, and here are lots of perfect examples. As for the imperfect examples I have which require more research and deeper understanding, here is my note that says they are imperfect examples.'

The pattern could be abstracted out and abbreviated as: 'This is this, and here are some examples', and what it does is to demonstrate the existence of the category through the listed examples. What we accept, and what shapes our own work and our own thinking about Shona, is the set of facts the analysis yields; in other words, those facts about Shona which comprise the theoretical categories Fortune posited for Shona combined with the data he amassed so responsibly. Having been exposed to his analysis, we see that there is a category 'verbaliser',[2] which consists of certain things, and that there is another, quite different, category, 'extension', which consists of certain other things. Having accepted his analysis, we come to believe in the existence of verbalisers and extensions in Shona, and our beliefs in them shape all sorts of other things we believe about the structure of the language.

Even so, the question could arise: 'Does Fortune's use of the "this is this" approach draw us into digging more deeply into the structure of the language so that we can become even more aware of it, or does it, because we have memorised "his facts" about the language, actually have the effect of preventing us from digging more deeply into it?' This is a question that Mkanganwi has raised indirectly (see his article in this issue). It is a good question, and one which I would like to ask again in the context of Shona verbalisers and extensions.

Through Fortune's analyses, we have come to accept the idea that verbalisers and verbal extensions in today's Shona are two different creatures. One creature, the verbaliser, brings words from a variety of word classes into the word class 'verb'. For instance, see the examples listed in 1.

1. VERBALISERS[3]

Other Word Classes	**Verbs**
paru 'tearing' (IDEO)	-paru**ka** 'get torn' -parura 'tear' (something)
svi-i 'be dark'(IDEO)	-svi**ba** 'be dark'
makoko 'pot scrapings' (N)	-koko**t**a 'clean pot with finger, consuming remnants'
shamwari 'friend' (N)	-shamwari**dz**a 'be friendly towards; befriend'
-kobvu 'thick (ADJ)	-kobvu**mar**a 'be thick'

[2] According to Dembetembe (1987, 9), the use of the term 'verbaliser' in linguistic studies of Shona comes from Gowlett's (1967) work on Lozi.

[3] Abbreviations used in this work are as follows: IDEO 'ideophone'; N 'noun'; ADJ 'adjective; s/o 'someone'; s/th 'something'; FV 'final vowel'; ADV adverb; V 'vowel'; C 'consonant'.

On the other hand, the verbal extension does something else: it creates different types of verbs out of words that are already verbs, as, for instance, those listed in 2:

2. VERBAL EXTENSIONS

Verbs	**Other Verbs**
-ita ‘do’	-it**ik**a ‘happen’
-sunga ‘tie, bind, arrest’	-sung**w**a ‘be tied, bound, arrested’
-netsa ‘annoy’	-nets**an**a ‘annoy one another’
-chengeta ‘keep, guard, look after, preserve’	-chenget**edz**a ‘look after’
-bvuma ‘agree, acknowledge’, admit, assent’	-bvum**ir**a ‘allow, permit’
-bata ‘touch, hold, seize, take captive, acquire, practise’	-bat**is**a (intensive) ‘hold firmly’, (causative) ‘cause to hold’

Fortune’s analysis here is generally congruent with Guthrie’s (1962) tripartite distinction between verb stem types in Bantu languages. In Guthrie’s view, there are simplex verb stems which consist only of roots, or radicals, complex verb stems which consist of a radical plus a fossilised and unanalysable suffix, and extended radicals which are those verbs which are derived with an analysable suffix. These latter, generally productive, affixes comprise most of what we would call extensions in Shona and the former, the fossilised ones, comprise mostly what we would call verbalisers.

Although they function in ways that accomplish different things, the extension and verbaliser creatures are similar in one major respect: they both provide — or have provided — means through which new words, have been — and/or can be — created. This point does not come up very often when we focus our attention on the syntactic relations associated with several of the verbal extensions, for example, as part of a claim that it is the syntax which brings them into the verb, because, when we do that, it is easy to see extensions as inflections which get attached to an old word, ‘the base’, so that ‘the base’ can fit into new syntactic patterns, rather than as derivational kinds of things which create new lexical items, or words, that name different kinds of events. The syntactic view of these morphemes is something that Fortune would agree with,[4] but I am not yet

[4] See, for example, his (1984, 22) description of extensions in general: ‘Extensions are suffixed to the R [radical] they extend. Since it is properly VPs [verb phrases] and not

convinced of it. The addition of some verbal extensions predictably adds to, subtracts from or otherwise modifies the argument structure of sentences, yes, and, by doing so, could be seen to be functioning in some sort of inflectional and grammatical way. But, even so — at best — this approach yields only part of the picture. Not all extensions bring about different argument structures in sentences, and that is not all that any of them do, as Khamisi (1985), for example, shows with respect to Swahili extensions, and as you can see in the Shona examples given in 3:

3. EXTENSIONS AS DERIVATIONAL MORPHEMES

Old Words	**New Words**
-ziva 'know'	-ziv-**isis**-a 'know very well' Root+Intensive+FV (no structural change; meaning shift)
-sunga 'tie, arrest'	-sung-**unur**-a 'untie, unarrest' Root+Reversive+FV (no structural change; meaning shift)
-cheka 'cut'	-chek-**erer**-a 'cut into tiny pieces' Root+Perfective+FV (no structural change; meaning shift)
-rara 'sleep'	-ra-**dz**-a 'put s/o in a grave' Root+Causative+FV (structural change; meaning shift)
-daidza 'call'	-daidz-**ir**-a 'call out loudly' Root+Applied+FV (given this sense of the verb, there is no structural change; meaning shift)
-shuma 'hand over s/th to s/o'	-shum-**ir**-a 'worship and praise' (e.g., God) Root+Applied+FV (unexpected structural change; meaning shift)
-tya 'fear'	-ty-is-idz-**ir**-a 'frighten' Root+Causative+Causative+Applied+ FV (not as much structural change as would be expected; meaning shift)

merely Rs which are transformed by extensions, the same question occurs here as occurred in the treatment of Rs derived from ideophones. Are extended Rs morphological constructions which can be properly treated at the level of the R? The answer here, as there, appears to be that extended Rs, which are morphological constructions with ICs [immediate constituents] consisting of (1) the extension and (2), in whole or in part, the R of the transformed VP, do result from the transformation as the result of a reconstructing of relationships with the extended VP.'

