

VOICES OF THE RAINFOREST



Bosavi, Papua New Guinea

**VOICES OF THE RAINFOREST
BOSAVI, PAPUA NEW GUINEA**

August 1990
Mt. Bosavi
Southern Highlands Province
PAPUA NEW GUINEA

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360° Productions
P.O. Box 3472
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Dear Mickey,
Greetings from the Bosavi rainforest. Or, to shout it through the trees as my Kaluli hosts might, NAO-OO-O! Which translates into something like, YO!! CALLING MY DISTANT BROTHER!

So here I am, back on the Great Papuan Plateau. If you pull out a map of Papua New Guinea you'll quickly find the name of Mt. Hagen, the largest town in the central highlands mountain range that runs up the middle of the country. Now trace a route about 100 miles to the southwest, to Mt. Bosavi, an extinct volcano that towers 8000 feet above the Plateau floor. That's where I am.

Here, just north of the mountain, live some 1200 indigenous people whose isolated longhouse communities are dotted through the rainforest. They call themselves Bosavi people, and are loosely divided into four smaller groups by geography and language differences. The ones who live in the most central region call themselves Kaluli. It's with them that I've undertaken all of my research and recording since the mid-1970's.

My Kaluli hosts now live at a place called Bolekini. People built me a new palm and thatch house to the side of their own communal longhouse. My rear veranda is set on posts ten feet off the ground, looking out toward Mt. Bosavi. The view today of the immediate rainforest edge and the distant mountain at sunset is pretty spectacular.

I've been thinking that since you're such a noisy guy you'd really like it here. Not because there are a lot of drums, but because you'd immediately lock into the spectrum of rainforest noises. I'm speaking of the rhythms of birds, of crickets, of frogs; the pulsing of rain, of creeks and streams. It's a never-ending and dense soundscape. And with it Kaluli sing along and beat out their own rhythms using the primal percussion of bamboo and palm canes, stone pounders, machetes and axes.

Kaluli people think of themselves as "voices in the forest." They sing with birds, insects, water. And when Kaluli

sing with them, they sing like them. Nature is music to Kaluli ears. And Kaluli music is naturally part of the surrounding soundscape.

To understand how Kaluli hear this world you have to get a handle on what they call *dulugu ganalan*, or "lift-up-over sounding." This refers to the fact that there are no single sounds in the rainforest. Everything is mixed into an interlocking soundscape. The rainforest is like a world of coordinated sound clocks, an intersection of millions of simultaneous cycles all refusing to ever start or stop at the same point.

"Lift-up-over sounding" means that the Kaluli hear their rainforest world as overlapping, dense, layered. And they apply the same principle to their own music. People's voices layer like the trees of the forest canopy. Sounds of drums or axes arch up and out like tumbling waterfalls into swirling waterpools. That's what you'll hear in these recordings. You'll hear the birds, insects, and rains do their "lift-up-over sounding." Then you'll hear the Kaluli do it with them. In this rainforest musical ecology the world really is a tuning fork.

"Lift-up-over sounding" is the Bosavi rainforest groove. It's like nature's own multitrack recording studio. Imagine 24 sets of stereo faders clocked to the cycle of the day, automatically sliding up and down, bringing tracks of numer-

ous kinds of rain, wind, birds, insects, and water all into a swell of sounds. And bringing Kaluli voices and instruments into and out of the same mix.

But I'm overwhelmed by a horrible irony in this story about music and nature. At just the moment when Kaluli music will receive international recognition as a volume in *THE WORLD*, the music itself is rapidly disappearing. *YOU'RE ABOUT TO HEAR ENDANGERED MUSIC*. Why? Because the people of this area have been intensely impacted in recent times. Evangelical missionization took a heavy toll on music and traditional culture in the 70's and 80's. But the heavier blow is being dealt right now by mineral exploration and the potential devastation of the rainforest itself.

