at is the world like to cultures that privilege touch or smell over sight or hearing?
men's and women's sensory experiences differ?
it lies beyond the aesthetic gaze?
> says money has no smell?
' has the proliferation of 'taste cultures' resulted in new forms of social
'mination?
' is the sixth sense to be defined?
it is the future of the senses in cyberspace?
e. Ancient Greeks to medieval mystics and eighteenth-century empiricists, Karl
Marshall McLuhan, the senses have been the subject of dramatic proclamations.
re sources of pleasure and pain, knowledge and power. Sites of intense personal
ce, they are also fields of extensive cultural elaboration. Yet surprisingly, it is only
that scholars in the humanities and social sciences have turned their full attention
experiences and expression as a subject for enquiry.
' the Senses: The Sensual Culture Reader (Ed. David Howes) documents the sensual
sion in the humanities and social sciences, and reclaims sensation as a domain
lur inquiry.
ory Culture Reader (Eds Michael Bull & Les Back) articulates a strategy of 'deep
ng' - a powerful new methodology for making sense of the social.
Culture Reader (Ed. Jim Drobnick) foregrounds the most marginalized, and
ially subversive, sense of modernity, in addition to sampling how diverse
scent the universe.
'f Touch (Ed. Constance Classen) maps the tactile contours of culture, exploring
erful and often inarticulate world of touch, the most basic of our senses.
Culture Reader (Ed. Carolyn Korsmeyer) serves up a savoury stew of cultural
is, blending together the multiple senses of the term 'taste'.
ative Visual Culture Reader (Eds Elizabeth Edwards & Kaushik Bhaumil) explores
ragen the multiplicity of scopic regimes within and without the Western
'se Reader (Ed. David Howes) asks: What lies beyond the bounds of sense? Is
enth sense ESP, electromagnetic sensitivitiy, intuition, revelation, gut instinct or
athemable?
To my son, Theo, who was born in the fin
stages of preparing this volume and who
sounds bring light into my day. M.B.

For my dear friend Ron Warshow, a great
musician and listener – the best tuned
ears I know. L.B.
ly lives of users in its establishment of ‘affective rhythms in the
She concentrates upon the routine nature of use (radio as a daily
and focuses upon the place of memory and nostalgia that
lays in the daily lives of her users. Tacchi distinguishes between
salising memory and the mood or feelings of memory evoked
id. Radio users often think about their narratives through music
sounds of the radio that evoke feelings of the past. Tacchi
es radio users as managing their day and moods through radio
g. Tacchi refers to the radio as providing ‘the taste of sound’ within
y household of users. The radio thus provides a valuable link, ‘a
tive engagement with wider society’. In doing so she argues that
se amongst her sample population demonstrates a desire for
ice and order in the personal narrative of users operationalised
the use of memory, fantasy and nostalgia. She argues that the
ostalgia need not be verifiable in ‘actual’ experience but functions
well in the ‘glow’ of imaginary states of recollection. The sound
of the medium of the radio thus offers a more imaginative plat-
the self than visually based media such as television.

A Rainforest Acoustemology*

Steven Feld

What role can anthropological inquiry have in shaping the discourse
of acoustic ecology and soundscape studies? How might it help us
imagine auditory culture(s) as historical formations of distinct sensibilities, as sonic geographies of difference? One way to answer is with
the simple observation that anthropologists tend toward the Kantian
view that all knowledge begins in experience. To jump off that cliff is
to study how human experiential patterns and practices construct the
habits, systems of belief, knowledge and action we call ‘culture’. The
pressing issue of concern is with human inventions and sensibilities,
with adequately and evocatively representing different experiential
worlds. To take up that concern the anthropological project basically
must ask, what could it possibly be like to be – to feel, sense, imagine,
act, become – a certain kind of person? Deep down the hope is that by
giving marginalized voices places to speak and shout and sing from,
anthropology can in some measure counter the long-standing arrogance
of colonial and imperial authority, of history written in one language,
in one voice, as one narrative. This chapter is about giving some voice
one kind of alternate reality, one kind of sonic sensibility that I have
encountered through anthropological inquiry into a language, music,
and acoustic ecology.