The recent work developed by Mkanganwi (1995) and Chabata (1997) on Shona derivational morphology shows that we come closer to understanding 'what is going on and how things are' by explicitly treating extensions as derivational morphemes.

If here too we focus on the idea that the set of verbalisers and the set of extensions comprise sets of derivational morphemes, we need a reminder of what derivational morphemes are said to do if we are going to explore them more deeply. Katamba (1993, 47), for example, says that such morphemes form new words either 'by changing the meaning of the base to which they are attached' (as Fortune would describe the function of verbal extensions in Shona); or 'by changing the word class that a base belongs to' (as Fortune would describe the function of verbalisers in Shona). This is a pattern we find quite easily in a wide variety of languages. In English, for example, a derivational morpheme like **-ly** (as in **happily**, ADJ to ADV) or **-ness** (as in **happiness**, ADJ to N) serves productively to bring 'outsiders' into a particular word-class, but a derivational morpheme like un- (e.g., **unhappy**, ADJ to ADJ) or **-ish** (e.g., **happyish**, ADJ to ADJ) affects 'insiders', words that are already in the word class in question. In a language like English, the two categories of derivational morphemes productively operate in mutually exclusive environments: either only to bring outsiders 'in', or only to modify insiders that are already 'in' there.

The verbalisers given by Fortune (1984) — which he says serve to bring words from other word classes into the word class verb — are described as consisting of single consonant, or **C**, morphemes, vowel-consonant, or **VC**, morphemes, or combinations of morphemes, as appears in 4, which shows his listing of them.

4. FORTUNE'S (1984, 13-21) VERBALISING MORPHEMES

Occur with Ideophones				
-b-	**-n-**	**-p-**	**-ik-**	**-m-ar-adz-**
-dz-	**-nd-**	**-r-**	**-ir-**	**-t-er-**
-k-	**-nh-**	**-t-**	**-k-ir-**	**-dz-ir-**
-m-	**-ng-**	**-v-**	**-m-ar-**	**-dz-er-**
-mb-	**-ny-**	**-z-**	**-m-adz-**	

Occur with Adjectives		
-k-	**-v-**	**-mar-**
-p-	**-s-**	

Occur with Nouns

	-k-	**-t-**	**-mar-**
-	**r-**	**-dz-**	**-dz-an-**

List 5 presents my annotated version of Fortune's (1984) list of verbal extension morphemes — or those derivational morphemes which he says make new verbs out of 'old' verbs:

5. FORTUNE'S (1984, 23-30) VERBAL EXTENSIONS

-at-, -et-	(contactive [indicating contact]; no longer productive) e.g., **-sungata** 'tether'; cp **-sunga** 'tie' **-chengeta** 'preserve, take care of'; cp **-chenga** 'keep'
-ik-, -ek-	(extensive [the action named by the unextended root is projected in space]; no longer productive) e.g., **-rumika** 'bleed'; cp **-ruma** 'bite' **-tondeka** 'point to'; cp **-tonda** 'face'
-is-, -es-	(intensive [heightened, more vigorous or effective action]; can be reduplicated) e.g., **-batisa** 'hold firmly'; **-batisisa** 'hold very firmly'; cp **-bata** 'hold'
-irir-, -erer-	(perfective [action/process named by the unextended root is carried through to completion, sometimes, even to excess]) e.g., **-sekerera** 'laugh on and on'; cp **-seka** 'laugh'; **-dyiririra** 'eat a lot'; cp **-dya** 'eat'
-urur-, -oror-	(repetitive [repeated action or action completed thoroughly]) e.g., **-tukirira** 'scold/curse over and over'; cp **-tuka** 'scold'; **-ononora** 'see s/th clearly, scrutinise; cp **-ona** 'see'
-ar-, -arar-	(stative [state as a result of some action/process]; no longer productive) e.g., **-omarara** 'become dry, hard'; cp **-oma** 'be dry, hard'
-an-	(associative [action/process/state named by the unextended verb is 'common to a group']; no longer productive) e.g., **-ungana** 'assemble together', cp **-unga** 'collect'
-ik-, -ek-	(potential [action is possible/easy; state resulting from a process or action]) e.g., **-goneka** 'be feasible'; cp **-gona** 'be able to'; **-itika** 'happen'; cp **-ita** 'do'

-w-, -iw-, -ew- (passive [action/process named by the unextended verb is undergone; impersonal and locative subjects can occur]) e.g.
-piwa 'be given'; cp **-pa** 'give';
-bikwa 'be cooked'; cp **-bika** 'cook'

-an- (reciprocal [action named by the unextended verb is performed mutually by agents upon one another]) e.g.,
-dana/-danana 'like/love/need one another'; cp **-da** 'like love/need'

-ir-, -er- (applied [action/process named by the unextended verb takes place 'with special reference to some person, thing, event or place, which is the complement of the extended verb phrase']) e.g.,
-wira 'fall into, onto'; cp **-wa** 'fall from';
-fanira 'be fitting'; cp **-fana** 'resemble';
-chengetera 'look after for s/o'; cp ' **-chengeta** 'look after'

