NOTICE OF

60TH ANNUAL GENERAL MEETING

The Annual General Meeting of the Society for 1986 will be held in the Conservation Centre, 120 Wakefield Street ADELAIDE.

on

MONDAY 24TH NOVEMBER 1986 at 8.00 PM.

AGENDA

1. Apologies:

2. Minutes of the previous Annual General Meeting:
   Minutes of the previous Annual General Meeting, held in the Conservation Centre, 120 Wakefield Street, Adelaide on Monday, 24th November 1985, having been circulated in this Journal, to be confirmed

3. Annual reports:
   Annual Reports from the President, Secretary and Treasurer, to be accepted.

4. Election of Officers:
   The election of office bearers for Council for 1987, in accordance with the Rules and By-Laws of the Society, to be carried out.

5. Speaker:
   Mrs Valerie Campbell will deliver a Presidential address.
   This will be the last meeting for Val. as her family is moving to Christchurch in December.

6. Supper will be served after the Address.

R. Allison
Hon. Secretary
120 Wakefield Street
ADELAIDE SA 5000.

PLEASE NOTE THAT SUBSCRIPTIONS FOR 1987 ARE NOW DUE.
The Talking Drums of Africa

from Scientific American

In spite of an abundance of tall tales, drum talk is a reality. Moreover, the drummers of Africa may well have been the first to utilize the principle of redundancy in their communications.

by John F. Carrington

Stories about African drum language usually elicit either uncritical acceptance or unwarranted skepticism. The former accounts for the attention wasted on such extravagant claims for drum talk as a speed of transmission greater than the speed of sound, or on the purported existence among "primitive" men of extrasensory perceptions that have atrophied among more civilized peoples. There is, of course, no need to invoke telepathy to explain drum talk. The procedure is usually more long-winded than swift, but no one who has lived in central Africa can doubt its existence. The presence of one or more drum sheds in many Congo villages and the use of drum talk to broadcast the most banal messages suffice to banish disbelief.

I remember seeing two men approach me along a village street one day. One of them darted into the village drum shed and beat out a quick message before rejoining his friend. The village was in an area whose drum language I did not know, and I was eager to find out what the man had signaled in such a short time because the usual message takes several minutes. He told me he had left his cigarettes that morning in his house in a village half a mile away. Knowing that a friend there intended to join him later, he had called him on the drum, asking that he bring the cigarettes along when he came. Messages of no greater import than this can be heard morning and evening and often through the day and night in many a village in the Republic of the Congo and elsewhere in sub-Saharan Africa.

The subject of drum language—or, as it is more proper to call it in the Congo, gong language—has been shrouded in mystery partly because of the confusion of one early investigator, the German linguist Carl Meinhof. Listening to the gong-beaters in one community in the Cameroons, he tried to compare their beaten notes with their spoken words. For instance, in order to signify a dog, the gong-beaters sent a six-syllable signal that they rendered phonetically as kuku to Tokulo. Their spoken word for "dog," however, was mbo. Meinhof published his conclusion that "there is no resemblance between the beaten elements and the spoken language of the people," and thus gave rise to an illusory mystery that has belied the subject ever since. Meinhof's informants were not, however, purposely deceiving him; it may take six or 10 or more syllables of gong language to unambiguously express a meaning that is clearly conveyed in a single syllable of spoken language. Among the Lokele, the Upper Congo linguistic group that is most familiar to me, the gong-language phrase for "dog" has 14 syllables and the spoken word for "dog" (ngwe) has only one syllable. The gong phrase, in translation, is "giant dog, little one that barks kpe kpe.": To be sure, the word "dog" appears in the gong phrase, but all the other words are designed to make it clear that what is being described is a dog and not something else described by a low-toned one-syllable word.

What dictates this form of gong language is the phenomenon of tonality, which is a key element in most African languages although it is virtually absent from European tongues. Let us consider an example in English. The sentence "They're in the house," when spoken with equal stress on each word, is quite recognizable different in meaning from an interrogatory "They're in the house?" or an emphatic "They're in the house!". In the first instance the speaker's voice falls in pitch throughout the statement. In the second, "house" is spoken with a rise in pitch and in the third "in" is emphasized. In Congolese languages this "semantic use of tone" is evident in every individual word. In spoken Lokele, which has 19 consonants and seven vowels, only 133 distinctly different syllabic sounds—the product of 19 times seven—are possible. By means of tonal variation, however, words consisting of identical syllables can be distinguished from one another. In the examples that follow, a high-toned syllable will be indicated by capital letters and a low-toned syllable by small letters. Take the word for copper: bosongo. The same three syllables also mean "river current" and "pestle." The three syllables for "copper," however, are low-toned, whereas "river current" is bowNGO and "pestle" is boaSONGO. Similarly, longo is "irritation," longo is "hill" and longo is "skull." Curiously there is no such word in Lokele as LONGO, the fourth possible tonal variation.

