Of the materials forwarded to me in advance of the Darwin Lectures, I was quite taken by the poster announcing the entire series (Figure 1). On it one sees the titles and local details of the lectures and associated sound events, superimposed over a striking background profile of Mr Darwin. 'Silence' floats above his scalp. Then 'Physics of Sound' and 'Ear to Brain' rest at his head. 'Birdsong' falls to the neck, and 'Speech' is poised at his throat. Finally, 'Ancestral Voices', 'Shaping Sound', and 'Sound Worlds' descend in order through his formidable chest, ribs, and belly.

While hardly wishing to impute an evolutionary message (or some devolutionary mischief) to the lecture committee, I was nonetheless struck by an anthropological implication in the poster's iconography. I read it to suggest that sound maps the body. This suggestion excited me, because I wanted to devote my contribution on 'Sound worlds' to the spatial and temporal metaphors of sonic geography. In other words, I wanted to question just how sound locates abilities, histories, habits and practices, how sound figures in bodily ways of knowing and being in the world.

Such a project is located at a significant anthropological intersection, one where the phrase 'sound worlds' conjoins its dual possibilities, namely 'worlds of sound', and 'sounds of the world'. The idea of the former, of 'worlds of sound', instantly denotes the multiplicity of distinctively local environmental soundscapes mapping the globe, and the complex ways their distinctiveness blurs as they change through space and time. Likewise, 'sounds of the world' equally denotes the diversity of human musical practices both in their most distinct and their most amalgamated forms. Together the two ideas imply that sound worlds are entities both distinct and cumulative, built up from the interaction of diverse communities, diverse acoustic environments, diverse languages and
THE TWELFTH DARWIN COLLEGE LECTURE SERIES 1997

SOUND

17 January  
Silence  
* Fri 24 & Sat 25 Jan. Stories from the Ice World  
COMPANY OF STORYTELLERS  
8pm, Cambridge Drama Centre  

Philip Peek  
(Drew University)

24 January  
Physics of Sound  
* Wed 29 Jan. Sound Connections  
FRANK PERCY  
11am Old Library, Darwin College  

Charles Taylor  
(University of Wales)

31 January  
Ear to Brain  
* Sat 1 Feb. Film: Le Pou de l'Ours  
Arts Cinema  

Jonathan Ashmore  
(University College, London)

7 February  
Birdsong  
* Sat 8 Feb. Birdsong and Music  
JEREMY TROXELL and PETER SLATER  
8.30pm Elaing Hall, Darwin College  

Peter Slater  
(University of St Andrews)

14 February  
Speech  
* Wed 19 Feb. Poetry of Many Tongues  
6pm Old Library, Darwin College  

Peter Ladefoged  
(University of California, Los Angeles)

21 February  
Ancestral Voices  
* Sat 22 Feb. Concert: Ode to Progress  
SIREN  
7.30pm, Emmanuel United Reformed Church  

Christopher Page  
(Cambridge University)

28 February  
Shaping Sound  
* Sat 1 Mar. Time and Motion  
ENSEMBLE ACOBOCHOT (Strasbourg)  
7.30pm Keil's Yard  

Brian Ferneyhough  
(University of California, San Diego)

7 March  
Sound Worlds  
* Sun 9 March. International Music Festival  
by Darwin members & friends  
7.30pm, Dining Hall, Darwin College  

Steven Feld  
(University of California, Santa Cruz)

FRIDAYS AT 5.30 p.m.  
The Lady Mitchell Hall, Sidgwick Avenue, Cambridge  
ALL WELCOME

FIGURE 1. Series poster announcing the 1997 Darwin Lectures on Sound.
musics. In short, the idea of sound worlds is that social formations are indexed in sonic histories and sonic geographies.

**Sound worlds and 'world music'**

But that, of course, only goes so far, for surely we now all live in vastly more complex and potentially confusing circumstances, where all 'sound worlds' are simultaneously local and translocal, specific yet blurred, particular but general, in place and in motion. This is because our present is one where virtually all sound worlds are actually or potentially transportable and hearable in all others. It has taken only 100 or so years of sound recording technologies to amplify sonic exchange to this extraordinary degree of circulation. This circulation encompasses ways sound recording has intersected histories of travel, migration, contact and isolation, conflict, colonization, missionization, domination, diaspora and displacement, and of course, reclaimed, renewed and reinvented traditions. In the current moment this history has created a rapid traffic in global sounds, one where cultural separation and social exchange are mutually constituted, one where musical identities and styles are more transient, more in states of constant fission and fusion than ever before. The cumulative effect is an uneven global soundscape, a contentious sound world, where we can see and hear equally omnipresent signs of struggle over augmented and diminished acoustic diversity.