* An earlier version of this chapter appeared as part of the article ‘Sound Worlds’ in
Press, pp. 173–200. Reproduced with permission. For more on acoustemology, see also
Feld (1996b).
Locating Place as a Global Time-Space

The Kaluli are one of four groups of 2,000 Bosavi people who live in the tropical rainforest of the Great Papuan Plateau in the Southern Highlands Province of Papua New Guinea. On several hundred square miles of lowland and mid-montane forest land, at an altitude of about 2,000 feet, they hunt, fish, gather, and tend land-intensive swidden gardens. Their staple food is sago, processed from wild palms that grow in shallow swamps and creeks branching off of larger river arteries that flow downward from Mt Bosavi, the collapsed cone of an extinct volcano reaching 8,000 feet.

Bosavi was once relatively easy to describe as a classless and small-scale society, inasmuch as no traditionally fixed occupational specializations, stratifications, ranks, professions, ascribed or achieved statuses formed the basis for social differentiation. Life was also generally egalitarian in matters economic and political. With no appointed or elected leaders, speakers, chiefs, bosses, or controllers, the Kaluli people hunted, gathered, gardened, and worked to produce what they needed, taking care of themselves, their neighbours and kin through extensive cooperation in food sharing and labour assistance. The egalitarian dynamics here involved both a lack of centralized social institutions and a lack of deference to persons, roles, categories, or groups based on power, position, or material ownership (E. L. Schieffelin 1976; B. B. Schieffelin 1990).

Hierarchy developed dramatically around the social changes that have more recently refigured Kaluli life, beginning with the advent of colonial government contact, particularly by the late 1950s. But it was evangelical missions that brought sweeping changes to the Bosavi area, beginning in the mid-1960s with the construction of an airstrip. In the early 1970s, the first resident fundamentalist missionaries arrived. A new wave of national government impact followed after Papua New Guinea's independence in 1975. Into the 1980s and 1990s, the presence of a second airstrip, a hospital, schools, aid post stations, mission station, and government development personnel, and particularly local pastors in each village, has introduced increasingly complex forms of deference based on differentiated wealth, particularly with a cash base (B. B. Schieffelin 2000, E. L. Schieffelin 1991).

Currently the Bosavi area is in the throes of a more complex set of changes that implicate cultural and ecological futures. Oil and gas projects are already transforming the surrounding region, and demands and debates about local logging, road access to the area, and large-scale development projects are current. With these have come the chaotic responses that occasional but large infusions of cash and material wealth bring following sporadic patterns of out-migration. The overall effect is the promotion of broader bases of conflict around real, perceived, and possible inequities, and the escalation of unequal access to power and resources along lines of gender, age, multilingualism, and Christianization (E. L Schieffelin 1997).

From the Anthropology of Sound to Acoustemology

My own engagement with the Bosavi region over the last 20 years is complexly situated in this history. In 1976 I went to Bosavi because I had heard the first tape recordings from the area, made by Edward L. Schieffelin in 1966–8. I was taken by the musicality of Kaluli expression, but particularly by the relationship of that musicality to the sounds of the rainforest, initially described by Schieffelin in his 1976 book *The Sorrow of the Lonely and the Burning of the Dancers*. It was that relationship that I wanted to investigate.

The general hypothesis that people in some way echo their soundscape in language and music was first developed by R. Murray Schafer in his 1977 book *The Tuning of the World*, a synthesis of the ideas developed during his time as director of the World Soundscape Project and Simon Fraser University. In that book he develops the concepts of 'soundscape' and 'acoustic ecology', and analyses trends in the transformations of sound environments through history. The work of Schafer and his colleagues was broad and stimulating, and invited anthropological and ethnomusicological scrutiny in grounded field studies.

