1. Background

Hausa is a Chadic language spoken in West Africa, primarily in northern Nigeria and Niger Republic. It has more native speakers—probably between 20-30 million—than any other language south of the Sahara Desert, and it is a second language for at least as many additional people. It is the lingua franca for nearly everyone in the northern half of Nigeria and all of Niger, as well as Islamic peoples in northern Ghana, Togo, and Benin. There are also large Hausa speaking communities in every major city in West Africa, in large part because, in recent centuries, Hausa Islamic scholars have been the main propagators of Islam in West Africa as well as having a tradition as traveling traders.

Hausa has been used as a written language since the 19th century, when Islamic reformers began to write religious poetry and other religious texts using Arabic script. A Roman orthography was developed by British colonial officials in Nigeria in the early twentieth century for use in official documents and schools. As a written language, it was largely restricted to these uses until the last two or three decades of the twentieth century. It has now come into its own as written language, however, and one finds publications of many kinds, such as Barbara Cartland-style romance novels (written mainly by women for a female audience), magazines, collections of poetry, and the like.

In terms of structure, Hausa is an SVO language. It has grammatical gender that distinguishes masculine and feminine in the singular but not in the plural. It has a moderate amount of inflectional and derivational morphology. Like most African
languages, Hausa has a variety of reduplicative processes in the nominal, adjectival, and verbal systems, but much of the morphology, both derivational and inflectional, is related to nominal gender and number and to the verbal system to mark lexical verb classes and verbal derivational functions called “extensions”. This paper will discuss two features of verbal morphology. These are *lexical classes* and *verbal extensions*.

The most extensive published description of Hausa morphology is Newman (2000). In addition to this source, I will rely on my 40+ years of experience with Hausa. As a starting point for discussing the morphology, I use the appended test. This is a transcribed narration by Halima Lawan Danladi of a cartoon strip (see “anonymous” (1966) in the references), which depicts a hapless character named *Sauna*.¹

The orthography here follows the standard Hausa orthography for the most part, but with a couple of additions. Hausa is a tone language, with distinctive high and low tones and a falling tone, which can be analyzed as high+low on one syllable. Hausa also has distinctive vowel length. Neither tone nor vowel length are represented in the standard orthography. In the transcription here, long vowels are marked with a macron (á), low tone is marked with a grave accent (à), falling tone is marked by a circumflex accent (â), and high tone is unmarked. Note the following IPA equivalents for the orthography: *y* = IPA [j], ’*y* = IPA [ʔ], *sh* = IPA [ʃ], *c* = IPA [tʃ], *j* = IPA [dʒ], *d* is a voiced implosive, *k* and *ts* are voiceless ejectives.

2. **Lexical Verb Classes**

In looking through the interlinear glosses of the text, a number of vowels at the ends of verbs are glossed “SV” for “stem vowel”. The most widely used classification of

¹ An mp3 file of the narration is posted on the Linguistics 105 website with this paper.
Hausa verbs is the Hausa “Grade System”, first proposed in Parsons (1960). This system classifies verbs in Hausa into seven *grades*, with each grade having its characteristic tone pattern and final vowel (or set of vowels), which is the vowel glossed “SV” in the text. This gives quite a comprehensive classification of Hausa verbs, inasmuch as fewer than 25 verbs do not conveniently fall into one of Parsons’ grades. Nearly half of these “exceptions” are verbs with only one root consonant (well over 90% of Hausa verbs have two or three consonants). Newman (2000) groups these monoconsonantal verbs together as an eighth grade, which he calls “Grade 0”.

