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Speech Disguise and Phonological Representation in Amharic*

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Recent work on speech disguise systems or language games, as they are often known, has demonstrated that there is a rich interaction between the processes forming play languages and the theory of phonological representation (Clements 1983; Haraguchi 1983; McCarthy 1982a, 1982b, forthcoming; Wright 1983; Yin 1983; Yip 1982). Specifically, the facts of a wide variety of speech disguise systems support the conception of phonological and morphological structure developed in McCarthy (1979, 1981) and subsequent works, where a CV-skeleton representing the segmental timing of utterances is posited to be independent of its associated phonemic melody (or melodies, in some cases). Quite generally, even in languages with exclusively concatenative morphological systems, language games may manipulate the CV-skeleton and the phonemic melody entirely separately from one another. In one Arabic language game (McCarthy 1982a), for example, the root consonants are transposed without affecting either the CV-skeleton or the other, vocalic phonemic melody. This is perhaps to be expected, given the overwhelming evidence internal to the language for the division between roots and other elements of the phonological representation. Yet strikingly, in Austronesian languages like Tagalog (McCarthy 1982b) or Bantu languages like Luganda (Clements 1983), we find precisely the same phenomenon in a transposition language game. In these languages, the phonemic melody - albeit without the consonant/vowel dichotomy that is characteristic of Semitic - is transposed, leaving behind the representation of segmental quantity by the CV-skeleton.

In this note, I will propose an analysis of a speech disguise system, based on the Ethiopian Semitic language Amharic, with a property that has not yet been observed: manipulation of the CV-skeleton while the root phonemic melody remains unaltered. In this respect it contrasts with the Arabic, Tagalog, and Luganda language games mentioned above,

*Although this paper was not presented at the workshop, its obvious connections with the work of the other authors represented in this volume seemed to justify its inclusion here.

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where the CV-skeleton is ignored by the process of speech disguise. All data on the Amharic play language come from the valuable treatment by Teshome Demisse and Bender (1983). The language is used chiefly by what they call "freelance prostitutes" in Addis Ababa, although it is said to have originated with a group of schoolboys' football team.

A disclaimer. Like the other Ethiopic speech disguise systems described in Leslau (1964), this Amharic one goes beyond the familiar norm of play languages like pig Latin by augmenting the phonological transformation with a number of lexical and grammatical peculiarities. I shall not be concerned with those here except as they bear on the purely phonological aspect of how the regular processes of speech disguise operate in this case. I shall also give rather short shrift to certain aspects of Amharic phonology, although there is no doubt that closer study of them might illuminate some aspects of the language game.

Some regular and phonologically relatively transparent data from the Amharic language game appear in (1):

(1)	Amharic form	Disguised form	Gloss
a.	g ^w aro	g ^w ayrər	'backyard'
	gən	gaynən	'but'
	mətt'a	mayt'ət'	'come' ¹
	kɛfu	kayfəf	'cruel'
	t'əffa	t'ayfəf	'disappear'
	bər	bayrər	'dollar'
	bərr	bayrər	'door'
	t'ətt'a	t'ayt'ət'	'drink'
	bəlla	bayləl	'eat'
	gəbba	gaybəb	'enter'
	wətt'a	wayt'ət'	'exit'
	sətt'ə	sayt'ət'	'give'
	hed	haydəd	'go'
	yet	yaytat	'where'
	bet	baytət	'house'
	dəgg	daygəg	'kind'
	wɛšət	wayštət	'lie'
	wəddədə	waydəd	'love'
	bədda	baydəd	'make love'
	səm	sayməm	'name'
	man	maynən	'who'
	s'afə	s'ayfəf	'write'
	k'əllələ	k'ayləl	'wishy-washy person'
b.	kəbad	kaybdəd	'heavy, difficult'
	wərk'	wayrk'ək'	'gold'