An indication of this complicated and uneven plurality is found in the now ubiquitous label 'world music'. Until a decade ago this label was considerably more obscure. How did it become naturalized in the public sphere? How has it participated in the ways we have come to imagine, interpret, or contest the very notion of 'globalization'? In his classic work *The Archaeology of Knowledge*, Michel Foucault argues that the modern world is one productive of categorizations experienced as normalizing routines that render both concepts and ideologies invisible but known. If this is so, how might a genealogy of 'world music' help make more critically visible the ways a modernity is mirrored in its sound world?

Circulated first by academics in the early 1960s to celebrate and promote the study of musical diversity, the phrase 'world music' began largely as a benign and hopeful term. In the simplest sense it was a populist idea, a friendly and
less cumbersome alternative to the more strikingly academic label ‘ethnomusicology’ that emerged in the mid 1950s to refer to the study of non-Western musics, or, in some national contexts, musics of ethnic minorities. ‘World music’ was meant to oppose the dominant tendency of music conservatories, critics, and publics in the West to assume the synonymy of ‘music’ with Western European Art Music. Likewise ‘world music’ was meant to have a practical effect on Western conservatories, namely to recognize and hire virtuosi musicians from non-Western societies, and to promote the study of non-Western performance practices and repertories.

Whatever its success in promoting a universal and unified world of music(ology) in the 1960s and 1970s, the terminological dualism of ‘world music’ versus ‘music’ also exacerbated a clear division in the academy. ‘World music’ helped keep those imagined as non-Western or ethnically other distinct from Westerners and their ‘music’. And this reinforced and promoted the separation of musicology, the historical and analytic study of Western European Art Musics, from ethnomusicology, the rather more cultural and contextual study of non-European musics. The relationship of the colonizing and the colonized thus remained intact in ‘music’ and ‘world music’, magnifying the divide between unmarked, prime-ologies for the West, and ethno-fields for its ethnic others.

Enter the world of popular commerce

In some ways, the situation would have been little different had ‘world music’ been more bluntly termed ‘Third World music’. And outside of the academy, in the world of commerce, that was perhaps more the mood. For even though commercial recordings were increasingly made in every world location from the early days of this century, in the years immediately following the invention of the phonograph, the development of a highly visible commercial documentary music recording industry solidified considerably later, in the 1950s and 1960s. This took place around a diverse set of categories indicating a conjunction of academic and commercial enterprise, namely recordings variously labeled and marketed as ‘primitive’, ‘exotic’, ‘tribal’, ‘ethnic’, ‘folk’, ‘traditional’, or ‘international’.

If these recordings had much in common it was often in their politics of rep-
resentation. Namely, they were frequently depictions of a rather sanitized world, one where missionaries, colonials, state policies or for that matter almost any intercultural influences were largely presumed absent, rendered epiphenomenal, or edited out of audibility. As ethnomusicology developed academic credibility in the 1960s, increasing prestige accrued to recordings produced by knowledgeable academics who could speak as to the originality and uniqueness of what was recorded. Academics thus became guarantors of musical 'authenticity'.

Ironically it was the turbulence of independence movements, anticolonial demonstrations, and the powerful nationalist struggles of the late 1950s and early 1960s in Africa, Asia and Latin America that fueled this marketplace creation of, and commercial desire for, 'authentic' (thus often nostalgic) musical elsewhere. Soundprints of the political struggles of that era would not be widely hearable on popular recordings, or celebrated for their own stunningly powerful authenticity, for another decade in the commercial music marketplace.

