
Virtual Reality: A Sound Proposition?

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First, a word about the rather come-on title. The point about anything being virtual is that, according to the SOED, it "is so in essence or effect although not formally or actually". Virtuality is a matter of "essential nature or being, apart from external form or embodiment". What kind of reality would it be, virtual or otherwise, which would deny the essence of the acoustic spaces within which we all live ?

The problem is that "Hearing is Believing", even "Hearing is Believing 2" owes its impact, in a culture which values the visual over the aural, to our 'knowing' that, really, it's seeing that's believing. But is it conceivable that hearing could literally be taken to be believing ?

Not only is it conceivable, it's the daily reality of life on the Great Papuan Plateau of PNG, home of the Kaluli, and not too far away the Umeda and the Foj, and I'll return to them later.

So, whilst my title points to some issues to do with the so-called new media, it also touches on the social construction of knowledge. As one who works in radio, I'm interested in questions about the cultural meaning of sound. As a teacher, I'm perennially reviewing curriculum design for courses in media production, in which students may inform their acquisition of production skills with theory, and ground the theory in practice. I'd like that theory not to be limited to visual concerns.

This event, as an experimental radio symposium, is clearly grounded in practice, and I look forward to our discussions contributing towards the development of a parallel body of theory about the cultural meaning of sound. It promises, therefore, to be important -for media education, where there's an almost total bias in favour of the visual; for artists working in sound; for radio, whose future seems mortgaged to speech for news and current affairs, and niche musical wallpaper.

One of my primary interests has been to develop undergraduate courses in Visual Anthropology in departments of Humanities and Art, Media & Design. There's an important curriculum role for social anthropology in complementing other disciplines open to 'the anthropological approach', by providing a running critique of any body of ideas or practise grounded in western cultural assumptions, and there are many of those, ranging from how we think about sound, to how we develop new media technology.

Conversely, the influence of television, through series like *Disappearing World* has been considerable on documentary form as developed for visual anthropology in this country. However, despite our enviable tradition of radio documentary, anthropologists have not chosen to work in sound.

Nevertheless, Anthropology offers a cross-cultural view on the relation of technology to modes of thought. Some anthropologists have drawn attention to the extraordinary impact of,

for example, the new reproductive technologies on our thinking about nature and culture. Others foresee the so-called new media, or cybertechnology, having an impact, not only on communication, but also on the way we construct knowledge.

Linear/Non-linear

One of the biggest challenges facing media producers is the subversion of traditional narrative structures.

Received in real time, programmes have had a beginning, a middle, and an end, and the audience knew where they were. As with the traditional academic article or book, the audience may be receiving not merely information, but a more or less explicit argument which is developed over the linear progression of the piece, and a metacommunication that this is the form in which such knowledge is properly constructed and presented.

Of course, different academic disciplines have different expectations about what constitutes a proper way of writing, and within anthropology in recent years there has been fierce debate about forms of writing ethnography, whether concerning levels of description, reflexivity, the dominance of the written text and the role of the audio-visual. However, all this, like the debates about form, style, and narrative flow in relation to the media, have been predicated on a basic linear structure.

Faced now with the technical capability for the storage, retrieval and manipulation of information in a variety of non-linear ways, producers are forced to re-examine primary questions about the form in which information should be constructed in relation

- to the 'reality' to which it refers,
- to any particular mode of discourse,
- and to any particular audience.

Media producers are working with technology which permits - indeed encourages - audiences to make their own mind up about which direction to take at any point.

Whilst the choice apparently offered by interactive programmes is, in reality, no more than a function of prior design decisions, any particular combination of choices, and the resulting sense to be made by a user, is unlikely to have been foreseen as a possible text by the original author. Audiences are now able to construct their own texts and meanings - a prospect not without its problems.

Much attention is paid to the psychology of the 'computer/user interface', presumably because our response to particular items of technology is regarded as natural behaviour and therefore cross-culturally valid. Much is made of the notion of metaphor for providing programmes with their organising shape. Icon-based, rather than word-based interaction is believed to be more 'user-friendly', permitting immediate, almost intuitive response. But technology and metaphor reflect only one cultural view of the world, and why should intuitive response be limited to a visual stimulus ?

Since the students I teach are working with the new media as well as the old - if I can put it like that - one of the issues they have to face is the unreliability of traditional forms and methods of working. There is no preferred way of producing interactive programmes. There are precious few even moderately good examples in existence.

Sound v Vision

A specific concern of mine is the western cultural bias in favour of the visual. Especially since I've been working in a faculty of art, media & design, I've been increasingly frustrated by the overweening importance attributed to the visual. Sound for TV or multimedia programmes mostly trails along in the wake of creating powerful images, and speech radio is an endangered species.