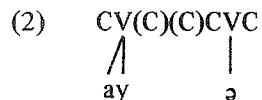
səkkərə	saykrər'	'drunkard'
wəssədə	waysdəd	'take'
zəffənə	zayfnən	'sing'
təmara	taymrər	'learn'
səddəbə	saydbəb	'insult'
gabbəzə	gaybzəz	'invite to'
k'əld	k'ayldəd	'joke'
rəjjim	rayjməm	'tall'
səgara	saygrər	'cigarette'
t'əyyək'ə	t'ayk'ək'	'ask'
c. təwəllagəd	waylgəd	'stagger' ²
birc'ək'o	bayc'əkək	'glass, drinking' ³

The quite systematic alternations in (1) between Amharic and the play language based on it constitute the vast majority of the forms cited in Teshome Demisse and Bender (1983). It is fairly clear that one or at most two processes are involved in forming the disguised words.

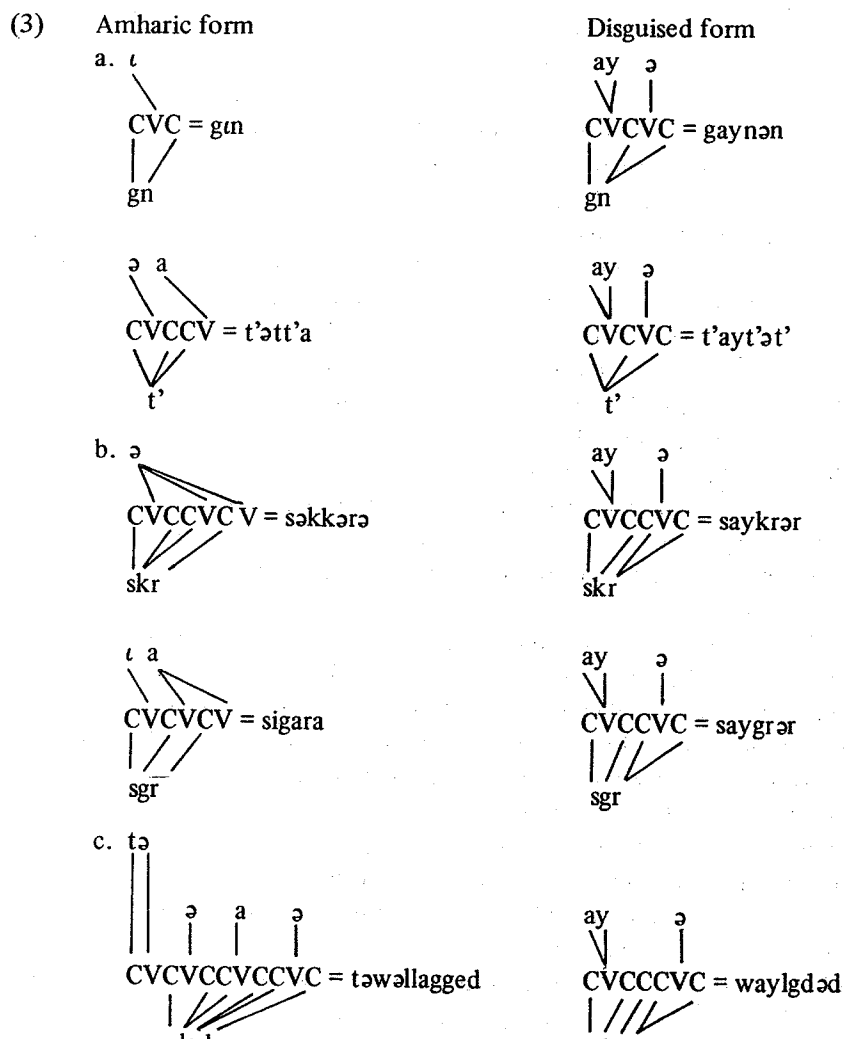
Pretheoretically, we can observe that the Amharic form transmits no information to the language game other than its consonants. The canonical form and the vocalism of the base are irrelevant to determining the disguised form. The language game supplies the vocalism - the diphthong *ay* in the first syllable and *ə* in the second - and it also supplies the canonical pattern assumed by the derived form. This canonical pattern is CVCVC in (1a), CVCCVC in (1b), and CVCCVC in (1c). We can also observe that choice of canonical pattern for the disguised form among these three possibilities is determined by the number of *different* consonants in the Amharic word. That is, the forms in (1a) have just one consonant (like *t'ətt'a*) or two different consonants, although they may have two, three, or four actual consonants when geminates and nonadjacent identical consonants are counted. On the other hand, all forms in (1b) have three different consonants and the forms in (1c) have four, when the prefix *tə* is discounted.