***-y-, -idz-, -edz-** (causative type (a): ['participation by an agent in some activity; a personal participation involving action by an agent on someone or something']; the ***-y-** allomorph never appears; a variety of allomorphs **[-dz-; -ts-; -sv-; -zv-; -nz-; -idz-]** depending on the preceding consonant; occurs with a limited number of roots, notably with those ending in **-k, -r, -p, -b, -v, -mb, -nd,** and **-ng**) e.g.,
-rambidza 'forbid'; cp **-ramba** 'refuse';
-fadza 'make s/o happy'; cp **-fara** 'be happy';
-mutsa 'wake s/o up deliberately'; cp **-muka** 'wake up'

-is-, -es- (causative type (b): [someone is made to act, or someone is made to be acted upon; causation is relatively indirect; can also add an instrumental sense; has the potential to add an argument]) e.g.,
-farisa 'greet'; cp **-fara** 'be happy';
-garisa 'make s/o sit'; cp **-gara** ' be seated, stay at, live at';
-mukisa 'make s/o wake up without intending to'; cp **-muka** 'wake up'

An examination of the verbaliser morphemes in 4 and the extension allomorphs in 5, shows that the forms of at least some of the verbalisers resemble the forms of at least some of the extensions, particularly with respect to the consonants they contain.

This is part of the observation that got me thinking about developing this article. The rest of the observation is demonstrated in a list of related sets of words which Fortune (1984) presents and which I have reproduced as 6:

6. FORTUNE'S (1984, 16) LISTING OF VERB PAIRS DERIVED FROM IDEOPHONES

Ideophone	**Verbs Derived with Verbaliser -k-**	**Verbs Derived with Verbaliser -r-**
paru 'tearing'	-paruka 'get torn'	-parura 'tear (s/th)'
simu 'rising'	-simuka 'rise'	-simura 'lift (s/th)'
pfudugu 'uncovering'	-pfuduguka 'get uncovered'	-pfudugura 'uncover (s/th)'
kwachanu 'coming away from wall'	-kwachanuka 'fall from wall'	-kwachanura 'take (s/th) from wall'
bwodo 'dislocating'	-bwodoka 'get dislocated'	-bwodora 'dislocate s/th'
undu 'moulting'	-unduka 'lose feathers'	-undura 'pluck (s/th)'
tepfenu 'slackening'	-tepfenuka 'be slack'	-tepfenura 'loosen (s/th)'
tasanu 'being straight'	-tasanuka 'be straight'	-tasanura 'straighten (s/th)'
mwau 'breaking'	mwauka 'get broken, torn'	-mwaura 'break, tear (s/th)'
nyandu 'disordering'	-nyanduka 'be dishevelled'	-nyandura 'disorder (s/th)'

Fortune's observation about these related forms is that **-k-** and **-r-,** respectively, bring intransitive and transitive meanings to the ideophonic base, but my observation is: isn't it interesting that **-k-** brings an intransitive sense to its set of derived verbs, and that **-r-** brings a transitive sense to its set of derived verbs, since that is not very different from what the **-ik-/-ek-** and **-ir-/-er-** extensions do with extended verbs?

To test this as an idea that could have possibilities, let us look at the effects of the potential **-ik-/-ek-** and the applied **-ir-/-er-** have on some unextended verbs. In 7, I have selected a few random samples that I expect will not serve as 'perfect examples'.

7. SAMPLE VERBS EXTENDED BY THE POTENTIAL AND THE APPLIED EXTENSIONS

Verb Stem	**Verb Stem plus Potential**
-ziva ‘know’	-zivi**k**a ‘be knowable, get known’ (Fortune, 1984, 25)
-gura ‘cut off; cut to pieces’	-guri**k**a ‘be broken, as in dried things’ (Chabata, 1997, 53)
-netsa ‘annoy’	-nets**ek**a ‘be troubled’ (Kangira, 1997, 28)
-rova ‘beat’	-rov**ek**a ‘be beaten’ (Kangira, 1997, 28)
-tora ‘take’	-tor**ek**a ‘(able to) be taken’ (Kangira, 1997, 28)
-ona ‘see’	-on**ek**a ‘be seen; visible’ (Kangira, 1997, 28).
Verb Stem (Hannan, 1981)	**Verb Stem plus Applied (Hannan, 1981)**
-rova ‘beat’	-rov**er**a ‘fasten by striking; nail’
-gura ‘cut off; cut across’	-gur**ir**a ‘take a short-cut to/from’
-oma ‘become hard, dried, parched, difficult’	-om**er**a ‘adhere (by drying onto s/th)’
-gara ‘be seated, live at, stay at, last, stay away from’	-gar**ir**a ‘lie in wait for X, ambush X, watch over X, watch for X, sit on’
-mira ‘stand, wait’	-mir**ir**a ‘wait for s/o, s/th’
-tora ‘take’	-tor**er**a ‘take for or from s/o’

Even for those examples that do not demonstrate perfectly what I am seeing here, what is most striking to me is that the verbalisers **-k-** and **-r-** in 6 signal differences between the concepts named by the ideophones and those named by their derived forms that are at least parallel with the differences signalled between the concepts named by the unextended verbs and the concepts named by the verbs which have been extended by **-ik-/-ek-** and **-ir-/-er-**, as we see in 7. Specifically, the **-k-** verbaliser in 6 signals the addition of the potential’s sense of ‘result of action or process’, and the resulting intransitive verb is usually unaccusative (see Kangira, 1997, for discussion), with a patient or experiencer or theme as subject, just as the **-ik/-ek-** extension does in 7.

The verbaliser **-r-** in 6 signals a transitive sense, with an agent or instrument as subject, and it signals that an object must be included among the arguments associated with the derived form, in parallel with what the applied extension signals in at least some sentences.[5]

There is a problem with this similarity. Morphemes are not supposed to overlap that much. They are supposed to signal different units of function and meaning with different phonological shapes. If the shapes of each pair of these verbalisers and extensions resemble one another so much, and if they function to derive new words and they mean such similar things, then why is it necessary to place them in two completely different categories, as if they could not possibly be uses of the same morpheme in somewhat different contexts?