Since each syllable in such a language can be spoken in either a high or a low tone, there are four ways to accent a two-syllable word, eight ways to accent a three-syllable word, and so on. The unwary outlaw can easily encounter difficulties. For example, lala means "fancée" and lala means "rubbish dump." He who says sOoLaMABoBoli instead of sOoLaMBABoBoli has stated that he is boiling his mother-in-law rather than watching the riverbank.

Bearing in mind the presence in the spoken language of two distinct tones, one high-pitched and the other low, let us now consider talking drums and talking gongs. A drum is a membranophone; the membrane of skin, which vibrates when it is struck, is stretched over a resonator made of wood, pottery or some other material. The instrument used to send messages in the Upper Congo is made solely of
DRUMS OF THE CONGO, which are actually gongs made from a particular tree, vary widely in shape. The Lokele favor a simple cylinder (b). The slots of Bankundo gongs (a) and Baluba gongs (c) are more complex. Azande gongs (d) take the form of animal effigies and Batetela gongs are triangular in cross section (e). The other three gongs (f-h) exhibit variations on these basic shapes.
TRUE DRUMS, in contrast to the wood gongs of the Congo area, are used in West Africa. Two kinds of Ashanti drums (I and J on map) are shown in the illustration at bottom of page. The Congo gongs that are located on the map (A–E) are shown on preceding page.

wood, and the entire instrument vibrates when it is struck. It is thus an idiophone, like metal gongs and the wood and metal bars of the xylophone and the glockenspiel. The wooden gongs of the Congo are nearly always made of the red heartwood of a forest tree that also yields a powdery substance that is smeared on the body on ceremonial occasions.

The gong-maker gouges a slot in a round log of this red wood and then hollows out the log, making sure to remove more wood from under one “cheek” of the slot than the other. As a result when one lip of the slot is struck with a rubber-covered stick, the gong emits a low-pitched note, and when the other lip is struck, it produces a higher note. The Africans who use talking gongs generally speak of the lower sound as the husband’s voice and the higher one as the wife’s. This refers, however, to penetration rather than to pitch alone. If a gong’s high sound has more carrying power than the low one, it is the sound that carries farther that is considered male. The sound of a gong can carry a remarkably long way. If a large instrument is situated on a riverbank, it can be heard for five or six miles in the cool, quiet hours of evening and early morning. Smaller gongs will carry two or three miles.

The simplest form of talking gong is one used by the Lokele living near Kisangani (formerly Stanleyville), where it is known as a bongunu or bongungu. It is simply a cylinder of red heartwood hollowed out through the long side slot. The Mongo of the central Congo use a quite similar gong (which they call a loko), but the lips of its slot have small projections in the middle. The gong of the Katanga region (called a mondo) has even longer projections. The lip area under the mondo projections is so thick that the opening appears to consist of two square cavities connected by a narrow slit. The gongs used in the Mayombe area, nearer the Atlantic coast, are similar; their exterior, however, is not circular in cross section but almost triangular. To the north the Azande and related peoples produce elaborately carved gongs that they shape in the form of an animal such as an antelope, complete with head, tail and four legs; the slot follows the line of the animal’s backbone.