The theory of morphophonological representation applied to Semitic languages in McCarthy (1979, 1981) provides a straightforward unitary account of these disparate observations. The language game extracts from the Amharic base form only the consonantal root, the fundamental unit of lexical organization, which is represented on a separate autosegmental tier from either the vocalism or the CV-skeleton. That is, the language game is sensitive to the contents of the root tier alone. Roots in Arabic and Hebrew, and in Amharic as well, are subject to a constraint that is a version of Leben's Obligatory Contour Principle: adjacent identical elements are prohibited. It follows, then, that any reference to the number of *different* consonants in a surface form is equivalent to referring to the

number of consonants in the root itself. Thus, the forms in (1a) all have uni- or biconsonantal roots, those in (1b) have triconsonantal roots, and (1c) have quadriconsonantal roots. Finally, the language game itself supplies a CV-skeleton (or rather, a family of them), to which the *ay-ə* vocalic melody is preassociated. This skeleton appears in (2):



Let us first look at some representative Amharic forms and their disguised counterparts, and then turn to some details of the autosegmental association. In (3) I display words from each of the three types in (1):



The first issue we must deal with is the pattern of association found in the language game forms. Although the original Amharic forms show a wide variety of idiosyncratic, lexically or morphologically determined associations, the disguised forms are all associated according to the unmarked or automatic rules. That is, they have one to one association of all nonfinal consonants and autosegmental spreading of the final consonant. In this respect, they conform precisely to what happens with geminate or ninth binyan forms in Arabic (McCarthy 1979, 1981). It follows, then, that no special rules of association are needed beyond the universal apparatus already justified.

A second issue is the selection of the correct skeleton from among the choices embodied by the parentheses in (2). We have already observed that the size of the template – the expansion of the parentheses – is determined by the number of consonants in the root. This sort of behavior is extensively precedented in Semitic; some Arabic skeleta are prohibited with roots of four consonants (generally because one consonant would inevitably be lost), whereas others may not occur with roots of two or three consonants. Although the language game must apparently stipulate the connection between skeleton size and root length, such a stipulation is also countenanced by universal grammar on independently motivated grounds.

An alternative account of these two problems can also be considered. We might suppose that the autosegmental spreading in the language game is not a result of universal conventions but is rather stipulated in the representation of the skeleton. In other words, the grammar would explicitly require that the last two C-slots of the skeleton in (2) be associated with the same segment. With this in hand, we can then appeal to universal considerations for the connection between skeleton size and root length. In McCarthy (1984) it is proposed, based on data of a quite different sort from Modern Hebrew and Cupeño, that optional skeletal slots are expanded only when some phonemic material would otherwise remain unassociated; in effect, the necessity of expressing all lexical material phonetically forces association with optional slots. The interaction between the stipulation about the manner of association and this universal principle also generates the correct constellation of facts. Since I know of no data that select between these two quite different accounts, and since they are roughly equivalent in explanatory power, I will leave this issue undecided.

In many cases the source of the disguised form is not Amharic proper but English; generally we find that these loan words behave according to the analysis developed above:

(4)	English form	Disguised form
	a. cash	kayšəš
	cassette	kaystət
	date (appointment)	daytət
	gin (drink)	jaynən
	shit!	šaytət
	whiskey	wayskək
	b. artificial	ayrtətfayšləl
	Mirinda	mayrndaɣəd
	sprite (Sprite)	ayspraytət

The forms in (4a) require no further comment, given that some approximation to English phonetics is the input to the speech disguise system. The words in (4b) are all, in their undisguised forms, in flagrant violation of the canons of Amharic word structure. As Teshome Demisse and Bender (1983) suggest, they are split into two quasi-words for the purposes of the language game, a phenomenon that is quite well attested in many other languages (McCarthy forthcoming). This is particularly clear in the case of *artificial*, where the foot-sized units *arti* and *ficial* are separately input to the language game.