The most obvious reason could be that the derivations in 6 are exceptional derivations and that what I have shown with Fortune's set of examples departs from the norm. But closer examination suggests that this may not be the case. In the appendix, I have listed all of Fortune's (1984) examples of verbalised ideophones which take **-k-, -dz-** and **-r-** (i.e., those verbalisers which resemble most closely what appear to be currently productive verbal extensions), so that you can examine them on your own. Briefly, the words derived with **-k-** and **-dz-** seem to me to be fairly straightforward: **-k-** (intransitive; result of process or action; potentiality); and **-dz-** (causing/making a sound or a sight which is describable by an ideophone). With the **-r-** derived forms, each instance of **-r-** seems to mark one of three things: bringing transitivity to the stem, requiring the specification of direction-towards/away-from in the argument structure (both like the applied extension) or expressing positionality (like Fortune's old, now non-productive, **-ar-** extension). What it does not seem to mark with these ideophone bases is the benefactive/malefactive relation that is associated with many **-ir-/-er-** extended verbs, something that should be explored more deeply later on.

If these three — **-k-, -dz-, -r-** — turn out to be productive 'verbalisers' these days (and we will need to find out if they are), then at least for these morphemes, there is reason to see Fortune's split categories as actually being a single category which derives verbs. Sometimes, they help to bring 'new' words into 'verb' with specifiable characteristics, and, sometimes, they make 'new' verbs out of 'old' verbs with at least some of the same specifiable characteristics. In this respect, they are unlike those

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[5] The forms derived by the **-ir-/-er-** extension may not be quite so obviously parallel with the forms containing verbalisers as they are with **-k-** and **-ik-/-ek-**. A possible reason for this is highlighted by Myers (1984, 192) when he observes in another context that ideophones, unlike base verbs, '. . . have no argument structure', a claim that will need to be examined carefully in future research that takes into account their collocations with introducer phrases.

'extensions' like **-an-, -w-** etc. which serve only to make 'new' verbs out of 'old' ones, and they are also unlike those 'verbalisers' which are no longer used productively to bring words from other word classes into the word class 'verb'.

This last observation leads me to another reason that could explain why Fortune's verbalisers and extensions have been treated as if they were different creatures. It could have come out of that underlying assumption about what derivations do which is captured in the 'either' class-changing 'or' class-maintaining idea Katamba (1993) expresses in his discussion of derivational morphemes. Maybe the relation is more like 'and/or', as Crystal (1991) and Robins (1989) suggest. It could be that at least **-k-, -dz-** and **-r-** serve in both class-changing and class-maintaining functions, and Shona could be a language that presents a clearer case of this dual function than English does.[6]

Regarding some of Fortune's other verbalisers, I wish someone would start some historical and comparative work so we can find out more about which of today's verbalised ideophones and nouns represent frozen forms: the results of having been derived by yesterday's productive extensions. That **-at-** (contactive), **-an-** (extensive) and **-ar-** (stative) are listed by Fortune as synchronically non-productive extensions is suggestive, especially when they are clearly at least related to, on both semantic and 'shape' grounds, today's **-t-** verbalised forms, and at least some of the **-n-** and **-r-**, verbalised forms, respectively. The stative, **-mar-**, which is possibly a combination of currently non-productive morphemes, **-(a)m** and **-ar-**, as Fortune (1957, 224-5; 1984, 15) notes, could also have been productive in Shona at some point. When some research has been done, it may turn out that many verbs that we now see as being productively derived with 'verbalisers' are actually left-overs from an earlier time.

At least some of the others could be as productive as **-k-, -dz-** and **-r-**. The **-v-** verbaliser, for example, could be a particular manifestation of the morpheme **-va/-ve** 'become', as in **-nyorova** 'become soft' (cp **-nyoro** (ADJ) 'soft') and **-fovova** 'become shrivelled up' (cp **fovo** (IDEO) 'shrivelled'. We might even find that the consonants found in some of the

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[6] Even English, however, provides a non-productive example. Robins (1989, 242) notes that, although English **-ly** usually serves with a class-changing function, it also has a class-maintaining function with a few words. He gives **kindly** as an example where ADJ+**ly** yields either another ADJ (e.g., **a kindly act**, with a sense that is closer to its source word, **like**, which is also found in N+**ly** ADJs like **manly**) or an ADV (e.g., **she acted kindly**, with the [more generalisable and less relevant sense], 'manner of'). Bybee (1985, 82-4), like Katamba (1993), distinguishes between the two types of derivation, using how the relevance criterion applies to each to separate them. Her approach to morphology in general, however, stresses the idea of gradience (e.g., 'inflectional' and 'derivational' are gradient, rather than bipolar, characteristics). As a result, it is difficult to say whether or not she would agree that class-changing and class-maintaining are bipolar types.

other auxiliary verbs (i.e., **-na**, 'be with' **-ri**, 'be' **-nga**, 'be able' and **-ti** 'say') participate in 'verbalising' as well . . . something that is reminiscent of Givon's (1971) 'far-fetched hypothesis' which claims that Bantu extensions all originally came from verbs.

My final observation about the consonants serving a 'verbalising' function is that the ***-y-** extension shown in 5 above seems to modify a list of root-final consonants (i.e., **-k, -r, -p, -b, -v, -mb, -nd, -ng**) that, except for **-nh**, includes the rest of the verbalisers listed in 4 that I have not even speculated about here. Only a new theory tested against relevant data will help us know more about what is going on here.