How can the gongs talk? The reader has probably already surmised a connection between the high and low tones of Congolese languages and the two “tones of voice” of the gongs, and he may have recognized the hint contained in the Camerooners broadcasters’ need to use six drummed syllables to express their one-syllable spoken word for “dog.” The answer is that the gong’s two tones are used not to transmit vowels and consonants but to mimic the tones of well-known stock phrases. Each phrase is understood by sender and receiver alike to represent one word or another of the spoken language, as the following examples show. In spoken Lokele the word for “banana” is likondo. The equivalent gong-language phrase is likondo Llibo Tumbela, which means “bunch of bananas propped up.” The spoken word for “manioc” is lomata; the gong phrase is lomata oTikala KOudo, or “manioc left behind in the fallow ground.” Similarly, the word for “up above” is likolo and the gong phrase is likolo konDUASE, or “up above in the sky.” “Leopard” is nogul but is beaten out as ALONGA losando, or “he tears up the roof,” “goat” is MBULi and is beaten out as iMBumbali SHAO-
It is probably to facilitate the memorizing of a sizable vocabulary of such stereotypes that the phrases are often cast in joking or amiable forms. The gong form of "dog" in the Lokele language—"giant dog, little one that barks kpet kpet"—is an affectionate diminutive of the kind that in European languages turns Jack into Jackie and Jan into Janneke. So is the gong form of "goat" and "firewood" and, on analysis, the gong form of "manioc" ("what remains in the fallow ground are the little bits left after the main crop is harvested"). Dan Crawford, who worked as a missionary in the Congo, wrote affectionately of this aspect of the mondo gong of his area: "Not a dull...rub-a-dub...but a drum with a tongue wagging out even gossip; a drum that, provided you do not crack it, can actually crack a joke. Again and again...you can hear...a burst of laughter. [The listeners] are laughing at the pleasant wit of Mr. Mondjo five miles off."

The phrases also tell us a good deal about the culture of the people who invented them. Manioc will keep in the garden for a long time until one has a need for it. As bunches of bananas grow heavy they need to be propped up with forked sticks so that they do not pull over the plant's weak stem and rot on contact with the soil. Leopards are dangerous even when the gong shed has strong doors; they can tear away the roof thatch in order to reach their prey.

The gong sheds have been doing for centuries something that Western communications theorists learned to be necessary only a few decades ago. He utilizes the principle of redundancy. In 1928 Ralph V. L. Hartley of the Bell Telephone Laboratories, who was investigating the intelligibility of telephone communications, expressed the required relationship between the quantity of information in a message (H) and the number of signs (N) employed out of the total number available (S) in the equation $H = N \log_2 S$. If we use Hartley's equation to estimate how many Lokele syllables need to be broadcast when the total number of available syllables in the language is 266 (133 vowel-consonant combinations spoken in a high tone and 133 in a low tone), it appears that about eight gong-phrase syllables are needed for every syllable in a spoken word. If the reader examines the phrases I have cited, he will see that Lokele broadcasters have not usually gone that far, although an occasional phrase may exceed the Hartley ratio. The Lokele nonetheless achieve the required redundancy quite simply by repeating each phrase.

It is because of this repetition that it takes several minutes to broadcast even fairly brief spoken messages.

The need to construct a gong phrase that is much longer than the spoken word is reflected in the gong names given to both individuals and villages. For example, the village of Yakusu, 15 miles west of Kisangani, has the gong name afaka kolaledimbu, a phrase that is probably derived from the names of two ancestral villagers. The villagers of Yaalu, near the Yangambi Agricultural Station, claim by their gong name to be "The elders of Yaokanja" (the geographical name of the central Lokele area); the villagers of Yatuka, 50 miles upstream from Yaalu, proudly use the gong name "Masters of the river."

Sometimes the gong names commemorate historical events. For example, the villagers of Yatuka showed that they were indeed masters of the river on one occasion when a nearby village on the same bank of the river challenged them to a fight. At the time the gong name of the other village was "They had medicine to overcome curses." After Yatuka had won the battle, it forced the other village to move to the opposite bank of the river, where the gong name was changed to "The evil spirit has no friend nor kin."

When personal names are transmitted, the extended form may reflect the spoken name directly, may identify the individual by parental references or may be purely imaginative. A medical assistant I knew in Kisangani was an orphan, and his spoken name was Lotiba, which is the word for orphan in the Lokele tongue. His gong name explained in picturesque language just what an orphan is: "The child has no father nor mother, he begs for his food in the communal hut." Another young man from the same village had a purely imaginative gong name: "Don't laugh at a black skin, because everybody has one."

Marriage is patriloc, and in a polygamous household the same paternal name, but their mothers seldom come from the same village. Thus when a gong name is extended by the addition of paternal and maternal references, it is usually the father's given name and the name of the mother's village that are appended. Another Kisangani medical assistant, my acquaintance, John Litumanga, enjoyed one of these imposing three-part gong...
his own gong name. "Sof of the spitting cobra" was his father's gong name and "of the village of Middle Yafolo" specified his mother's original residence. Litumanya had inherited his own gong name from his grandfather.