Recent years have seen the exploratory drilling for oil by Lake Kutubu, just thirty miles from here. The exploitation of oil will require the building of more than one hundred miles of pipeline down to the Papuan Gulf. Roads and development are promised all through these remote rainforest lands. With these schemes come the logging and destruction that signals the end of autonomy for Bosavi people. The new voices in the forest are helicopters and drill rigs. Soon they'll be joined by chain saws, portable saw mills, trucks, and bulldozers.

We've got to do everything possible to make people realize that the destruction of rainforests is not only linked to

global warming and the disastrous loss of biodiversity. It's also about the destruction of cultures, and that includes massive musical wipeout. Right before my eyes it's happening here in Bosavi. Kaluli ceremonial life has stopped; people have sold or burned their dance paraphernalia. Nobody under the age of 25 composes or sings songs or tells traditional stories. Children don't know about the birds because they don't work in the forest with their parents. Bosavi people are being taught to work for a cash future. They can't imagine how the selling of their land really means they will have no future. YOU'RE ABOUT TO HEAR THE VOICES OF ENDANGERED PEOPLE.

Here are some notes on the individual tracks. I've arranged them as a day in the life of the Kaluli and the rainforest.

1. FROM MORNING NIGHT TO REAL MORNING 4:28

The dawn soundscape begins around 5 a.m, what Kaluli call *keafonulu* or "morning night" and swells through to *keafoli*, or "real morning." Right away you'll feel the pulse of crisp rattle-buzzing insects and peeping tree frogs mixed with the wetness of mists and dripping leaves. But the real dawn forest voices belong to the birds. You can encounter more than one hundred and fifty different birds in the Bosavi rainforests. Incredible variety! And where it really shows is the calls. No wonder Kaluli name the birds by

their sounds and have myths relating these calls to the origins of all human music. You'll hear some great "lift-up-over sounding" duos here, like the interplay of the New Guinea friarbird and Brown oriole. Or when Imperial pigeon hoots are answered by dramatic bursts from a Raggiana bird of paradise or Magnificent riflebird, or overlapped by melodious whistles from a Chanting scrubwren.

2. MAKING SAGO 5:37

As you listen picture this: I'm standing in a very shallow creek by a grove of sago palms, the kind of tree from which Kaluli extract their staple starch. Directly across from me, on the other side of a split palm ready for scraping sits Ulahi. She is surrounded by her daughter Yogodo, her youngest sons Bage and Wano, and Wano's friend Sele. Some other young women, Siegiba and Haidome, are also sitting nearby.

As she works, Ulahi sings in a melodic style called *koluba*. Haidome echoes with a rhythmic whistled breathing. They scrape the pith with stone pounders, swung overhead like an axe. The scrapers never hit in unison; their rhythms overlap in the "lift-up-over sounding" of voices and percussion.

Ulahi has composed many *koluba*. The first one she sings is about the trees from which resin torches are made. The sec-

ond concerns her older brother, who has gone to live in a distant place. She sings *ni adeyo-e*, "my older brother" calling out, imagining how she might see him again.



After scraping, sago pith shavings are gathered and placed in a bark trough, flushed with water, and beaten with a four-foot long stick of cane. As Ulahi beats she sings another new *koluba* song. Her voice is echoed by Haidome, who whistles the melody as she too beats sago at another trough, about ten feet away.

In full form Bosavi songs consist of a part called the "trunk" and a part called the "branches," comparable to our notions of "refrain" and "verses."

<u>mo</u>	<u>"trunk"</u>
<i>ni mani ni mani</i>	my sago, my sago
<i>ni mani ni mani</i>	my sago, my sago
<i>o mani</i>	oh, sago

<u>dun</u>	<u>"branches"</u>
<i>Muluma 'nolo ni mani</i>	I'm going to Muluma, my sago
<i>Muluma mo-e ni mani</i>	I'll taste it at Muluma, my sago
<i>o ni mani</i>	oh, my sago

Ulahi composed this song after her daughter Waye married a man who was living at Muluma. The song's "branches" start with Muluma and in later verses name other places, creating a map of the major lands and creeks by Waye's sago palms. More metaphorically, Ulahi's song equates the food with family. Her longing for her daughter, like her longing for sago, means traveling through these places.