If the idea is correct that some morphemes function in ways that bring words from other classes into the word class 'verb' — i.e., 'verbalise' — and create new words from verbs that are already verbs — i.e. 'extend' — then there are implications. The first has to do with the morphological shapes of several of the verbal extensions. In most descriptions, the passive **(-w-/-iw-/-ew-)**, causative (**-idz-/-edz-** plus ***-y-** modified stem-final consonants; **-s-/-is-/-es-**), applied (**-ir-/-er-)** and potential **(-ik-/-ek-)** extensions are described as **VC**, with **V** representing **-i-** or **-e-**, since extensions are subject to word-internal vowel harmony processes.[7] Of these, the passive and the causatives are the only extensions which have a **C** allomorph, especially in Zezuru where the 'contracted' **C** forms seem to be most widely used (see, e.g., Fortune, 1984, 25). The passive and the causatives appear as **-w- or -s-** (or some other consonant which has been modified by what Fortune refers to as **-*y-** respectively) if and only if, the immediately preceding sound can combine with it (or replace it distinctively) to form a syllable onset, and so long as the derived stem does not yield a monosyllabic word. If verbalisers are manifestations of the same morphemes that give us — or at one time gave us — extensions, then I think it could be worthwhile to think again about the status of the vowel in the **VC** allomorphs of these derivational morphemes.

What I am tempted to say about this is a claim that Myers (1994) has also made with reference to what he specifies as the causative morpheme, although he made it for different reasons than I do, and there is considerably more certainty expressed in his work than I am willing to express here without more research having been done. Given what I

[7] For discussion, see, for example, Myers (1987). It also occurs to me that the operation of vowel harmony in affixation may suggest the presence of 'not-very-strong' vowels in certain affixes, which, in addition to depending on the nucleus of a neighbouring syllable for vowel shape also depend on the tone of a neighbouring syllable for their surface tones. This is an observation I make in Jefferies (1990) in connection with certain allomorphs of the copulative, 'possessive' and some of the adverbialising prefixes in Shona, where, again, these inflectors depend on 'their' stems for vowel shape and how their underlying high tones are realised. I hope someone will explore these phenomena, especially in the context of Optimality Theory, where structure preservation is taken seriously, in the sense that what is generated by the linguistic system is seen to emerge without modification.

know so far, I agree with Myers that the vowel in the **-s-** causative is needed more for phonotactic reasons than it is for lexical identification. For the lexical identification of this morpheme, as well as for others which have **iC/eC** allomorphs, all you need is the consonant, as the commonly used passive, causative and Fortune's verbalised forms show in 8:[8]

8. **C** FORMS OF SOME DERIVATIONAL MORPHEMES IN CONTEXT

-w-	**-sungiwa/-sungwa** 'be tied, arrested'; cp **-sunga** 'tie, arrest'; **-batiwa/-batwa** 'be held' cp **-bata** 'hold, touch' (Mkanganwi, 1995, 71)
-s-	**-batisa/-batsa** 'cause to hold'; cp **-bata** 'hold, touch' (Mkanganwi, 1995, 71) **-potesa/-potsa** 'cause to go around'; cp **-pota** 'go around' (e.g., a hill) (Mkanganwi, 1995, 71) **-pfupisa** 'shorten'— cp **-pfupi** (ADJ) 'short' (Fortune, 1984, 21)
-k-	**-svetuka** 'jump'; cp **svetu** 'jumping'; **-bhururuka** 'fly'; cp **bhururu** 'flying'; **-pfimbika** 'ripen fruit' cp **pfimbi** (N) 'hole dug for ripening fruit' (Fortune, 1984, 18-21)
-dz-	**-pururudza** 'ululate'— cp **pururu** 'ululating sound'; **-chochodza** 'run, of a cock' -cp **cho cho cho** 'running, of a cock'; **-shamwaridzana** 'be mutually friendly' cp **shamwari** (N) 'friend' (Fortune, 1984, 18-21)
-r-	**-gomera** 'groan'— cp **gome** 'groaning sound'; **-marangura** 'scratch surface'-cp **marangu** 'scratching surface'; **-kokora** 'scrape pot'; cp **makoko** (N) 'pot scrapings' (Fortune, 1984, 18-21).

The data in 8 suggest that vowels are needed primarily for pronouncing the derived forms. The **C** form of passives and causatives, for example, can occur only when the immediately preceding segment of the

[8] In Fortune's (1984) listing, the only productive extension containing a vowel that contrasts with another containing at least one **-i-** is **-urur-**, which is also subject to vowel harmony. What he calls the morpheme **-irir-** is not among those extensions which have contracted forms. Fortune (1957, 220-1) also lists reversives **-Vnur-a** and **-Vnuk-a,** which mark valence in addition to 'reversivity' and where V is the same as the last root vowel. There, he says, they have contracted **-ur-a** and **uk-a** forms, but none of these appear in his 1984 listing of extensions, since, in the interim, he had apparently re-analysed **-(V)-nu-** as 'belonging' to the ideophone, rather than to the verb (see, for example, Fortune, 1984, 153; for additional discussion, see Dembetembe, 1987, 11). You will see in 6 that **-k-** and **-r-**, even when affixed to **-u-** final stems, are interpreted, not as reversives/conversives of the meanings of the base form, but as valence markers. As Mkanganwi in his seminar earlier in the year, pointed out, we need new ways of looking at these phenomena if we are going to understand them more deeply.

multisyllabic stem, which is usually a consonant, is something **-w-, *-y-** or **-s-** can combine with to create an onset. Unless **-k-** and **-r-** are preceded by a vowel, they must occur in the **VC** allomorph form since they combine with nothing to form syllable onsets. With Fortune's 'verbalisers', the segment of the noun, ideophone and adjective which immediately precedes these morphemes is usually a vowel. The 'verbaliser' itself, on its own then, would serve as a syllable onset in these derived forms.