With this in mind, during my first Bosavi research in the 1970s I developed the idea of an ethnography of sound, or study of sound as a symbolic system, an acultural system, in order to relate the importance of acoustic ecology, particularly the avian rainforest soundscape, to the musicality and poetics of Bosavi laments and vocal song. The mediation between this rainforest ecology and Bosavi music turned out to be cosmological, for Kaluli consider birds not just singers but spirits of their dead. Birds appear to one another and speak as people, and to the living their presence is a constant reminder of histories of human loss, an absence made present in sound and motion. The relationship between the construction and evocation of local expressive forms, and the bird world they metaphorized, was a deeply emotional one. From this, I found, came the great aesthetic force of Kaluli lament, poetics and song performance, the subjects of my first research (Feld 1990/1982).
In my subsequent Bosavi research, a growing concern with place, poetic cartography, and everyday meanings of the Bosavi sound world has pushed the idea of sound as a cultural system somewhat farther, toward what I called acoustemology. In one sense this step is a natural development in my concern to understand the place-name maps in Bosavi songs, and how vocal performance articulates their poetic and ecological relationship to the sounds and meanings of the rainforest. But I’ve also taken this step in critical response to research in acoustic ecology that artificially separates sonic environments from the pervasiveness of human invention. Soundscapes, no less than landscapes, are not just physical exteriors, spatially surrounding or apart from human activity. Soundscapes are perceived and interpreted by human actors who attend to them as a way of making their place in and through the world. Soundscapes are invested with significances by those whose bodies and lives resonate with them in social time and space. Like landscapes, they are as much psychical as physical phenomena, as much cultural constructs as material ones (Casey 1996).

By acoustemology I wish to suggest a union of acoustics and epistemology, and to investigate the primacy of sound as a modality of knowing and being in the world. Sound both emanates from and penetrates bodies; this reciprocity of reflection and absorption is a creative means of orientation—one that tunes bodies to places and times through their sounding potential. Hearing and producing sound are thus embodied competencies that situate actors and their agency in particular historical worlds. These competencies contribute to their distinct and shared ways of being human; they contribute to possibilities for and realizations of authority, understanding, reflexivity, compassion, and identity.

Following the lead established by Maurice Merleau-Ponty’s *Phenomenology of Perception*, then echoed in Don Ihde’s *Listening and Voice: A Phenomenology of Sound*, my notion of acoustemology means to explore the reflexive and historical relationships between hearing and speaking, listening and sounding. This reflexivity is embodied doubly: one hears oneself in the act of voicing, and one resonates the physicality of voicing in acts of hearing. Listening and voicing are in a deep reciprocity, an embodied dialogue of inner and outer sounding and resounding built from the historicization of experience. The ongoing dialogue of self and self, self and other, of their interplay in action and reaction, are thus constantly sited at the sense of sound, absorbed and reflected, given and taken in constant exchange. The soundingness of hearing and voicing constitute an embodied sense of presence and of memory. Voice then authorizes identities as identities authorize voice. Voice is evidence, embodied as experiential authority, performed to the exterior or interior as a subjectivity made public, mirrored in hearing as public made subjective.

**Sound as a Poetic Cartography**

How might an acoustemological perspective on voice and place help reveal the connection between the powerful locality of the Bosavi sound world and its global emplacement? To begin, Bosavi songs are textually constituted as poetic cartographies of rainforest trails. This notion of ‘poetic cartographies’ is clearly delimited in local compositional and vocal practices around four concepts. These are *tok*, ‘paths’ of connected localities, whose *sa-salan*, ‘inside speaking’ or poetic revelation, consists of *bale to*, ‘turned over words’, metaphors, and *gono: to*, ‘sound words’, mimetic phonesthesmes. Making song ‘paths’ is how Kaluli people sing the forest as a poetic fusion of space and time where lives and events are conjoined as vocalized, embodied memories (Feld 1990).

The importance of sound and voice to these memorial and performative practices cannot be overstated. That is because while much of the forest is visually hidden, sound can’t be hidden. Acoustic revelatory presence is always in tension with visual hidden presence in everyday experiences of the forest. This sensory tension between the seen and heard, the hidden and revealed, is itself poeticized in two synesthetic metaphors Kaluli use to link forest emplacement to its aesthetic evocation. These are locally known as *dulugu ganalan*, ‘lift-up-over sounding’, and *abalan*, ‘flowing’ (Feld 1994, 1996a, b).