The 1960s and 1970s witnessed the rise and academic proliferation of ethnomusicology and its shadow version in 'world music' programs. But this proliferation was in many ways overwhelmed in the 1980s by the rise of popular music studies, whose international prominence was quickly marked by the emergence of professional journals (notably, Popular Music in 1981), professional societies (notably, the International Association for the Study of Popular Music, also 1981), and a succession of influential theoretical texts, from Simon Frith's Sound Effects, in 1983, and Ian Chambers' Urban Rhythms, in 1985, to Richard Middleton's Studying Popular Music, in 1990, and John Shepherd's Music as Social Text, in 1991. Even though much of the early emphasis was on studying Western popular musical forms, particularly rock music, popular music studies' concern to theorize the global dominance of mediated musics in the twentieth century signalled to ethnomusicology that its uncritical naturalization of 'authentic traditions' was in trouble. Simon Frith summarized this moment succinctly in the introduction to World Music, Politics, and Social Change, his 1989 anthology of papers from early and mid 1980s conferences of the International Association for the Study of Popular Music. Perhaps it is not a coincidence that IASPM has grown as an academic organization just as "world music", the sounds of countries other than North America or Western Europe, has begun to be recorded, packaged, and sold as a successful new pop genre"
Alongside academic changes in the 1980s, the commercial potential of world music began developing rapidly. Reprising an earlier trend, one evident in the relationship of the Beatles to Ravi Shankar, new signs of pop star collaboration, curation and promotion became the key marketplace signifiers of world music from the mid 1980s through the mid 1990s. The ability of Western pop music élites to mobilize both fans and record companies fueled their forays into a simultaneously larger and smaller world. The best known examples were: Paul Simon's *Graceland* with South African musicians, and *Rhythm of the Saints* with Brazilians; Peter Gabriel's WOMAD promotions, the development of his Real World label, and his collaboration with artists as diverse as Youssou N'Dour and Nusrat Fateh Ali Khan; Mickey Hart's World Series on the Rykodisc label, his projects with Tibetan Monks and African and Indian percussionists, and his Endangered Musics series in collaboration with the US Library of Congress; David Byrne's Brazilian, Cuban and Puerto Rican music projects and his cultivation of groups such as Zap Mama for his Luaka Bop label; Ry Cooder's collaborations with Hawaiian, Mexican American, African and Indian guitarists and his promotion of Cuban music and musicians.

The marketplace successes of world music recording projects developed in synergy with industry, commercial and popular culture journalism. *Billboard* magazine reinvented 'world music' as a sales tracking category in 1990 and began charting its commercial impact. *Rolling Stone* and many other music magazines worldwide began reviewing 'world music' as an extension of pop and rock. In 1991, the American National Academy of Recording Arts and Sciences invented a 'world music' Grammy award category out of its former 'ethnic and traditional' one. *The Virgin Directory of World Music* appeared at about the same moment, as did the monthly magazine *Rhythm Music: Global Sounds and Ideas*. The next few years brought *World Music: The Rough Guide*, as well as the beginnings of commercial mail order catalogs exclusively merchandising world music, a proliferation of new recording companies devoted to the genre, and tremendously increased airplay, from exclusive radio programs to exclusive airline channels. Consumer recording, entertainment and audio technology magazines across class and stylistic lines, from Tower Records' consumerist *Pulse* to Britain's upscale *Gramophone*, developed world music news and review sections.

If, then, a world of consumers was, by the mid 1990s, increasingly familiar with groups as diverse in background and style as Ladysmith Black Mambazo,
The Mysterious Bulgarian Voices, Deep Forest, The Chieftans, Zap Mama, Carlos Nakai, Sheila Chandra, Zakir Hussain, Gipsy Kings, Apache Indian, Yothu Yindi, Ofra Haza, Gilberto Gil, or Manu Dibango. It was due to a complete refiguration of how the musical globe was being curated, recorded, marketed, advertised and promoted. No longer a matter of academic or commercial promotion of traditions, 'world music' became first and foremost a global industry focused on marketing, managing, promoting and circulating danceable ethnicity on the world pleasure and commodity map.

Anxiety and celebration: narrating world music's flow

What this industry, its products, and its commentators now indicate is that the 'sound world' of 'world music' is one where every style, every genre, every musical production narrates stories about uneven forms of global connection. At the same time each of these productions simultaneously narrates stories of local, regional, ethnic and social distinction. As the first book length studies of world music – Tony Mitchell's Popular Music and Local Identity (1996) and Timothy Taylor's Global Pop: World Music, World Markets (1997) – indicate, some of these stories explicitly embrace dominant hegemonic trends in the global popular music industry. Some explicitly resist those trends. And some simultaneously do both.