In going through Fortune's examples of verbalised forms which contain monomorphemic verbalisers (1984, 13-21), I noticed three patterns:

1) the most typical is that the base appears in its full form, and the verbaliser combines with the final vowel **-a** to serve as the final syllable of the derived verb (as we saw in 8 above);
2) in a few derived forms, the final vowel of the base form is dropped and replaced with **iC/eC**; and
3) in a few other derived forms, the final vowel of the base form is retained and the **iC/eC** verbaliser occurs as well.

In 9, I list most of the few **iC/eC** forms that Fortune (1984) offers as examples.

9. FORTUNE'S (1984, 113-21) **iC** AND **eC** VERBALISER MORPHEMES[9]

Ideophone	**Verbs with** -ik- **or** -ir-
rukutu 'being weak'	-rukut**ik**a 'be weak'
vhukutu 'dashing to pieces'	-vhukut**ik**a 'dash to pieces'
parapata 'waking up suddenly'	-parapat**ik**a 'wake up suddenly'
tsakata 'vanishing'	-tsakat**ik**a 'get lost, vanish'
tande 'stretching out'	-tand**ir**a 'stretch out'
ndure 'stinging'	-ndur**ir**a 'sting'
dzimu 'extinguishing'	-dzim**ir**a 'burn grass to prevent the spread of a fire'
teka teka 'swaying from side'	-teka**ir**a 'sway from side to side' (no FV elision)
rita rita 'walking aimlessly'	-rita**ir**a 'walk aimlessly' (no FV elision)
Adjective	*Verbs with* **-es-** *or* **-ek-**
-chena 'white'	-chen**es**a 'whiten'
-shoma 'few'	-shom**ek**a 'be scarce, insufficient'

[9] Note that, with some of these, elision occurs; with others, it doesn't. The examples also show that coalescence does not occur with these forms (see **-tekaira** or **-ritaira**), though it could be argued that it does with **-chenesa** (from ADJ **-chena**). Regarding this last possibility, Fortune (1984, 21) notes that verbalised ADJs whose root vowel is mid take the **-eC-** 'verbaliser morpheme', on false analogy with what would happen if the 'verbalisers' were 'extensions'.

With most of these, the final vowel of the ideophone is dropped, and the ideophone's final syllable onset (**-t, -nd, r, m** or **k**) is a consonant which is listed as one of the verbalisers in 4 above. There is, then, at least a possibility that the base forms are fossilised deverbatives which have been further derived as ideophones. Fortune does list a few others, but all of these are clearly preceded by other verbalisers, as you can see in 10, which lists the rest of his **iC/eC** examples.

10. VERBALISER + **iC/eC** DERIVATIONS IN FORTUNE (1984, 13-21)

ko ko ko 'tying to; securing'	-ko-m-**er-**a 'tie to; secure'
go go go 'groaning'	-go-m**–er–**a 'groan'
fe fe fe 'blowing of wind'	-fefe-t-**er-**a 'blow'
tsvu tsvu tsvu 'sound for urging on a dog'	-tsvutsvu-dz-**ir-**a 'urge on a dog'
tiki tiki 'perspiring'	-tiki-t-**ir-**a 'perspire'

Especially in 10, the **iC/eC** 'verbalisers' are indistinguishable from 'extensions', yet they are listed as examples of particular verbaliser morphemes. I am curious about this, since it is not characteristic of Fortune to list, without comment, examples of a particular category which at the same time are potentially listable in another category, as is the case with these forms.

If the vowel in what I see here as **iC** and **eC** allomorphs is needed more for pronunciation than for signalling part of a unit of derivational meaning, then we have an opportunity to test whether or not epenthesis might be in operation. The alternative, which may be equally plausible, is to see the **-i-** or **-e-** being deleted whenever it can be deleted: after other vowels (usually, but not always, as we saw in 9) and between consonants which can be adapted to serve as syllable onsets. Information which could help us choose the better of these two alternatives would need to arise out of something independent of them, and it would be good if the choice of one or the other could solve a problem we see elsewhere in the grammar.

The tonal structure of verbs in their citation form might be an area where there is information that could help lead us to a choice. Unlike words in other word classes, regular Shona verbs conform with tonal configurations, rather than, as is the 'usual' case, having tones assigned to each syllable, perhaps in accordance with principles that are not yet understood at all. In their citation form, regular verbs[10] are classified as

[10] There are a variety of irregular verbs that do not have what I am referring to as the 'regular' tonal configuration for verbs. Mkanganwi has pointed out that, in addition to the so-called 'defective verbs' like **-dai** (HL) and **-daro** (HL), there are verbs like **-dzungira**

being either H, with the first (up to a maximum of three) syllables of the stem carrying high tones and the rest being low, or L, with all syllables carrying low tones. The syllables which carry the derivational morphemes, then, depend on the tone assigned to the root for their own tones. As a result, they appear as underlyingly toneless morphemes, as they have often been described in the literature (see, for example, Fortune, 1985, 21; Odden, 1981; 1984; 1986; Myers, 1987; Jefferies, 1990; Kenstowicz, 1994).

In the context of the content word lexicon of a level tone language, where it seems to be the case that tone is associated with morpheme- and word-sized meaning units (see, for example, Leben, 1978; Hombert, 1986), this is curious: lexical tones are assigned to the syllables which realise the morphemes of content words in order to help signal different words. So why would the syllables carrying certain derivational morphemes in this level tone language be inherently and relatively systematically toneless? So far, we do not have an explanation for that. We just know from observation that they seem to be toneless, and we know that it is easier to handle them within generative frameworks if we treat them as being toneless (see, for example, Kenstowicz, 1994, 332). If there is not necessarily a nucleus in those syllables which carry derivational morphemes when lexical tone is associated with the word, then there is a reason for H-tone and L-tone patterns to spread on H and L verbs respectively. In other words, lexical tone assignment could be made independently of the specification of syllabification.[11] Conceiving of derivational morphemes that apply to verbs as **C** units which take epenthetically inserted vowels whenever they are needed or wanted, may help us to explain, rather than merely describe, regular verb tonal patterns.