I wondered what I could do to encourage students, especially though not exclusively, those working with radio, to think about sound more radically - as having at least as much potential as the visual media for experiment, challenge and excitement.

So, over the past year, I've been looking at what anthropologists and others have had to say about the cultural meanings of sound - apart from music, and especially in everyday rather than ritual contexts. What I've found has excited me, and confirmed my belief in the contribution anthropology has to make to the debates yet to be held about new directions for the media.

Key works among ethnographies are Steven Feld's *Sound and Sentiment: Birds, Weeping, Poetics, and Song in Kaluli Expression*, and Paul Stoller's *The Taste of Ethnographic Things*. They contrast the western under-rating of the sense of hearing with its importance in Kaluli and Songhay culture respectively. Then there's a most important contribution by Alfred Gell in a new book on the anthropology of landscape, in which he describes the acoustic world of the Umeda, like the Kaluli, of Papua New Guinea.

A TV producer colleague of mine is researching into the production of virtual reality programmes, whose essential characteristic is of the user apparently being able to operate freely within a structured space. That made me think, after reading about these aurally-based cultures, that any 'reality' in which one could not operate equally autonomously within a meaningful acoustic space, would be even less virtual. Is there a danger, indeed, that Virtual Reality may become another example of the ethnocentrism by which a notion as problematic as 'reality' is hi-jacked by the particular biases of technological development.

Questions about Sound

The implications of all this for what we teach, have led me and another colleague to construct a course in sound, in which ideas for exploring the social construction of acoustic space are intermingled with experimental production work. I'm sure others are going in similar directions, and I'd be most interested to talk to you in the course of the next two days.

As a freelance radio producer since 1980, I rapidly became aware of an acuity of hearing among practitioners developed beyond the cultural norm. Such a capacity for discrimination implies relatively low volume levels, more like 10 - 50 dB than 100dB, in contrast to so much of our cultural experience today, which, whatever our age, involves extremely high levels, often approaching, indeed surpassing, damage and pain thresholds.

The radio audience is offered more opportunities for listening than ever, but this is hardly in response to a culturally developed aural faculty. How much radio output demands close attention to its acoustic structure ? How much listening takes place as a primary activity rather than an accompaniment to driving, cooking, studying, dancing ?

The popularity of radio is not evidence that listening is anything other than secondary, subsidiary activity, like the sound that accompanies TV pictures. This hierarchy of the senses, with sound coming in a poor second, is neither universal nor 'natural'.

The Ranking of the Senses

Synnott [1993] shows how the senses have not been ranked equally by cultures generally, and have until recently been ignored by sociology. The ranking in the western tradition puts sight at the top, with hearing trailing behind.

"The dominant communication systems in preliterate societies were the proximity senses: oral-aural, in face-to-face interaction. Humanity lived (and still does live) in 'acoustic space'. But with the invention of the alphabet and writing .. the balance of the sensorium began to shift"[210]

Classen [1993] quotes the case of the Suya of the Brazilian Matto Grosso who "deem keen hearing to be the mark of the fully socialised individual. The Suya term 'to hear' .. also means to understand, while the expression 'it is in my ear' is used by the Suya to indicate that they have learned something, even something visual such as a weaving pattern. Sight, in fact, is considered by the Suya to be an anti-social sense, cultivated only by witches."[9]

In an impressive review of the potential for research by anthropologists into the developing multimedia technologies, Escobar [1994] ignores sound in favour of predicting changes in the ways we record, manipulate and communicate knowledge via the still and moving image, and text.

"How, for instance, will notions of community, fieldwork, the body, nature, vision, the subject, identity, and writing be transformed by the new technologies ?" [214 my emphases]

"Given the importance of vision for virtual reality .. it is not surprising that the branch of anthropology most attuned to the analysis of visuality as a cultural and epistemological regime has been the first to react to uncritical celebration of cyberspatial technologies."[216]

Notwithstanding the 'uncritical celebration', the new media are already having a profound impact on how we conceive of the construction of bodies of knowledge, and access to such knowledge. Meanwhile, Feld, writing about the Kaluli, and Gell about the Umeda, make it clear that sound cannot be omitted from any attempt to understand the nature of knowledge. Gell talks about his own "methodological deafness" which caused him to fail to appreciate, during his fieldwork in Umeda, "the auditory domain, including natural sounds, language and song, as cultural systems in their own right, and not just adjuncts to culture at large, but as foundations, thematic at every level of cultural experience." [1995:233]

Stoller compares the virtual ignoring of the dimension of sound by Western thinkers with the ethnographic observation that "taste, smell and hearing are often more important for the Songhay than sight, the privileged sense of the West. In Songhay one can taste kinship, smell witches, and hear the ancestors....[5]

Songhay use senses other than sight to categorize their sociocultural experience. If anthropologists are to produce knowledge, how can they ignore how their own sensual biases affect the information they produce."[7] "[S]ound .. [is] .. a foundation of experience... A deeper appreciation of sound could force us to overturn our static, spatialized world and consider the dynamic nature of sound, an open door to the comprehension of cultural sentiment" [1989:103].