3. CUTTING TREES FOR A GARDEN 7:55

Now we're on a ridge which descends about seventy feet to a creek, standing among trees ranging from sixty to over

one hundred feet high. Gigio, Wano, Sele, Seyaka, Ayasilo, Hingulu, Deya are cutting down trees to make a garden.



Listen to how the men's whooping coordinates their work. These yells and yodels are interspersed with fragments from a number of *koluba* style songs. One you hear snatches of quite often was composed in 1982 for a *koluba* ceremony held after the death of Asiya, a great composer and the man responsible for introducing the *koluba* ceremony to the central Bosavi area. For this occasion Mudu composed a song in memory of his friend. The song questions the path Asiya's spirit reflection has taken by singing a map of his sago places. The song tells how morning calls like a strong pulsing river; it draws you to your sago places to work, to make food. Asiya was a man of great vitality, remembered for his ability to mobilize men for work or ceremonies. His memory is kept alive in these men's voices and work rhythms.

mo

'yu'-de
Isawa-de
danibi-de

wo-wo

dun

ni dayo
Obaye dayo
wo-wo
ni dayo
Yafe dayo
wo-wo

"trunk"

"yu" (morning is calling out)
the Isawa river runs clear
in the morning it makes that
strong bubbling sound
wo-wo

"branches"

my sago
my little sago place at Obaye
wo-wo
(I'm going to beat) my sago
my sago at Yafe
wo-wo

4. CLEARING THE BRUSH 3:29

Early one afternoon, I followed Ulahi into her garden as she cleared the brush that remained from a tree-felling. As we walked together, she leaned down and hacked at the dense underbrush with short methodical machete strokes, singing her newest songs. This was my favorite.

<u>mo</u>	<u>"trunk"</u>
<i>ni dikidiyabo ni dikidiyabo</i>	I was tricked, something tricked me
<i>Isenwe ni dikidiyabo</i>	Isenwe tricked me
<i>mige ni dikidiyabo wo</i>	the <i>mig</i> tree there tricked me

<u>dun</u>	<u>"branches"</u>
<i>ade ni henene</i>	older brother "I'm going"
<i>ne Deseb fele henene</i>	I'm going to the flatland at Deseb
<i>ade ni henene</i>	older brother "I'm going"

The story behind this song is complicated. Ulahi's husband, Tulunei, was fighting with people from his place and insisted on moving his family to another longhouse community. But after some time there relations soured and the family eventually returned. This song is sung from the point of view of Tulunei's children expressing their desire to return to their home. The textual map moves back and forth between the two places.

5. BAMBOO JEW'S HARP 4:41

The bamboo jew's harp, called *uluna* in Bosavi, is about 7" long and is made from a single piece of bamboo, cut with two long slits to form a tongue. Gaima holds one end of the *uluna* between his teeth and pulls the string back and forth to set the bamboo tongue in motion. At the same time he manipulates the position and shape of his tongue, larynx, and mouth cavity to shape the overtones and sound effects.



Bosavi men only play the *uluna* for recreation. Their improvisations create spontaneous "lift-up-over sounding" dialogues with forest sounds. In this spirit, Gaima suggested that we record at a tree-covered ridge near a stream where the afternoon presence of cicadas and melodious birds would be present.

6. RELAXING BY A CREEK 5:50

Water runoff from Mt. Bosavi creates numerous rivers, creeks, streams, and pools that meander through Kaluli lands. You can't walk through forest trails for more than a few minutes without crossing some sort of waterway. And when traveling through the forest, water sounds are everywhere, defining the presence of flat lands, ridges, hills and valleys.