(HLH), **-jirichanya** (HHLH) and **-jogodoka** (LHLH) which have citation form patterns which, for at least some speakers, do not conform with the 'regular' patterns that are typically described in the literature. Exploring how the tones of adopted and coined verbs are treated in their citation forms, however, seems to expose the 'regular, productive' patterns, as shown, for example, in Chimhundu (1983).

[11] That this could be happening is supported in fast speech pronunciations of words like **masikati** '(good) afternoon'. Even when the **-i-** of the syllable **-si-** weakens to the point of deletion, thereby contracting the word to three syllables (i.e. to **ma-ska-ti**), the pitch level of the next syllable (**-ska-**) is not lowered. Rather, it maintains the same pitch level that it would have had before **-i-** was deleted. Another, less direct, kind of evidence comes from Hombert (1986) who reports on word-game experiments conducted with speakers of level and contour tone languages. When asked to reverse the syllables of disyllabic words, the level tone language speakers, unlike the contour tone language speakers, reversed the segmental parts of the syllables, but not the tonal contour of the word (in parallel with what happens with English word stress patterns with syllable reversals: e.g., **FOOTball** to **BALLfoot**. In contrast, the contour language speakers constructed reversals taking the pattern equivalent to ***ballFOOT**.) The conclusion drawn was that, while tone is associated with meaning units like words in level tone languages such as the ones under study, it is associated with syllables in the contour tone languages of the subjects of the study.

We know from C. Harford's paper on disyllabification in Shona[12] that if there is need to epenthesise in Shona, the vowel of choice for doing so is the high front vowel **/i/**. Is it a coincidence that the allomorphs of the verbal derivational morphemes I am referring to here — potential, applied, causatives and passive — use **/i/** to derive verbs? Or could something else be happening? Again, this is something that would need some research. If my observation about this turns out to be correct, then it may bring out those kinds of recalcitrant data for existing theories — such as one that would claim that, as a matter of principle, either vowel harmony or epenthesis applies to vowels, for example — that move our understanding of what is going on forward.

The other implication of the 'extension equals verbaliser' proposal comes out of my suspicion that positing 'verbalisers' as being different from 'extensions' is probably one of the many things that make it difficult for us to explore the role of ideophones in the grammar. Fortune's (1962, 1971; 1985) approach to ideophones is that they are used 'expressively', that is, that they exist at the phonaesthemic edges of the language. In support of this, he argues that there are limited class-maintaining derivational processes which apply to ideophones, that they do not take inflections, that their internal phonology does not conform with 'regular' phonology, and that ideophonic constructions tend to interrupt the 'regular' downdrift patterns of 'regular' sentences and are used to signal a dramatic (as this is opposed to a 'normal') style of speech. Although I am not aware of a statement that makes the claim succinctly,[13] I sense that Fortune sees 'verbalisers' as those morphemes which 'bring' ideophones under the control of 'the regular grammar' of Shona. So far, the only work that begins to look at this highly productive class of words as comprising 'proper lexical items' that operate within the grammar of Shona is Tafangombe (1997). Perhaps the 'verbaliser equals extension' view will also help us take ideophones into account, especially when we are exploring the grammatical properties and/or lexical projections of Shona words. In addition, when we study things that have to do with 'extensions', such as morphological causatives or transitivity or object

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[12] C. Harford (1998) ''Disyllabification in Shona'', a seminar presented to the Department of Linguistics (Harare, University of Zimbabwe).

[13] He sometimes comes close to making such a statement, but has not, to my knowledge, actually done it. For example, 'There are many correspondences in form between ideophones on the one hand and verbs and nouns on the other where ideophones form part of a verb or noun in various ways. These seem to be clear cases of derivation and there are a series of governing suffixes for deriving verbs (Fortune, 1962, 21)'. He goes on to note that, 'Ideophonic verbs and nouns are, of course, inflected normally, and are part of formal speech. Whereas the ideophone may have exaggerated features of pitch and length as compared with those of normal speech, these are not found in the corresponding derived verb or noun forms' (Fortune, 1962, 24).

relations, we may need to redefine what the relevant data is and examine deideophonic verbs in addition to those extended verbs we currently look at as a matter of course.

I hope that scholars will undertake some research in this area. At a more general level, I hope the questioning I have done here encourages scholars to question the facts we have about Shona and to take new questions about them into account. The questions I have asked here address real problems, given my goal of trying to understand what is going on and how things are, and if the observations I have made yield something that helps us move our understanding forward, I would be pleased. If they end up yielding nothing useful, or yielding only mistaken impressions, I would also be satisfied, as long as the research that would test them is actually carried out. In either case, we will have learnt something.

I have demonstrated something by using Fortune's selection of examples to argue for a 'this is this and here are some examples . . .' position that is quite unlike Fortune's own. This is that we cannot trustingly accept the facts that result from the 'this is this . . .' approach to linguistic analysis. I do not believe we can do this with any approach discovered so far. Whether the analytical tools we use to arrive at the categories that give us our facts are relatively concrete, as Fortune's are, or highly abstract and/or heavily formalised, as they are in the majority of generative approaches, they can easily suggest to us that they yield immutable truths about language in general, and/or about Shona in particular, rather than what they actually yield: facts that result from combining our theories with our data in ways that are acceptable within the particular scientific framework that suits us best. Since what we accept as facts shapes what we see in our linguistic research, my belief about the nature of facts could help prevent us from leaping too quickly to conclusions about how things are and what is going on in the real world of human language structure.