The facts discussed to this point are representative of the most straightforward and general aspects of this Amharic speech disguise system. With some phonological and morphological background, most of the remaining data in Teshome Demisse and Bender (1983) are readily explicable as well. First, affixes of various sorts are ignored in the construction of the disguised form. This follows from the insensitivity of the language game to any aspect of the base word other than its root, since affixes are obviously not part of the root. We have already noted this fact in connection with (1a), and it is also attested in *maynkək* from Amharic *mankiya* 'spoon'.

Second, Amharic does not contrast labialized and nonlabialized consonants before round vowels. It is apparently the case that consonants in this environment are underlying (redundantly) labialized, because the labialization appears overtly before nonround vowels in the disguised forms. This fact is responsible for a large number of surface alternations attested in the following forms:

(5)	Amharic form	Disguised form	Gloss
	bunna	b ^w aynən	'coffee'
	k'onjo	k ^w aynjəj	'beautiful'
	t'ərmus	t ^w ayrm ^w aysəs	'bottle'
	šukka	š ^w aykək	'fork'
	k'olləf	k ^w aylfəf	'lock'

muztk'a	m ^w ayzk'ək'	'music'
k'ut'ir	k ^w ayt'rər	'number'
suk'	s ^w ayk'ək'	'shop'
c'ohə	c ^w ayhəh	'shout'
k'ucc	k ^w ayc'əc'	'sit down'
	f ^w aydəd	'food'
	v ^w aymtət	'vomit'

Apart from the emergence of underlying labialization, these language game forms are unremarkable.

A final set of phonological effects in the speech disguise system is observed with the vowel-initial words in (6). In these forms, the initial C slot of the derived CV-skeleton apparently remains empty, contrary to what we would expect from the association procedure.⁴

(6)	Amharic form	Disguised form	Gloss
	ɛ ɲɲa	ayɲɲa	'we'
	ɪne	aynənə	'I'
	antə	ayntət	'you (m. sg.)'
	anci	ayncəc	'you (f. sg.)'
	addərə	aydrər	'stay over night'

The explanation for this apparent anomaly is quite straightforward: the roots of all of these words have initial *h*, associated with the first C slot, which is deleted in all contexts (Bender and Hailu Fulass 1978:47). We may prefer to eschew this relatively abstract treatment in a complete phonological treatment of Amharic, but in any case the question is totally independent of the language game discussed here.

This exhausts the data except for a few patently irregular forms that are noted as such by Teshome Demisse and Bender (1983). I conclude, then, that the CV-skeleton in (2), augmented by some stipulations about association, is a sufficient account of the formation of this speech disguise system in Amharic. What is of particular interest here is the similarity between this language game and the ordinary morphological resources of Semitic languages. Not only is the language game parasitic from the root-pattern dichotomy that underlies Amharic morphophonological representations, but it also supplies a CV-skeleton just as the Semitic processes of verbal derivation characteristically do. This observation supports not only the conception of morphophonological structure developed here but also the notion, developed in McCarthy (1982b, forthcoming), that language games are a kind of functionally empty morphology, sharing significant formal properties with the nonconcatenative morphological systems of the world.

NOTES

1. The apostrophe indicates glottalization. Geminate glottalized consonants are written with a single apostrophe.
2. The *tə* sequence in the Amharic form is a prefix, which is systematically ignored in the language game, as I show below.
3. The *ɪ* in the disguised form is a vowel epenthesized into the medial triconsonantal cluster by a phonological rule (Bender and Hailu Fulass 1978:38). The disguised form is irregular in its loss of glottalization.
4. The first person pronouns in (6) are exceptional in retaining final vowels in the disguised form.

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