This ecology of water presence and the aesthetics of song are closely linked in Kaluli imagination. Their language has many onomatopoeic words that mimic the sounds of water. What to you or me might simply sound like hiss is much more subtle for a Kaluli familiar with rainforest rhythms. That hiss might be *fu*, the fine sprinkling mist thrown off by white water. Or it could be *bu*, the splashing pulses of water flowing down through rocks. Or maybe it's the *gololo* of a swirling waterpool, or the droning *gululu* of a long rippling waterfall, or perhaps the *tubutubu* of a bubbling creek, or the *kobokobo* of water plopping in a shallow sago stream.

Water also figures in the way Kaluli think about song. Like water, song must flow with immediacy and presence. Composing a song is said to be like "having a waterfall in your head." That's why Kaluli men and women often compose

or practice their songs sitting by a stream. They say the flow of water fills their minds with ideas.

Relaxing by a creek where water rolled gently over shallow rocks, Ulahi sings in the style called *gisalo*, the most complex Bosavi poetic form, usually composed and sung by men. Since this is a very short version of a long song that's quite hard to translate simply, I'll just give you a synopsis.



In the first part of the song a butcherbird finds itself alone in familiar places and calls for its sisters and brothers. In the next part the bird is revealed to be a human spirit, trying to find his way through lands he has left behind, cruising along the waterways, searching for his gardens, his sago places, and his pigs who live there

now without him. The naming of lands and waters in the text takes the listener on a journey through these places, and through that journey, to the feelings associated with the deceased whose places they were.

Right after that last *gisalo* song, Ulahi launched into a short *koluba* fragment.

wu-o	wu-o (calling out)
ni America kalu-o-e	my American men
gi wi oba-e	what are your names?
ni Australia gayo-e	my Australian women
gi wi oba-e	what are your names?
ni America kalu-o-e	my American men

There's a nice story here and you're in it. When I returned this year Ulahi asked me why I was making new recordings. I told her that an American "drum man" friend really liked the sounds of Bosavi and wanted other people in our place to someday hear Bosavi voices. Right after singing this song Ulahi told me that she was thinking about how these other people wouldn't understand her language. So she decided to sing out to them with the names of their own places. That's because singing a path of placenames is the emotional heart of Kaluli song. It's their way of reflecting on the depth of how people are connected. So here she is trying to reach out to us, and to her new listeners.

The last of the creekside songs was composed more than twenty years ago. It's one of Ulahi's best known songs in the melodic style Kaluli call *heyalo*.

<u>mo</u>	"trunk"
nimo seyalena imolobo	my waterway cicada stays hungry
Wafuno seyalena imolobo	hungry cicada at Wafuno
nimo seyalena imolobo	my waterway cicada stays hungry
<u>dun</u>	"branches"
kuguno ge aowo elelubiyo	at valley you keep calling to your brother
Hoiyowo ge aowo elelubiyo	at Hoiyo you keep calling your brother
bolo ge aowo elelubiyo	at the bol tree there you keep calling

Kaluli liken the sound of cicadas at a waterway to the churning of an empty stomach. To be empty is to be abandoned. So this is a song about loneliness and loss. By changing the names of lands, ridges, creeks, and valley, the full text creates a map of a path traversed by a spirit in the form of the cicada.

7. FROM AFTERNOON TO AFTERNOON DARKENING 6:25

The clear skies of the afternoon begin to close in by 4:30 p.m. Bird voices intensify and swell, overtaking the breezy intermittent rattling of early afternoon crickets. Pigeons, doves, whistlers and warblers join the more familiar "lift-up-over sounding" of the riflebird, friarbird, oriole, grackle, butcherbird, and birds of paradise here. As the skies fully darken around 6:30 p.m., roaring cicadas signal *galo nudabiki*, "afternoon darkening" and the soundscape gives way to barking frogs and pulsing dusk insects whose insistent metallic buzzings sound fully electronic.



8. EVENING RAINSTORM 5:21

What's a rainforest record without rain! I recorded these tracks early one evening with the microphones just a few inches from a sago thatch roof just at the point where the roof arches off and hangs over the side of the house. This is the way you really hear the rain in Bosavi, drumming on the thatch, beating out "lift-up-over sounding" cross-rhythms with the nearby insects and frogs and occasional bats whose pulses swell through the darkness of early evening.