Even the gongs themselves can have personal names; the broadcaster will beat out the name of the gong at the beginning or the end of his message. Today Congo villages are declining as the young people move to the larger population centers. One consequence of this is that many of the names given to the gongs have a bitter flavor. The Ya-
"mangwendua clan of Yangomu village has named its gong "Birds do not steal from a person without food." The two large gongs of the Bakama of Bandio are named "We eat the last bits of food" and "Ears of mine, do not listen to what people say" (an admonition to be stoical when other clans mock their reduced numbers).

Some villagers are less embittered. The name of the gong of the Yabita clan of Yalomba is "An empty gourd cannot be kept beneath the surface of the river," and the gong of the Yambonga of Bokondo proclaims the clan's self-
identification with a tree that is noted for its thorny bark: "The bolongo tree is not beaten with the hand for fear of its thorns." The Bungola clan of the same village calls its gong "The male elephant waves his trunk about."

The two-toned phrases of a gong language can be broadcast by instruments other than gongs. For example, hunters carry small horns, usually made from antelope horn but sometimes made from ivory. The horns have a hole at the small end and a second hole, through which the hunter blows, in the side. By covering and uncovering the end hole the low tones. The range of these horns is a mile or more.

Even the human voice is used to transmit two-toned phrases over distances of a mile or so, particularly along a river in the cool of the evening when the sound of a voice carries a long way. Home-

bordered Lokole fishermen will signal their success with shouts long before they reach the village. Rather than giving high-pitched and low-pitched shouts, they substitute the syllables ki or li for the gong-language high tone and ke or le for the low tone. The fishermen of Yalomba use the same method, but their substitutes for the high-pitched syllables are ko and go and for the low-pitched ones ku and gu.

Although it is more proper to speak of gong languages rather than drum languages in the Upper Congo region, skin covered resonators are often used to broadcast messages in other parts of Af-

rica. The Ashanti, for example, use two drums for this purpose: a small one to produce the high-pitched tones and a larger one for the low-pitched tones. They call the pair "husband and wife." Drummers often accompany important Ashanti chiefs on festive occasions, beating out praise names on single small drums held under the arm. The drum-

mer is able to produce two notes on the one drum because the resonator is shaped like an hourglass. By increasing or diminishing the pressure of his arm on the taut cords that run between the two drumheads he can tighten or loosen the membrane and alter the drum's tone.

Stories of the long distances that drum messages travel can be explained by the willingness of successive broadcasters to relay significant news. As Henry Morton Stanley relates in his diaries, his

by Lokole drummers. It is certain that important messages travel from village to distant village in this manner even today. When a message reaches a linguis-
tic border, however, it cannot travel farther without translation. This is not as serious a handicap as might be supposed. Most border village families have female members who have come from neighboring tribes, so that the children grow up speaking both their father's and their mother's language. The result is that bilingual broadcasters are usually available.

In addition to skin drums, horns and the unaided voice, whistles are sometimes used to transmit gong language. Small children sometimes fashion whis-
tles and proceed to broadcast praise names outside the house of some impor-
tant villager, expecting a reward for doing so. Whistling by mouth serves to pass messages secretly within a group on the appearance of a stranger. Many travelers in Africa have commented on arriving in an apparently deserted vil-

lage and hearing whistling from the empty houses or the nearby forest. The stranger is being carefully described to the community at large by people who watch his progress through the settle-

ment.

In earlier years there were no secrets about gong language; it was public for everyone to hear. Indeed, it was such an integral part of tribal culture that when I sought information on the subject from Lokole broadcasters, they simply as-

sumed that we Europeans had similar instruments at home. The only time I ever encountered difficulty with an in-

formant was when I asked a Lokole fish-

erman what his gong name was. He re-

plied that he would tell me his if I would tell him my own. When I said I did not have a gong name, he responded that I was a liar. Convinced that I was with-

holding the information, he never did give me his name.

Today, as a result of population shifts, fewer and fewer young Africans are fa-

miliar with gong language. In a typical village of the Upper Congo the gongs talk every morning and evening, but in the city of Kisangani few exist and they are seldom heard. One of the rare broad-

casters in Kisangani, whose small gong is audible at times throughout most of the city, has told me with regret that he can no longer recall all the gong lan-
duage phrases his father knew and transmitted. I suspect it is high time that in-

terested linguists and ethnologists began to record these unique languages before they disappear forever.