Feld shows how the Kaluli, who live just north of Mt Bosavi in Papua New Guinea, totally incorporate bird song into the expression of core values of their culture, so that "an analysis of modes and codes of sound communication leads to an understanding of the ethos and

quality of [their] life... Kaluli sound expressions are revealed as embodiments of deeply felt sentiments." [1990:3]

The soundscape characteristic of any particular set of cultural and geographic circumstances, produces "the foundation of experience" for those whose whole way of life is built on that foundation, not just the narrowly auditory bits. So what consequences can we expect when individuals move between quite different acoustic environments, or those environments themselves are subject to massive change ?

Jackson, in a paper on the use of sound in ritual, discusses ".. the meaning and use of sounds in human society generally." In ritual, he says sound "provides a frame and a marked off time or place that alerts a special kind of expectancy.... Of all physical stimuli sound is an ideal marker, it is pervasive and far-reaching yet capable of infinite variation" by contrast to sight [295].

But is this 'marking' function of sound confined to ritual ? I've been using a questionnaire, so far only with students, designed by Gary Ferrington of the University of Oregon to elicit the level of awareness of sound in people's everyday lives, and identify the range of meaning sounds have for them. The associations of sounds made by my respondents accomplish precisely this 'marking off' in everyday life, constituting a largely unremarked part of our soundscape - for example, the sound of "dad's razor being scraped night and morning, giving me a sense of security", "the sound of the key in the front-door meaning dad was home and everything was all right", and "the sound of family moving about the house after I'd gone to bed giving me a sense of security and belonging".

These references to notions of security are but one example of the deeply emotional and personal associations that respondents were producing in answer to Ferrington's five very basic questions:

1. Identify two or three dominating soundmarks in in your life
 - (a) as a child
 - (b) as an adult
2. Identify two or three sounds in the acoustical environment that you vividly recall from your childhood. Explain the emotional attachment you connect to these sounds.
3. How would you describe the term noise as it applies to the acoustical ecology of your world ?
1. What is your favorite soundscape? In other words, where is your favorite place in the natural acoustical environment ?
2. Identify the type of community in which you lived
 - (a) Age 1-6
 - (b) Age 6-13
 - (c) Age 13-18

and the soundscape generated by living organisms within that community. [Ferrington 1995]

Giving this questionnaire first to highly visually oriented Graphic Design students I imagined it wouldn't hold their attention for more than 10 minutes at the most. In the event, I had to stop them writing after 45 minutes. There were similar reactions from groups of Time-Based Media students. The questionnaire triggered a level of response which suggests to me it would be rewarding to set up further activities to encourage the exploration of, and reflection on, this culturally under-rated sensory area.

For example, returning to the title of this event, there's that question of the relative

reliability we ascribe to aural information compared to visual. Gell describes the harrowing experience of an Umeda informant who had been chased down a path by an ogre.

"'Yes, yes,' I said, cutting him off, 'but did you actually see the ogre? ' My informant looked at me in perplexity. 'It was dark, I was running away, it was there on the path, going hu-hu-hu' .. When, I wondered, was an Umeda going to admit to actually seeing one of these monsters ? But that, of course, was a misapprehension bred of a visually based notion of the real. For Umeda, hearing is believing, and the Umeda really do hear ogres. "[1995:239]

If ethnographers have largely ignored the acoustic environments within which they've been working, because of what Gell called "methodological deafness", it remains true that, except for the extra-ordinary circumstances of a 'dead' sound studio or being profoundly deaf, all human experience is contextualised in a 'soundscape' [Schafer 1994]. Most ethnographies begin with a description of the landscape, none describes the soundscape.

Reports over recent months suggest a growing concern with noise pollution in the UK, and a number of extreme reactions to it. The Guardian on 28th September last year reported that "Domestic noise has become the most common complaint received by local authority officers, leading to at least 17 killings and suicides in the past three years."

Anthropology of Sound

Apart from the general aural context of all social behaviour, how might a consideration of sound bear upon any particular theoretical topic, which might then influence the ideas of, say, a sound producer ?