9. DRUMMING 4:28

The ceremonial drumming and song here were recorded in 1982 since ceremonial life has virtually ceased in Bosavi since 1985. Kaluli people traditionally held several kinds of ceremonies to mark important social occasions between two longhouse communities. These ceremonies would involve several hours of drumming in the late afternoon and early evening, followed by singing until dawn, performed by a separate set of costumed dancers.

The drumming is called *ilib kuwo*. The four performers here are Gaso (foreground), Gigio, Sowelo, and Agale. Independently they tune their drums in place, and then dance the drum back and forth down the house's central corridor,

always returning to their places at either end of the house, about sixty feet apart.



I recorded this from the center of the house so you could hear the movement of the crisscrossing dance and drumbeats the way a Kaluli listener would during a ceremony. You'll notice multiple layers of "lift-up-over sounding" here, from the dancing feet on the bark floor, to the resonant overtones of the drums, to the crayfish claw rattles suspended in each dancers bark belt.

The symbolism of this drumming is as intense as the sound is loud. Kaluli hunt a *tibodai* bird, a Crested pitohui, sacrificing its throat into the cut wood when a drum is first being shaped. The drum is thought to assimilate the extraordinary properties of this bird's call, principally a long throbbing pulsation --sometimes up to ten minutes!-- without a gap. Inside the voice of the drum Kaluli can hear the voice of a *tibodai* bird, pulsing with its distinctive call of "*tibo tibo tibo tibo...*"

The drumming goes on for several hours. Players and audience become more absorbed into the intensity of the sound. The drum's voice transforms through this intensity, now saying "*dowo dowo dowo dowo...*", which means "father." Whistling birds like *tibodai* are said to be spirits of dead children. So inside the voice of the bird Kaluli hear the voice of a child. When the spirit of a dead child calls through the drum for its father, men in the audience may be moved to tears.



10. SONG CEREMONY 2:55

Following the drumming comes the *koluba* ceremony. *Koluba* is always performed by twelve dancers, costumed the same as the drummers. They sit as a group at the rear end of the house. For each song a pair of singers rises, faces each other, then dances up and down in place while singing the same text and melody in a "lift-up-over sounding" echo. Each song is sung several times at different places in the house, with the performers dancing from one position to the next with a skipping step.

At this ceremony ninety songs, mostly new compositions, were sung between dusk and dawn. The five most powerful ones moved listeners to tears of grief. The one included here was sung by Giwo and Wasio. Within moments of hearing its words, Hasele was in tears. The intensity of his crying was overwhelming and later he grabbed a resin torch and burned the shoulders of Giwo, the composer (you'll hear the commotion on the recording). The burning is repayment for the pain Hasele was made to feel by the song.

<u>mo</u>	<u>"trunk"</u>
<i>uwolo</i>	(hungrily calling out) <i>uwolo</i>
<i>Bolekini uwolo</i>	<i>uwolo</i> (calling out at) <i>Bolekini</i>
<i>uwolo</i>	(calling out) <i>uwolo</i>
<i>wo-wo</i>	(calling) <i>wo-wo</i>

<u>dun</u>	<u>"branches"</u>
<i>Moresby nabe</i>	"I'm wondering if I could eat in Pt. Moresby?"
<i>ni adalomake-a</i>	"I have no older brother there"
<i>ni imolobe</i>	"I'm empty"
<i>wo-wo</i>	<i>wo-wo</i>

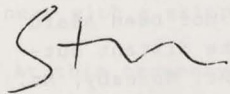
Here's why Hasele was so broken up: Twenty years ago his two brothers, Seligiwo and Molugu, left Bosavi for labor contracts. They were among the first to leave Bosavi, and are the only Kaluli who have never returned nor been heard from since. Giwo's use of placenames from the distant outside world of Papua New Guinea towns, like Pt. Moresby, Mt. Hagen, Rabaul, and Mendi, evoked great fear for Hasele. Added to the image of a voice calling out hungrily from his family lands, he was filled with deep sadness over the loss of his brothers.