‘Lift-up-over-sounding’ glosses the seamlessly staggered alternations and overlaps that comprise the sensual experience of the rainforest soundscape. One hears no unison in nature. In the tropical forest height and depth are easily confused, and the lack of visual cues make depth often sensed as the diffuseness of height moving outward. ‘Lift-up-over sounding’ precisely yet suggestively codes that ambiguous sensation: upward feels like outward. This placing of sound is simultaneously a sounding of place. One knows the time of day, season of year, and placement in relative physical space through the sensual wrap-around of sound in the forest. This way of hearing and sensing the world is mirrored in the production of Kaluli song, where voices overlap and echo with surrounding forest sounds, with instruments, or with other voices to create a dense, multilayered, alternating and interlocking form of expression.
'Lift-up-over sounding' is as potentially omnipresent in the experiences and aesthetics of the Kaluli world as 'harmony' is in the experiences and aesthetics of the West. Like 'harmony', 'lift-up-over sounding' is a grand metaphor modelling sonic relations, the way tones combine together in space and time, as well as social relations, the ways people, interact in concert. Whether it is the birds, insects, winds and watercourses of the forest, or the vocalizing of Kaluli, or the overlap and interplay of the two, 'lift-up-over sounding' always comes across as in synchrony but out of phase. By this I mean that however cohesive, 'lift-up-over sounding' always seems to be composed of sound sources at different points of displacement from any momentary or hypothetical sense of unison.

Neither a clear-cut heterophony or polyphony, 'lift-up-over sounding' is more an echophony where one sound may stand out momentarily, then fade into the distance, overlapped or echoed by a new or repeated emergence in the auditory mosaic. The Kaluli concept of 'echo' helps reveal this idea of presence and diffusion. In the Bosavi language 'echo' is represented by the mimetic phonetheme gugu-go:go. Gu denotes downward moving sound; reduplicated, gugu marks the action as continuous. Go: likewise denotes outward moving sound; reduplicated, go:go: also marks the action as continuous. So the auditorily ambiguous interplay of continuous downward and continuous outward moving sound is what is heard and felt as echo. In its constant play of immediacy and vagueness, gugu go:go: is an ever-present soundmark of the up-is-over forest soundscape.

A similarity of convergences characterizes the metaphorical potency of abua'lan, 'flowing.' 'Flowing' first glosses the sensuous presence of water moving through and connecting rainforest lands. As it does so, water moves in and out of visual presence and immediacy, yet it always remains audible even when invisible. The local forests are multiply criss-crossed by creeks running off from the high mountain streams of Mt Bosavi. In the mid-montane foothills, one cannot walk for more than a few minutes in any direction without crossing water of some variety. As one walks, these waterways constantly disappear and re-emerge through densities of forest shrubs, hills, and treelines. 'Flowing' is this ever-emerging and receding presence, this constancy of water moving and resounding through and figuring the ground.

'Flowing' equally characterizes the on-and-off, emerging and fading, circulatory motion of a song or songs. Whether within perceptual immediacy or long held in mind, 'flowing' is the lingering grip of a song's images, its progression of sounds and words that stay in mind.

The Western metaphorical counterpart to Kaluli 'flowing' is the 'broken record', the sound that does not turn off but stays with a listener. These are both metaphors for an embodied repeating.

Kaluli notions of 'flow' converge in the vocal performance of songs whose texts are forest 'paths' of named places. Singing a sequence of named places is a way of taking listeners on a journey 'flowing' along local waterways and through contiguous lands. The flow of these poetic song 'paths' signals the connectedness of Bosavi places to people, experiences, and memories. The 'flowing' nature of waters through lands, then, mirrors the 'flowing' nature of songs and places through local biographies and histories.

Song 'paths' derive experientially from everyday life, where people travel through the forest by foot to and from their home longhouse community, going to gardens, to sago places, or to other longhouse communities. Everyday experiences of the forest always involve the intermeshed experience of lands and waters. The most significant kinds of land formations come from the images of fele, 'thighs', attached to a dom, 'body'. 'Thighs' are the relatively flatter lands rolling off and downward to either side. These 'thighs' are reached from hilly segments of ascent, descent, and roll-off in the land that are its 'body' sides.

This sense of land as a grounded 'body' of sides and 'thighs' is closely related to the lay and motion of forest waterways. Walking a 'body' implies water below; once crossed there is another 'body' to climb on the other side. Likewise, 'thighs' usually have one or more eleb, 'heads' of waters lying off or below to either side. In other words, water reclines, moves along a body lying, typically flowing, downstream along its 'thighs.'

These images construct a world where the body is imagined like the curves of land between, around and over which water flows. Moreover, as these primal landforms are connected like thighs to the body, so the passage of water through them flows like the motion of voice. Voice flows by resounding through the body, feelingfully connecting its contiguous physical segments, sensually resonating throughout. This 'flowing' mirrors that of water through land, with its multiple presences across and along a variety of relatively contiguous but physically distinct forms. The 'flowing' of water and of voice moves through lands and bodies to link their segments and reveal their wholeness.