These trends participate in a new discourse on authenticity, a discourse forged out of narratives equally anxious and celebratory about the world, and the music, of 'world music'. It is anxious because a dominant public theme is the suspicion that capitalist concentration in the recording industry is always productive of a lesser artistry, a more commercial, diluted, and sellable version of a world once more pure. This suspicion fuels a kind of policing, both of the uses of 'tradition' and of the loss of musical diversity within 'world music', asking if such a loss is ever countered by the proliferation of new musics. Counter to this suspicion, celebratory perspectives tend to take ideas about a world blanketed by Western pop and turn them upside down, emphasizing fusion forms as rejections of bounded, fixed or essentialized identities. At the same time celebratory narratives counter anxious ones by stressing the transformed and reappropriated uses of Western pop forms.

To expand, celebratory narratives of world music applaud the production of
hybrid subjects via hybrid musics. They place a positive emphasis on fluid, de-
essentialized identities. Although in some ways like 'rainbow' musical politics
from previous eras, today's celebratory narratives make larger assumptions
about possibilities for cultural and financial equity in the entertainment indus-
tries. Here 'global' replaces the previous label 'international' as a positive va-
lence term for modern practices and institutions. This has the effect of down-
playing hegemonic managerial and capital relations in the music industry, and
bringing to the foreground the ways in which somewhat larger segments of the
world of music-making now get somewhat larger returns in financial and cul-
tural capital to match their greater visibility.

Celebratory narratives of world music normalize and naturalize globaliza-
tion, rather like the ways 'modernization' narratives once naturalized other
grand and sweeping currents that transformed and refigured intercultural his-
tories. As with these predecessors, to the questions of what has been brought,
and what has been taken, celebratory narratives stress the costs to 'tradition' as
rather surface ones, ones that will, in the larger sweep of things, be overcome
by creativity, invention and resilience. Celebratory narratives then imagine a
natural tenacity of the past resounding in possibilities for an amplified present,
one of 'endlessly creative conversation' between 'local roots and international
pop culture', as Sean Barlow and Banning Eyre put it in their highly celebratory
1995 book AfroPop!

In anxious narratives we see an insistence on the complicity of 'world music'
in 'commoditizing' ethnicity, and a focus on understanding the hegemonic
locations such commodifications occupy within globalization practices and
institutions. In particular, it is the production and dissemination of 'world
music' in cosmopolitan and metropolitan centers that clearly underscores the
character of the exotic labor it imports and sells. As Ashwani Sharma writes,
in Dis-orienting Rhythms: The Politics of the New Asian Dance Music, an exem-
plary 1996 collection of anxious essays, 'instances of "musical and cultural con-
versation" validated under the sign of World Music too easily mask the
exploitative labour relationship of the very powerful transnational corpora-
tions with the "Third World" musicians, let alone with those of the Third
World with only their photogenic poverty to sell.'

At the same time, anxious narratives also chronicle indigenization as a
response to globalization, a response that is resistant, either to trends in cul-
tural imperialism or increased cultural homogeneity. Likewise, anxious narra-
tives also insist on world music’s abilities to reassert place and locale against globalization. Indeed, in many anxious narratives, the very term ‘global’ comes to be synonymous with ‘displaced’. In other words, displacement is a metaphor for globalization as a simultaneity of alienation and dispersal. But at the same time anxious narratives want to claim the potential and hope that every loss opens up for resistance, for reassertion, for reclamation, for response.

‘World music’, then, like ‘globalization’ more generally, is a discourse equally routed in the public sphere through overlapped tropes of anxiety and celebration. These narratives, these positions, are being asserted by complexly overlapping communities of musicians, fans, consumers, producers, critics and academics. Yet what everyone is responding to is an omnipresence of productions and consumables that has intensified exponentially in quantity, variety, imagery and speed of circulation. In a remarkably short time the diversity of ‘world music’, its promise, is always suspended in the spectre of ‘one world music’, its antithesis. The struggle to continually pluralize and rediversify is a dialectical necessity in a world where ‘world music’ increasingly consists of standardized and familiar sounds and commodities.