The *Sauna* text illustrates most of the grades: Grade 0 *yì* ‘do, make’ (panel #2), *bi* ‘follow’ (panel #5), *kai* ‘reach, carry’ (panel #3); Grade 1 *färà* ‘begin’, *zugà* ‘urge on’ (panel #2), *tākà* ‘step (on)’ (panel #5), *māntā* ‘forget’ (panel #4) *zāgāyā* ‘make the rounds’ (panel #1); Grade 2 *sāmù* ‘find, get’ (panel #1); Grade 3 *shīγa* ‘enter’ (panel #2), *ànkara* ‘notice’ (panel #5); Grade 4 *kwārè* ‘be expert’ (panel #2), *bīrgè* ‘impress’ (panel #3), *gānè* ‘understand’ (panel #5), *dāukè* ‘take away’ (panel #4); Grade 6 *zubō* ‘pour’ (panel #3), *hantsulò* ‘intensify’ (panel #3). Only two verbs in the text fall outside the grade system: *gudù* ‘run’ (panel #5) and the irregular *ganī* ‘see’, which has the forms *ga* before a noun object or complement clause (see examples in panel #4), *gan* before a pronoun object (*nā gan shì* ‘I saw him’), and *ganī* when no object follows. Only Grades 5 and 7 lack examples in this text, and verbs in both these grades are virtually all derived from verbs whose bases are in one of the other grades. Examples are Grade 5, “causative” verbs, such as *shīγar* ‘insert’ from Grade 3 *shīγa* ‘enter’ (see panel #2), and
Grade 7, “middle” or “intransitized” verbs, such as zuğu ‘be incited, be inspired’ from Grade 1 zugà ‘incite, urge on’ (see panels #2-3). I will not discuss these grades further in this paper.

Parsons (1960) organized the grades illustrated in the Sauna text according to their tones, final vowels, and syntactic context as in Table 1, which also includes the monoconsonantal Grade 0. Grade 2 is not well illustrated in the text, and the one Grade 2 verb (sämù ‘find, get’, panel #1) is slightly irregular, so a word not in the text is used.

Table 1. Hausa verb grades

<table>
<thead>
<tr>
<th>Grade</th>
<th>No object</th>
<th>Pronoun object</th>
<th>Noun object</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 0</td>
<td>b-i</td>
<td>b-î</td>
<td>b-i</td>
</tr>
<tr>
<td>Grade 1</td>
<td>zug-à</td>
<td>zug-à</td>
<td>zug-à</td>
</tr>
<tr>
<td>Grade 2</td>
<td>nêm-à</td>
<td>nêm-è</td>
<td>nêm-i</td>
</tr>
<tr>
<td>Grade 3</td>
<td>shig-a</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>Grade 4</td>
<td>biğ-ê</td>
<td>biğ-ê</td>
<td>biğ-ê/biğ-è</td>
</tr>
<tr>
<td>Grade 6</td>
<td>zub-ô</td>
<td>zub-ô</td>
<td>zub-ô</td>
</tr>
</tbody>
</table>

The table shows that grades are characterized by tone patterns (HL for Grades 1 and 4, LH for Grades 2 and 3, and H(H) for Grades 0 and 6) and final vowels, which differ according to grade and syntactic context. Grades 2 and 3 are in complementary distribution syntactically: all Grade 2 verbs are transitive, all Grade 3 verbs are intransitive. Parenthetically, I should note that the grade forms in Table 1 are not affected by tense/aspect/mood. These dimensions of the verbal system are marked by preverbal morphemes, some of which are seen in the text, glossed “perfective”, “relative perfective”, and a couple of others. The continuative aspect uses gerunds or verbal nouns.

---

2 The table illustrates only disyllabic verbs for Grades 1-4, 6. Verbs of three or more syllables likewise have the same vowel patterns and grade-specific tone patterns.
(glossed as such in the text), which, except for Grade 2, are formed in a regular way on the base of the “no object” grade form.

3. Extensions

The verbs of Grades 0-4 in Table 1 can be viewed as belonging to five lexical classes, not unlike verbal lexical classes such as Spanish cant-ar ‘to sing’, com-er ‘to eat’, viv-ir ‘to live’. These are the “neutral” forms of these verbs in terms of meaning, and nothing about the meaning or root shape of the verbs would predict what grade they might fall into, other than the fact that monoconsonantal verbs are automatically Grade 0, and Grades 2 and 3 are complementary for transitivity (the other grades accommodate both transitive and intransitive verbs). Grades 5-7, on the other hand, can be viewed as derived forms, described in Chadic linguistics as bearing “extensions”. These extensions replace the base vowels by a regular Hausa convention that vowel-initial suffixes replace the final vowel of the base, and, like most morphological patterns of Hausa, both derivational and inflectional, all the verbal grades are what Newman (2000) calls “tone-integrating”, i.e. particular tone patterns are integrated as part of the morphology. Virtually no verbs have forms in Grades 5-7 as their basic citation form, and each of these grades adds a fairly clear element of meaning to the base meaning of the root.