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APPENDIX

FORTUNE'S (1984, 13-21) **-k-** AND **-ik-/-ek-** VERBALISER EXAMPLES

Verb	**Gloss**	**Ideophone**
-bhidhirika	'roll over'	bhidhiri bhidhiri
-bhururuka	'fly'	bhururu
-bwodoka	'get dislocated'	bwodo
-cheneruka	'be whitish'	cheneru
-chenuka	'be covered with dust'	chenu
-dimika	'hint, allude, be metaphorical'	dimi
-doka	'set, go down'	do
-dzedzereka	'totter'	dzedzere
-foshoka	'pour out'	fosho
-kocheka	'hang up'	koche
-kotoka	'disperse'	koto
-kwachanuka	'fall from wall'	kwachanu
-ndoka	'go out, as fire'	ndo
-parapatika	'wake up suddenly'	parapata
-paruka	'get torn'	paru
-payika	'hang up, suspend s/th'	payi
-pepereka	'wave in wind'	pepere
-petenuka	'get unfolded'	petenu
-pfuduguka	'get uncovered'	pfudugu
-pfumburuka	'be greyish'	pfumburu
-piripitika	'stampede, run together'	piripiti
-ribiduka	'gallop'	ribidu ribidu
-rotomoka	'talk loudly in sleep, or thoughtlessly'	rotomo
-rukutika	'be weak'	rukutu
-saruka	'choose'	saru
-simuka	'rise'	simu
-sungunuka	'get untied'	sungunu
-svetuka	'jump'	svetu
-tasanuka	'be straight'	tasanu
-tendeuka	'turn around'	tendeu
-tepfenuka	'be slack'	tepfenu
-tepuka	'sway'	tepu tepu
-tereka	'place (pot) on fire'	tere
-togoka	'emit smoke'	togo
-tsakatika	'get lost, vanish'	tsakata
-tsvukuruka	'be reddish'	tsvukuru

-tuturuka	'swell'	tuturu
-unduka	'lose feathers'	undu
-vhozhoka	'gush out'	vhozho
-vhukutika	'dash to pieces'	vhukutu

Verb	**Gloss**	**ADJ**
-kobvuka	'be thick'	-kobvu
-pfupika	'be short'	-pfupi
-shomeka	'be insufficient'	-shoma
-tsveneka	'be clean'	-tsvene

Verb	**Gloss**	**Noun**
-pfimbika	'ripen fruit'	pfimbi

FORTUNE'S (1984, 13-21) **-dz-** VERBALISER EXAMPLES

Verb	**Gloss**	**Ideophone**
-bhabhadza	'flap wings'	bha bha bha
-bhararadza	'shout, bleat'	bharara
-chechedza	'trim'	chechetere
-checheredza	'run with a hoop, like a bicycle rim'	checherere
-chochodza	'run, as a cock'	cho cho cho
-dadadza	'run, as a dassie'	da da da
-dededza	'toddle'	de de de
-dhiriridza	'thunder, roar'	dhirirrr
-dododza	'hammer'	do do do
-gogodza	'knock'	go go go
-kekedza	'cluck'	ke-ke-ke-e
-kukuridza	'crow'	kukurigo
-kerekedza	'cluck'	kere kere
-ngururudza	'growl, as a leopard'	ngurrr
-ngwerengwedza	'tinkle'	ngwere ngwere
-njereredza	'sing, as a cicada'	njerere
-pfipfidza	'squeak'	pfi pfi pfi
-pururudza	'ululate'	pur-r-r
-sesedza	'trot, as a dog'	se se se

Verb	**Gloss**	**Noun**
-shamwaridzana	'be friends with one another'	shamwari

FORTUNE'S (1984, 13-21) **-r-** AND **-ir-/-er-** VERBALISER EXAMPLES

Verb	**Gloss**	**Ideophone**
-chachura	'take from pot'	chachu
-chakura	'munch, like a pig'	chaku chaku
-davira	'answer'	davi
-dzamura	'take a big handful'	dzamu
-dzedzemura	'cut out a large section'	dzedzemu
-fefetera	'blow, as wind'	fe fe fe
-gachira	'receive'	gachi
-gakaira	'gulp down noisily'	gakai
-gomera	'groan'	gome
-hukura	'bark, as a dog'	huku
-jajura	'take from pot greedily'	jaju
-kakaira	'drink noisily'	kakai
-kambaira	'crawl'	kambai
-kambura	'scoop food with fingers'	kambu
-kokorora	'croak, as a frog'	kokoro/kokororo
-kwegura	'grow old'	kwegu
-marangura	'scratch surface'	marangu
-mhara	'perch'	mha
-momotera	'swarm around'	momote
-nanaira	'move painfully, slowly'	nanai
-ndonyera	'plant a shoot'	ndonye
-ndurira	'sting'	ndure
-n'aira	'glitter'	n'ai
-n'un'unura	'gnaw'	n'un'unu n'un'unu
-nyura	'sink'	nyu
-pazaura	'pull down, here and there (as a building)'	pazau
-ritaira	'walk aimlessly'	rita rita
-saira	'push'	sai
-sesemura	'cut out a section'	sesemu
-tandavara	'stretch out'	tandava
-tandira	'stretch'	tande
-tanhaura	'remove nuts from a plant, legs/wings from a locust'	tanhau

-tekaira	'sway from side to side'	teka teka
-tikitira	'perspire'	tiki tiki
-tonhora	'be cold'	tonho
-tonongora	'shell nuts'	tonongo
-tsamura	'take a pinch'	tsamu
-tsvaira	'sweep'	tsvai
tsvutsvudzira	'urge on a dog'	tsvu tsvu tsvu
-vhaira	'show off'	vhai
-yangarara	'float'	yangara
-zvambarara	'lie prone'	zvambara

Notes: Fortune (1984, 24) observes that the **-ar-/-arar-** stative extension ' . . . is akin to the verbaliser **-r-** which combines with ideophones to indicate posture'. Adding **-r-** results in transitivising some ideophones in his examples. Movement to/from and position seem to be the most common features of the other derived forms he presents.

Verb	**Gloss**	**Noun**
-kokora	'scrape pot'	makoko