At their conjunction 'lift-up-over-sounding' and 'flowing' indicate the remarkable creativity with which Kaluli absorb and respond to the sensuousness of the rainforest environment. 'Lift-up-over sounding' naturalizes song form and performance by way of its resonance with
the forest world. Likewise, ‘flowing’ naturalizes poetic cartography as the performance of biographical memory. Together these ideas fuse spatial and temporal experience, link everyday pasts and presents, join the powers of place and of journey. Most importantly, ‘lift-up-over sounding’ and ‘flowing’ directly emplace this world not just in texts, but in the reflexive relationship of voicing to hearing. Three case studies follow as illustration.

Singing in and out of Place

First, from a Kaluli ceremonial song genre called kotubu, consider (and hear on Feld 1991, track 10) a song composed by Bifo of the community of Suguniga. This item was one of 90 songs sung at an all night kotubu ceremony when Suguniga visited the community of Sululeb on 5 July 1982.

For kotubu, 12 costumed singer-dancers coupled in various pairs to sing from early evening until dawn; typically about 100 songs were sung in the course of the evening’s performance. Each song was repeated in succession five times, first at the rear of the longhouse’s main corridor, then in its centre, then in the front, then back again in the centre, and finally back to the rear. In between renditions the dancers moved with a skipping step from one house position to another.

Through each performance the pairs faced one another and moved up and down in place, rhythmically accompanying themselves through both the pulse of their heels bouncing on the longhouse floor, the indexical sounds of costume leaves and feathers in motion, and the up-and-down flapping of a rattle of crayfish claws (degegade, named for the clacking sound) arching out of dance belts in the rear of the costume. The costume and dance created a ‘lift-up-over-sounding’ effect, overlapping the voices. Audience members packed the house and crowded the dance floor. Attendants stood behind and to the side of the dancers to light them with resin torches.

Kotubu songs consist of a refrain and verses. The refrain repeats a melody and text; this alternates with the verses, which consist of a second melody whose text slightly varies with each repetition. In the Kaluli language the refrain is called mo, meaning ‘trunk’ or ‘flying,’ and the verses are called dun, ‘branches.’ Kotubu songs could thus be said to ‘branch’ out in verses from their ‘trunk’ or refrain. Here we see how a forest image is poeticized, bringing the sense of locale together with the sensuousness of vocal and dance performance.

Bifo composed his song in the weeks prior to the ceremony at Sululeb; at the ceremony he sang it paired with Wasiq, in the ‘lift-up-over sounding’ fashion where the first voice is echoed and overlapped by the second, singing the exact same melody and text. During the song’s very first voicing, while dancing at the rear house position, a man named Hasele loudly burst into tears and continued to cry periodically throughout the song’s performance. He cited the names of his brothers as a text to his melodic wept vocalizations. Finally he rushed out to the dance floor with a resin torch, and as the song continued, burned Bifo’s back in retaliation for the pain and grieving the song had caused him.

Hasele’s intense grief derived from the personal poignancy of Bifo’s song. In 1971 Hasele and his two brothers Seligw: and Mollugu left Bosavi and went to work on a labour contract near Rabaul, a colonial centre far from Bosavi, off the New Guinea mainland on the outlying island of New Britain. Hasele returned to Bosavi the following year, but his brothers stayed near Rabaul. They have never returned to Bosavi, nor have they been heard from again.

mo: ‘trunk’
    uwolo: riflebird (Ptiloris magnificus) calling
    Bolekini uwolo: calling from Bolekini
    uwolo: is calling
    wo: wo: crying out wo: wo:

dun ‘branches’
    Gogobo: nabe could I eat at Gogobo:
    ne sago:olomakeya I have no cousin (there)
    ni imolobe I’m starving
    wo: wo: crying out wo: wo:

With each rendition the song would go through four or five repetitions. Successive ‘branches’ from the ‘trunk’ poetically create both a physical map and a social one by the use of alternate placenames and relationship terms. The placenames Mosbi (Pt. Moresby), Rabal (Rabaul), and Medi (Mendi) alternate in the first line of successive branches, substituting for Gogobo: These are distant cities known to few Kaluli. In parallel, the relationship terms mo: (mother), nabo (brother), and ada: (older sister/younger brother) alternate in the second line, substituting for sago: (cousin). The poetics of the ‘branches’ thus play on an ironic parallelism, where successively named places become farther distant and hence more dangerous and lonely, as successively named social relations
become closer and hence more familial and secure. Food is the idiom and medium par excellence of Kaluli hospitality, sharing, sociability and relationship, as discussed in Bambi B. Schieffelin's 1990 ethnography, The Give and Take of Everyday Life. Food is central to these poetic 'branches' as well; spatial distance and social loss are equated with the pain of starving.

This parallelism of place and social relationship in the song's 'branches' plays off the central 'trunk' image, the longhouse site of Hasele's family, where a lone riflebird (Ptiloris magnificus), the spirit bird of the singer, calls in the bird sound words of its onomatopoeic name, uwoilo. As the 'branches' travel further and further away, the 'trunk' brings the song back, and holds it in a familiar lived-in place. This way the song's form becomes one with its content, producing an image of a life-world that is both spatial, with places reaching out and coming back, and temporal, with duration creating a journey of loss.

While Bifo's song was the only one in this particular koluba that cited placenames from the world beyond Bosavi, the technique was hardly new in 1982. I had heard similar songs in the mid 1970s, songs including names deriving from the first experiences of labour contracts, when Bosavi men left the area in the mid to late 1960s. Nonetheless, Bifo's song was clearly startling and instant in its powers of evocation, and its performance illustrates how singing names of remote places can be as powerfully charged as singing those that are intimately familiar. They also indicate how the Kaluli were quick to extend their song maps to include new worlds both gained and lost.

Listening to a tape playback of this song with me in August of 1992, Hasele nodded his head and smiled gently as he heard himself cry for his brothers. When the song finished, he shrugged his shoulders, swallowed, and said, sowo ongoro mmele mo:mieb koko, 'they're like the dead, they won't come back.'

This song's text, performance, and impact speak to local memories of Australian colonial practices of importing rural and remote labourers to coastal plantations in the former territories of Papua and New Guinea. In Bosavi these practices arrived within 30 years of first contact, 15 years of the first colonial census, and almost immediately upon the building of a first local airstrip in 1964. The places whose names locally signify the colony beyond are intensely poeticized, made to evoke the connection between labour and loss, distance and distress. History, region, and remote worlds beyond everyday experience are made local, and take on the sense of being close by, palpably immediate. The sound world of Bosavi becomes the entire space and time of a remote region encapsulated within a colonial territory. As the territory absorbs the Kaluli world, the Kaluli absorb the territory by poetically appropriating its place names into their language, song, and singing. Once voiced, these place names are committed to memory. Local voices know these places; they have heard and felt them resonating through their bodies and through their land. Like water through land and voice through the body, names 'flow,' and in so doing they signal how local knowledge is memorably embodied as vocal knowledge.

What are Your Names?

Bifo's song arose in the male-centred world of Kaluli ceremonies, the part of Kaluli life most strongly associated with male ritual expression. But in laments and in songs for work and leisure Kaluli women voiced similar concerns with place and social memory. In August 1990, Ulahi, the featured composer of the Voices of the Rainforest CD, invited me to Wolo creek, one of her favourite singing spots, to record some of her new songs. At the conclusion of one of her songs, a gisalo, Ulahi spontaneously launched into a fragment that was improvised in the moment (heard on Feld 1991, track six, song two).

wo: wo: calling out
ni America kalu-o-e my America men
ni Australia gayo-o-e what are your names?
gi wi o:ba-e
ni America kalu-o-e my America men
ni Australia gayo-o-e (calling out)
wo: wo:
ni America kalu-o: wo: wo: what are your names?
gi wi o:ba-e
ni Australia gayo-e my America women
ni America kalu-o-wo: what are your names?
o wo:— wo: wo:
gi wi o:ba-e
ni Australia gayo-e my America men
dsi: ni America kalu-o-e calling on and on
ni Australia gayo-e my America women
ni America kalu-o-e my America men
a:ye- wo: wo: calling out, wondering

I was stunned by this song, but before I could say a word Ulahi continued with a brief reflective apology, here rather literally translated:
well, myself, thinking about it, speaking sadly, I won't see your place but you see mine, I don't know your names, who are you? I'm wondering, thinking like that, you people living in far away lands, listening to me, I haven't heard your land names so who are you? That's what I'm saying. Steve, having come before you can say 'my name is Steve, American man' but all the others, what are your names? 'Many people will hear your Bosavi songs,' you said like that to me before, but thinking about it, singing by myself I'm thinking what are your names? That's what I was thinking. I don't really know the land names, just America, Australia, so I'm sadly singing like that so that they can hear it.