What this struggle tells us is that the sound world of world music is one that both stays at home and travels. It is a familial world, drawn close, intimate, local, intense to the point of a powerful essentialism. It is also a world in motion, open to fast movement and circulation, copy, blending, intense to the point of diffuse ephemerality. It is to the complexities of how one such very specific world is both at home and on the move, full of both celebratory difference and anxious contraction, that I now turn.

Localities within sound worlds, and sound worlds within localities

The Kaluli are one of four groups of 2000 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 kilometres of lowland and mid montane forest land, at an altitude of about 600 m, 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 larger river arteries that flow downward from Mt Bosavi, the collapsed cone of an extinct volcano reaching about 2400 m.
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. This was also a generally egalitarian society in matters economic and political. With no appointed or elected leaders, speakers, chiefs, bosses, or controllers, Kaluli people hunted, gathered, gardened, and worked to produce what they needed, taking care of themselves, their neighbors and kin through extensive cooperation in food sharing and labor 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.

Emergent 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 missionization that brought sweeping changes to the Bosavi area, beginning in the mid 1960s with the building of an airstrip, and then developing from the early 1970s with the first resident fundamentalist missionaries. 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.

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.
From sound as a symbolic system to acoustemology

My own engagement with the Bosavi region 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 analyzes 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 cultural 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 to be not just singers but spirits of their dead. To one another birds appear 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 1982 book Sound and Sentiment.

In my subsequent Bosavi research in the 1980s and 1990s, 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 now call 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 have 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 significance by those whose bodies and lives resonate with them in social time and space.

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 realization 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 to 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.

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 cannot 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 dulagu ganalan, ‘lift-up-over-sounding’, and abalalan, ‘flowing’.

‘Lift-up-over-sounding’ glosses the seamless 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 wraparound 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 modeling sonic relations (the way tones combine together in space and time) as well
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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 phones-theme gugu-gogo: Gu denotes downward moving sound; reduplicated, gugu marks the action as continuous. Gor likewise denotes outward moving sound; reduplicated, go:go: also marks the action as continuous. So the auditorally 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-gogo: is an everpresent soundmark of the up-is-over forest soundscape.

A similarity of convergences characterizes the metaphorical potency of a:ba: 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 which 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 formation come from the images of jele, ‘thighs’, attached to a dom, ‘body’. ‘Thighs’ are the relatively flatter, even and wide stretch of 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 land forms 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, feelingly 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
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.

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FIGURE 2. (a) and (b) Costumed kobuna dancers turn into birds at forest waterfalls.
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.

**Singing in and out of place**

My first example of song production within this sound world comes from a Kaluli genre called *ko:uba*. This one was composed by Bi'o of the community of Suguniga, and it was one of 90 songs sung at an all night *ko:uba* ceremony when Suguniga visited the community of Sululeb on 5 July 1982 (heard on *Voices of the Rainforest*, track 10).

For *ko:uba* 12 costumed singer-dancers coupled in various pairs to sing from early evening until dawn (Figure 2); 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 center, then in the front, then back again in the center, 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 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 (*degegado*, 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.

*Ko:uba* 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 the *mow*, meaning ‘trunk’ or ‘base’, and the verses are called *dun*, ‘branches’. *Koluba* songs could thus be said to ‘branch’ out in verses from their ‘trunk’ or refrain. Here we see how a forest image is poetized, 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 Sululele; at the ceremony he sang it paired with Wasio, 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 Seligivo and Melugu left Bosavi and went to work on a labor contract near Rabaul, a colonial center 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.

*mow*:

uwolo:

Bolekini uwolo:

uwolo:

wo: wo:

‘trunk’

riflebird (*Ptiloris magnificus*) calling

calling from Bolekini

uwolo: bird is calling

crying out

*dun*

Go:go:bo: nabe

ne sago:alomakeya

ni imolobe

wo: wo:

‘branches’

could I eat at Go:go:bo:?