Of Grades 5-7, the text illustrates only Grade 6. We can take that as a typical example of an extension in terms of formal and semantic effects. The Grade 6 extension is called “ventive” by Newman (2000), from Latin venire ‘to come’. It indicates that the action was initiated elsewhere from the place where it has effect. It is frequently described as showing “action toward the speaker”. The text has three examples of the

3 A small number of verbs do have base forms from Grades 5-7, e.g. Grade 5 käya ‘knock down’ has no counterpart in any other grade. Grade 6 fafiθa ‘come to (after fainting)’ has no direct formal or semantic counterpart in another grade. This is no different from an English verb like beguile, with a transparent prefix but no related verb *guile in current English, or forego, which is now semantically unrelated to go.
ventive extension:  **z-ô** ‘come’ (panel #2), based on an irregular Grade 0, **z-ä** ‘go, be on one’s way’; **hantsul-ô** ‘intensify’, based on Grade 1 **hantsùl-ä** (see footnote 5 for meaning); and **zub-ô** ‘pour out’, based on Grade 1 **zub-à** ‘pour’. The Grade 6 extension of **z-ô** ‘come’ shows a canonical ventive meaning. **Hantsul-ô** shows another typical Grade 6 use, indicating an effect (benefactive or otherwise) directed to the audience of the action. The sense of Grade 6 on **zub-ô** is like “forth” if we were to translate the sentence ‘his money was coming forth…’. In each case, -ô replaces the final vowel and an all high tone pattern replaces the base grade tones.

There is another extension illustrated in the text as well. This is the “totality” extension seen with **dâuk-ë** ‘pick up and take away, pick up all’ in panels #4 and #5. The base form for this verb is Grade 2 **dauk-à**⁴ ‘pick up’. The totality extension adds a sense of thoroughness and often of removal; both senses seem appropriate for **dâuk-ë** in this text. As another example, **shig-a** ‘enter’, a Grade 3 verb seen in panel #2, has a totality form **shig-ë** meaning ‘pass through’—something like “enter and go on through”.

Obviously, the “totality” form is identical to Grade 4, which to this point we have been implying is simply an inflectional lexical class with no inherent meaning of its own. In fact, **all** the grades except Grade 0 can be used in extensional functions. Grade 1 can be used with an “applicative” sense of directing an action onto an object or location. For example, the Grade 1 form is often a replacement for Grade 2 when an indirect object is added, e.g. from **nêm-ä** ‘look for’ in Table 1, we have the Grade 1 usage in **zâ mû nêm-à**

⁴ The underlying tones of the Grade 2 form of this verb are LHL, with LH conflated on the first syllable. This configuration becomes H, giving the surface pattern HL over the two syllables of the verb. The fact that the first syllable bears two underlying tones can be seen in the falling tone of **dâuk-ë**.
makà aïkì ‘we will seek work for you’. From ruf-è ‘close’, where the most unmarked meaning is Grade 4, the Grade 1 form gives the sense of ‘cover, cover over’, e.g. yà ruf-à gângå ‘he put a head on a drum’ (‘he covered a drum (with hide)’). Grade 2 can be used in what Newman (2000:642) calls a “partitive/displacive” meaning. For example, from Grade 1 base yank-à ‘cut’, one can form Grade 2 yànk-à ‘cut a piece off’ (note also Grade 4 in the totality function yank-è ‘cut in two, sever’). Grade 3 is not typically used in extensional functions, but a large number of verb roots pair a Grade 3 in an intransitive meaning with a Grade 1 in a transitive meaning, where it is hard to say which is the “base”, e.g. Grade 1 füsât-à ‘anger (someone)’, Grade 3 füsât-à ‘get angry’.