The background to this remark was a conversation Ulahi and I had as we walked together from Bolekini, our village, to the spot on Wolu creek where she sang her songs that day. Ulahi, with whom I'd worked often since 1976, asked why I wanted to record her songs again. I replied that many new people would hear her voice because a song man from my own place (Micky Hart of 'Grateful Dead' rock band fame) was helping me to make a new recording of Bosavi sounds. I couldn't really explain how Voices of the Rainforest was to be a serious departure from the academic recordings I'd previously made for scholarly ethnomusicological audiences. And the world of Bosavi had never heard names like 'Grateful Dead'. So I just told Ulahi that, with the help of my friend, many people in Australia and in America would someday hear her sing.

What stayed in Ulahi's mind, obviously, was the thought of her voice resonating through America and Australia. But to whom? Who would be listening in this world beyond? And what would they possibly understand of her world within? Ulahi's improvised song takes up this theme, appropriating the place names of the largest of imaginable worlds beyond, and delicately juxtaposing them with the mystery of personal names. Imagining her listeners in this way, Ulahi acknowledges both our presence and absence in her sound world. But placing names in performance, voicing those names poetically, makes them her own in the moment and from then on. Here Ulahi both anticipates and reciprocates the gesture of each distant listener who might hear her recorded voice, speak her name, or speak the name of her place.

One World or Several?

As a final example I turn to a song I recorded late in 1994. It features a different kind of sound, one that has penetrated all of the cities as well as the interior of Papua New Guinea. It is a sound that carries with it the intertwined histories of missionization and Western choral harmony, the spread of guitars and ukuleles throughout the world. It is the sound of Pan-Pacific acoustic string band popular music. But of course this very urban Papua New Guinea sound, one that developed tremendous momentum and local cassette market appeal around the time of the country's independence in 1975, has a way of sounding incredibly local when taken on by the Kaluli.

Like many other local string band performances, the song 'Papamama' was sung by a group of Kaluli men and women comprising lead and backup vocals, lead guitar, rhythm guitar, bass guitar, and ukulele (heard on Feld 2001, CD 1, track 11). The song is sung first in Tok Pisin, a Papua New Guinea lingua franca of cities and towns, and then in Kaluli. The group's leader, Odo Gaso, also known as Oska, heard the song from a non-Kaluli pastor; he then translated it and set it to the style of string band music he learned as a student at Tari High School.

| papamama | father and mother |
| tanim bel, nau tasol, | change your thoughts, now, not tomorrow |
| i no tumora | |
| | |
| bratasusa | brother and sister |
| tanim bel, nau tasol, | change your thoughts, now, not tomorrow |
| i no tumora | |
| | |
| i no yumi tasol | not only us |
| olgeta hap Papua Nugini | all places in Papua New Guinea |
| tanim bel pinis | have already repented |
| dowo: no:wo: | father, mother |
| asugo: nodoma og wemaka: | turn your thinking, here and now |
| alibaka: | not tomorrow |
| | |
| nao nado | brother, sister |
| asugo: nodoma og wemaka | turn your thinking, here and now |
| alibaka: | not tomorrow |
| | |
| ni kormbaka: | not only us |
| Papua Nugini sambo | everyone in Papua New Guinea |
| asugo: nodolo: | has turned their thoughts |
Tok Pisin, although still relatively little heard locally, became part of the linguistic repertory known in Bosavi through the return of labourers, through increasing government presence, and, of course, through missionization, all dating to the early 1970s. Guitars and ukuleles began to appear in the hands of young men returned from labour contracts around the same time. Returnees from provincial high schools, and students at the local mission and government schools also received some encouragement to take up the instrument, although there was little in the way of formal lessons. Throughout the 1970s and well into the 1980s I never heard a guitar or ukulele that was tuned or played as a melody instrument. Young men played them to accompany Tok Pisin songs heard from radio or cassette or pastors. But they were always played like a seed pod rattle and sometimes together with one, the strum always providing more an isometric rhythmic texture, ‘lift-up-over sounding’ with voices.