I have no cousin (there)

I’m starving

crying out

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 place-names and relationship terms. The
place-names Mosbi (Pt Moresby), Rabal (Rabaul), and Medi (Mendi) alternate in the first line of successive branches, substituting for Gogo:bo:. These are far city places known to few Kaluli. In parallel, the relationship terms noa (mother), nao (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 further 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 Hascle's family, where a lone riflebird (*Ptiloris magnificus*), the spirit bird of the singer, calls in the bird sound words of its onomatopoeic name, uwo:lo. 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 lifeworld 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 *ko:luba* that cited place-names 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 labor contracts, when Bosavi men left the area in the mid to late 1960s. None the less, 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 Kaluli were quick to extend their song maps to include new worlds both gained and lost.

Listening to tape playback of this song with me in August 1992, Hascle 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, *sowa:ongo: emele momieb ko:lo*, '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 laborers 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 labor 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 memorially embodied as vocal knowledge.

What are your names?

Bifo’s song arose in the male-centered 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 compact disk (CD), invited me to Wo:lo creek, one of her favorite 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 Voices of the Rainforest, track 6, song 2).

wo: wo:
ni America kalu-o-e
gi wi o:ba-e
ni Australia gayo-o-e
gi wi o:ba-e
calling out
my America men
what are your names?
my Australia women
what are your names?
ni America kalu-o-e
wo: wo:
mi America kalu-o- wo: wo:
gi wi o:ba-e
ni Australia gayo-e
gi wi o:ba-e
ni America kalu-o-wo:
o wo:--wo: wo:
gi wi o:ba-e
ni Australia gayo-e
ni America kalu-o-e
a:-ye- wo: wo:

my America men
(calling out)

my America men (calling out)

what are your names?

my Australia women

what are your names?

my America men
calling on and on

what are your names?

my Australia women

my America men
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 Wodu creek where she sang her songs that day. Ulahi, with whom I had worked often since 1976, asked why I wanted to record her songs again (Figure 3). 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 could not really explain how *Voices of the Rainforest* was to be a serious departure from the academic recordings I'd previously made for scholarly ethnomusicalogical 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 some-
day hear her sing.

What stayed in Ulahi's mind, obviously, was the thought of her voice resonat-
ing 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 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 recipro-
cates 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 popu-
lar 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 Kaluli.

Like many other local string band performances the text below, ‘Papamama’, was sung by a group of Kaluli men and women comprising lead and backup vocals, lead guitar, rhythm guitar, bass guitar and ukulele. 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, 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,
i no tumora
not tomorrow

bratasusa
brother and sister
tanim bel, nau tasol,
change your thoughts, now,
i no tumora
not tomorrow

i no yumi tasol
not only us
olgeta hap Papua Nugini
all places in Papua New Guinea
tanim bel pinis
have already repented
dowo: nowo:
father, mother
asugo: nodoma o:g wemaka:
turn your thinking, here and now
alibaka:
not tomorrow

nao nado
brother, sister
asugo: nodoma o:g wemaka
turn your thinking, here and now
alibaka:
not tomorrow

ni kumbaka:
not only us
Papua Nugini sambo
everyone in Papua New Guinea
asugo: nodolo:
has turned their thoughts
Tok Pisin, while still relatively little heard locally, became part of the linguistic repertory known in Bosavi through the return of laborers, 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 labor 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 of an isometric rhythmic texture, 'lift-up-over sounding' with voices.

The string band sound developed by Odo Gaso and his friends from the late 1980s celebrates some very new skills and practices (Figure 4). First of course is 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 further. 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 register.

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. None the less, 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 dense and 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. None the less they almost always have a place name, and it is either a regional center, or, as in this case, Papua New Guinea. The imagined province, or the nation, a Christian nation, is a 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 ways specific ‘sounds of the world’ intertwine with the ‘world of sounds’ to constitute a Kaluli sound world and locate it within the world and the music of ‘world music’. This is not just about Bosavi life becoming ‘commoditized’ on cassette or CD, or about the tensions between musical loss and musical innovation. It is about the way local difference embodies history in sound.
The world of the Bosavi rainforest, of 'lift-up-over sounding' voices singing 'flowing' song 'paths', articulates the encounter of locality with colonialism, labor 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 practiced 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 space–time continuum of place, of connection, of exchange, of travel, of memory, of fear, of longing and of possibility. It is a sound world whose acousticology voices an ongoing poetic dialogue, a dialogue where emplacement and displacement embody geographies of local and global difference.

FURTHER READING AND LISTENING