11. FROM NIGHT TO INSIDE NIGHT 5:59

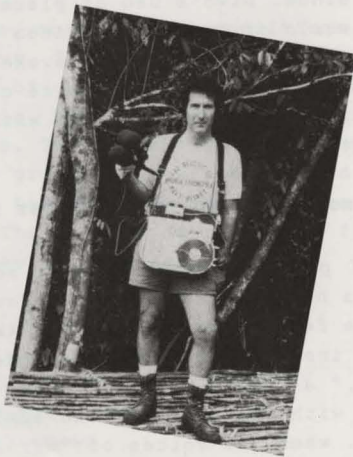
By 10 p.m. the "lift-up-over sounding" ensemble now includes numerous crickets and frogs. Owls and kingfishers have a few things to say here too, as do some incredibly eerie insects. They are creatures of *nulu usa*, "inside night," a Kaluli term of lovely mystery. Things sound like this, with the intermittent coming and going of rain, until 5 a.m. when the voices of "morning night" will take over again.

Well Mickey, I hope you're inspired to do some "lift-up-over sounding" drumming as you listen to these Bosavi rain-forest voices. "Lift-up-over sounding" is a groove we badly need on this planet of disappearing grooves.

Yours in aesthetic greenness, or as we close a speech in Kaluli, *ni towo kom, ni wiyo*, meaning, "my words finished, my name is..."



Steven Feld



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Bosavi assistants and consultants: **Ayasilo, Gaima, Gaso, Gigio, Giwo, Deina, Jubi, Hingulu, Kulu, Seyaka, Ulahi**

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Dedicated to the memory of Jubi of Bona, 192?-1984; exceptional ornithologist, composer, and voice in the forest.

To find out about the plight of rainforests and indigenous peoples, contact:

Rainforest Action Network,
301 Broadway, Suite 28, San Francisco, CA 94133

Cultural Survival
53-A Church Street, Cambridge MA 02138

A portion of the proceeds from the sale of this recording benefits rainforest preservation.

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Steven Feld is Director of the folklore and Ethnomusicology at the University of Texas at Austin. His research on Bosavi musical rituals and ecology is reported in *Sound and Sentiment: birds, weeping, poetics, and song in Kaluli expression*, University of Pennsylvania Press.

Tech notes...

Field recordings were made in flat stereo onto Agfa PEM 469 tape at 15 ips through a Nagra IV-S recorder and Bryston portable Dolby SR noise reduction, monitored through Sony MDRV6 headphones. Microphones were phantom powered modular AKG 460B preamplifiers and CK1 cardioid capsules in an X-Y configuration, fed into an Aerco MP2 preamplifier and then to the Bryston and Nagra through a custom interface designed by Dan Dugan. Some of the bird recordings were enhanced by the use of a Sony PBR 330 parabolic reflector.

Edited tapes were re-recorded onto a Studer A80 24-track analog recorder with Dolby SR noise reduction. The master multitrack tapes were mixed through a Neve 8058 console to a MCI analog 2-track recorder with Dolby SR noise reduction. The analog 2-track tape was transferred directly to a Sony 1630 PCM digital 2-track recorder for CD and digitally-fed cassette production. Studio editing and mixdown processes were monitored using both Meyer 833 and HD1 studio monitors.



RYKO

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- 2 Making Sago 5:37
- 3 Cutting Trees 7:55
- 4 Clearing The Brush 3:29
- 5 Bamboo Jew's Harp 4:41
- 6 Relaxing By The Creek 5:50
- 7 From Afternoon To Afternoon Darkening 6:25
- 8 Evening Rainstorm 5:21
- 9 Drummng 4:28
- 10 Song Ceremony 2:55
- 11 From Night To Inside Night 5:59



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