The string band sound developed by Odo Gosu and his friends from the late 1980s celebrates some very new skills and practices. First, of course, are the beginnings of some mastery of guitar band styles and the skills in tuning and playing guitar, ukulele and bass. To this is added some mastery of the harmony introduced by Christian mission hymns and church singing. These musical skills, however, are never completely separate from their articulation in a naturalized Kaluli way. The instrumental part relationships, the vocal part relationships, and the interplay of the two, are given voice as a density of ‘lift-up-over sounding’.

In the realm of social organization of musical activities, all indigenous Kaluli vocal practices and musical contexts were formerly gender separate. Only through Christian missionization and schooling did Bosavi boys and girls, men and women, begin to sing together and learn to create a ‘lift-up-over sounding’ blend of vocal registers. The string band format developed by Odo takes this a step farther. Here, as in several other Bosavi bands, the lead voices are a married couple, here Odo and his wife Sibalame, and the ‘lift-up-over sounding’ is organized by gendered voice registers.

Another interesting dimension to these songs is that the lyrics are typically sung both in Tok Pisin and Bosavi. This is actually quite difficult because of the inevitable prosodic awkwardness of trying to fit the Bosavi word forms into the cadences and number of rhythmic beats of the Western popular song form. Nonetheless, singing the song first in Tok Pisin then in Bosavi works both to demystify, and to appropriate, to make local, language and meaning indexed to places beyond.

Innovations notwithstanding, this new generationally based, gender-mixed, multilingual, and often Christian-inspired or Christian hymn text-based song form consistently indicates tremendous sonic continuities with other kinds of Bosavi song. There is, for example, a densely layered mix of ‘lift-up-over sounding’ voices and instruments, indicating the Kaluli aesthetic preference for overlapping and echoing layers of sound. At the same time these songs do not typically map a sequence of either forest or distant places. Nonetheless they almost always have a place name, and it is either a regional centre or, as in this case, Papua New Guinea. The imagined province, or the nation, a Christian nation, is a newly placed totality, a stringband sound world that connects remote Kaluli to Papua New Guinea through the idea that the nation is constituted by church, school, and radio.

### Sound Worlds as Embodied Histories

All three of these songs – Bifo’s ceremonial song, Ulahi’s improvised reflection, and Odo’s string band innovations – illustrate some of the many intensely local layers of the Kaluli sound world. It is a world where local difference embodies history in sound, where sound is deeply about knowing and being in the world. The world of the Bosavi rainforest, of ‘lift-up-over sounding’ voices singing ‘flowing’ song ‘paths’ articulates the encounter of locality with colonialism, labour contracts, Christian missionization, visiting foreign anthropologists, the nation state, and record companies. This is a sound world where these sensibilities have collided and where they now rebound in circulable cultural representations that embody and express musical histories – that is, histories lived musically. This is a sound world where not only is musical life socially and historically grounded, but social life is itself experienced and made significant musically.

The lived experience of Bosavi song joins the sounds of the forest, the poetics of place, and the voicing of song in a memorial cartography. Acts of making and hearing sounds are cartographically imagined and practised as the making and hearing of a world. Musicking, then, is clearly, for Bosavis as for many other people, a bodily mode of placing oneself in the world, taking the world in and expressing it out as an intimately known and lived world, a world of local knowledge that is articulated as vocal knowledge. Kaluli songs map the sound world as a spacetime of place, of connection, of exchange, of travel, of memory, of fear, of longing and of possibility. It is a sound world whose acoustemology voices an ongoing poetic dialogue, a dialogue where
emplacement and displacement embody geographies of local and global
difference.

Notes

Most Bosavi words can be pronounced simply by taking the English
orthography at phonetic face value. Two additional symbols are used:
o: is the phonetic open o, the sound in the English word ‘bought;' and
a: is the phonetic epsilon, the sound in the English word ‘bet'. Bosavi
pronunciation and language structure, including phonaesthetics, sound
symbolism, and onomatopoeia, is detailed in B.B. Schieffelin et al. (1998).

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