4. Are the Verbal “Grade” Forms Derivation or Inflection

The Hausa verbal grade system poses a challenge for the traditional distinction between inflection and derivation. Grades 0-4 as lexical verb classes seem to be canonical inflectional forms. They are productive and are required by the grammar in the sense that every verb (with the exception of a handful of irregular verbs) must have a basic form in one of these grades. Final vowel and tonal variants within a grade are conditioned by the syntactic context, namely, the type of object that follows. In their function as lexical classes, they are semantically neutral, that is, for verbs like those listed in Table 1, there are no meaning contrasts between the verbs that could be attributed to their grades, nor within a grade does one find idiosyncrasies from verb to verb that could be attributed to lexically associated interpretations of the grade form parallel to, say,
English *disinfect* ‘remove infection’ vs. *discolor* ‘create wrong colors’, where the exact semantic effect of *dis-* differs depending on the root to which it is prefixed.

On the other hand, Grades 5-7, illustrated primarily by Grade 6 in this paper, are more characteristic of derivational forms. No rule of Hausa requires that any of these forms be chosen in order for a sentence to be grammatical, and they add meaning in addition to the base meaning—*zub-ô* ‘pour forth’ seems not to be the same lexeme as *zub-â* ‘pour’. A somewhat atypical feature for derivation is that Grades 6 and 7, in particular, are virtually 100% productive and their meaning effect is nearly always compositional. Ironically, it is the “base” Grades 1-4, which, in their extensional functions, are more typical of derivation in terms of (non-)productivity and compositionality. We have seen, for example, cases above where verbs in Grades 1, 2, and 3 are related in various ways, but it is hard to pin down a single set of morpho-semantic relationships. As another example, we have been assuming that *bírg-ê* ‘impress’ is an unmarked form that happens to belong to Grade 4 as its lexical class. However, there is also a Grade 1 *bírg-â* ‘stir something thin, whisk’ and Grade 2 *bírg-à* ‘intimidate, bluster at s.o.’. In modern Hausa, we may want to say that these are simply three separate lexical items that share a common historical root, but it seems likely that at one time they were derivationally related.

The problem in characterizing Grades 1-4 as derivation or inflection has parallels in other languages. In Spanish, adjectives agree in gender with nouns they modify, as in *saco chic-o* ‘cute sack (masculine)’ but *bolsa chic-a* ‘cute purse (feminine)’. The adjective agreement is a canonical case of *inflection*. But Spanish has many nominal pairs like *hijo/hija* ‘son/daughter’, *tío/tía* ‘uncle/aunt’, *amigo/amiga* ‘friend (m/f)’. 
Though these pairs use the same morphology as the adjective agreement, we would like to call this derivation—the nouns have different kinds of referents and, unlike adjective agreement, nothing about the grammar of Spanish requires that one use *hijo* vs. *hija* in a particular context.

Anderson (1992:80-82) describes a situation where Fula, a language with noun classes marking singular and plural, a canonical inflectional function, uses exactly the same system of noun classes to mark diminutives (parallel to, say, English *pig* vs. *piglet*). Since Anderson does not want to abandon the reasonable notion that singular vs. plural marking is, *prima facie*, an inflectional function, and since diminutive marking uses morphology exactly parallel to number marking, he takes the “if it walks like a duck…” approach and argues that languages can differ in terms of whether particular morphological functions are inflectional or derivational. In the case of Fula, diminutive marking is inflectional, even though it happens to be derivational in English. A more conservative approach would reserve *inflection* for a rather narrowly defined set of dimensions (for verbs, dimensions like *tense/aspect/mood, lexical class, agreement*, etc.) and a rather strict view of the relationship between morphology and grammar (morphological distinctions that are not required by grammatical exigencies are not inflection).

For morphologists decisions on the inflection vs. derivation question will probably ultimately boil down to theoretical preferences. In the meantime, speakers of languages will happily exploit the morphological resources of their languages in ways that are useful to them. Are the Hausa verbal grades inflectional or derivational? The Hausas clearly don’t care! The grade system simply provides a convenient way to express useful distinctions!
References


Sauna Plays 'Yar Dungure

Abbreviations:

2, 3  2nd person, 3rd person
adv.  adverbial ending (the only example here is a locative ending –à)
cont.  continuative aspect (often has progressive meaning)
def.  definite marker (shows that a noun has been previously mentioned or implied)
DO  direct object
f  feminine
gerund  nominal form of verb, more or less like –ing form of verbs in English
impers.  impersonal subject, like “one” or “they” in English (on in French)
IO  indirect object
link.  genitive linker (linking morpheme in certain NOUN+NOUN constructions)
m  masculine (ms = masculine singular)
pl  perfective (completed action for active verbs, existing state for stative verbs)
plac.  plural action of a verb
preDO  vowel suffix used before direct object noun
rel.pf.  relative perfective (perfective used in certain contexts—see text of paper)
SV  stem vowel (see text of paper)
tot.  totality extension (indicates action thoroughly done—see text of paper)
vent.  ventive extension (indicates action initiated at a distance—see text of paper)
VN  verbal noun

(1) Wata rānā Saunā ya-nâ zaz-zāgây-â-wā sai ya 3ms-cont. plac.-make rounds-SV-gerund then 3ms-rel.pf.
sâm-(i) wasu yârâ su-nâ wâsâ, sunâ ’ya-ɾ dungure. find-preDO certain(pl) children 3pl-cont. playing 3pl-cont. daughter-f.link. dungure

(2) Shikênan sai ya z-ô shi mâ ya shíg-a ciki-n-sù well then then 3ms-rel.pf. come-vent. 3ms too 3ms-rel.pf. enter-SV among-m.link.-them

(3) Dà Saunâ ya ga fa ìbâ-n yâ kai àbù when Sauna 3ms-rel.pf. see(DO) indeed thing-def. 3ms-pf. reach thing
Free Translation

(1) One day Sauna was going here and there when he came across some boys (who were) playing, they were (doing) ‘yar dungure’.6

(2) Well then he came and he too entered among them and was doing it. When the boys saw that Sauna was doing it, they began spurring him on, saying, “Sauna is an expert! Sauna can (really) do it!” They kept on with their talk, and they were clapping for him.

(3) When Sauna saw that indeed the thing had reached a high level, he was being urged on, and he was impressing people, then he began intensifying his efforts greatly, to the point where his money7 began pouring out on the ground.

5 The verb stem hantsul- is given in the dictionaries in the meaning ‘fall headlong, topple’, but that is clearly not the meaning here. I have used a meaning suggested by the context.

6 Dungure doesn’t have any independent meaning. Bargery (1934), the most comprehensive Hausa dictionary, defines it as “a children’s game of standing on the head”. The speaker who narrated this story used it as the name of the game depicted in the cartoon.

7 From the interlinear text, note that kud’r ‘money’ is a plural noun in Hausa.
(4) The boys, when they saw the money, began taking it away (while) they were spurring him on. When (“the time that”) he saw that the urging on had become great, he forgot about his money.

(5) He had not noticed (what was happening), and then those boys took away his money completely (“at one mouth”) and ran away. Then he understood (what was going on), he lit out running, and he followed after them.
1 2 3 4 5

Wata ránà Saunà yanà zazzágâyâwâ sai ya sâm(i) wasu yàrà sunà wàsà, sunà ’yàř dungure.

Shikênan sai ya zò shî mà ya shîgà cikînsù yanà yî, Dà yàrà sukà ga Saunà yanà yî, sai sukà fàrâ zugà shi sunà cêwà, “Saunà yà kwarê! Saunà yà iyà!” Sunà ta fàman fàđe, sunà yi masà tâfì.

Dà Saunà ya ga fa âbîn yà kai àbù anà ta fàmà zugà shi yanà birgê mutanâ, sai ya fàrâ hantsulôwa (?) sòsai dà sòsai, hàr kuñìnsâ sukà fàrâ zubôwà à kasà. Yàrà, dà sukà ga kudì, sai sukà fàrâ d’âukêwâ sunà ta zugà shi. Lokàcĩn dà ya ga zugàwà tà yi [tai] yàwà, shi sai ya màntù dà kuñìnsà.

Bài ànkara ba sai dà yàrânan suñà d’âukê kuñìnsâ gà bàkì ñaya sukà gudù, Sànnan sai ya gâñë ya tàkà dà gudù sai ya bì sù.