One of the major themes of my second year visual anthropology course is Elements of Identity and Belonging. A key text is Cohen's Symbolising Boundaries, which considers the construction of identity in a number of communities in Britain. Many of the topics covered could quite easily include an aural dimension, judging by the associations made in the answers to the questionnaire I've already mentioned.

In one chapter Bouquet focusses on the kitchen when writing about the partitioning of status and identity in relation to a woman and her mother-in-law. My respondents recall: "mum singing in the kitchen; mother cooking in the kitchen with Radio 4 Woman's Hour; not just her voice, but the background sounds of domestic activities"

Mewett, writing about a Lewis crofting community as "constructed and constituted by the actors" [72] states that his "concern is to understand 'community' through the stock of knowledge people use to inform and guide everyday behaviour .. how boundaries are constructed as part of the shared meanings of everyday behaviour and within the context of the social relationships of everyday life."

As my informants indicate, such boundaries, when marked aurally, may be temporal,

"varied music playing throughout the day - classical at the dinner table: it's not just the music that stands out but the sound of the needle on vinyl and the smell of acetate discs; generator in the garage charging up in the morning; father's razor scraping morning and evening; mother calling me every morning at 8; dad banging his pipe on the bin at particular times of day, Playschool, TV theme tunes, 'phone late at night meaning trouble/problems",

...such boundaries may be associated with persons,

"different members of the family running up the stairs; the thump of my mother's heartbeat as I sat on her knee with my head against her chest; my little fake piano when my brother tried to play it with all his fingers; my father clearing his throat when concentrating; dad slurping his cornflakes when he used hot milk in the winter"

...such boundaries may be spatial,

"from my bedroom the sound of voices and till in our shop; the Aga lid being put down; the distinctive signature of the different streams in our village; Mrs Mepstead's dog barking; from in a terrace house, the sound of the neighbours' clock chiming every hour on the one side, and the family arguing on the other"

One particularly interesting example of aural boundary setting between households came from the respondent who noted, over three occasions in her life when she'd moved house, the changes in the thickness of the house walls and the corresponding raising or lowering in the threshold of audibility of neighbours' talking.

Taxonomy and Ways of Knowing

In addition to the question of the 'foundation of experience', aural or otherwise, there's that of the organisation of knowledge, which, as I've said, is crucially important to interactive multimedia producers. The anthropologist Maurice Bloch [1992] argues that the very act of writing down people's knowledge in sentences in books and articles, totally misrepresents its nature.

"Anthropological accounts .. work from a false theory of cognition. As a result, when they attempt to represent the way the people studied conceptualise their society, they do so in terms which do not match the way any human beings conceptualise anything fundamental and familiar in any society or culture" [127] "Everyday thought" he says "is not 'language-like', .. it does not involve linking propositions in a single sequence .. Rather it relies on clumped networks of signification which require that they be organised in ways which are not lineal but multi-stranded"[128] ,p. This view certainly accommodates the kinds of associations of sounds with information exhibited by my respondents.

One of Bloch's [1991] informants in Madagascar, whilst out walking made a swift assessment of the farming potential of a stretch of land they were passing as 'good swidden', and Bloch saw his judgement as based on" ..a fairly clear yet supple mental model, perhaps we could say a script, stored in long-term memory, of what a 'good swidden' is like; ... this model .. is partly visual, partly analytical .. partly welded to a series of procedures .." [187]

If he'd been talking about the Kaluli landscape, it would certainly include an aural element. In contrast to language-based taxonomies, Feld demonstrates that Kaluli avian taxonomy is grounded in sound. Theirs is "a set of beliefs that organises the interpretation of everyday living in a world that is full of birds and alive with their sounds. Myths, seasons, colors, gender, taboos, curses, spells, time, space, and naming are all systematically patterned; all of these are grounded in the perception of birds, as indicated foremost by the presence of sound."[83-84]

In a chapter suggestively entitled "To you they are birds, to me they are voices in the forest", Feld describes how "Kaluli categorize and think about routine experiences of birds most often and most thoroughly in terms of the sounds they hear in the forest

and at the village edges. Recognition of birds by sound is immediate in everyday situations ... Evidence for dominance of the routinely shared character of sound over image categories is manifest in a number of different ways.

When presented with pictures or specimens out of context, Kaluli tend first to think of and imitate the sound, then to say the name of the bird. .. Virtually all Kaluli men can sit down in front of a tape recorder and imitate the sounds of at least one hundred birds, but few can provide visual descriptive information on nearly that many."[72]

Gell [1995] goes so far as to claim a link between the Umeda landscape, and their mode of perception, cognition, language, and sentiment. For him "the primary rainforest environment imposes a reorganization of sensibility, such that the world is perceived in a manner which gives pride of place to the auditory sense (and another sense we hardly use, olfaction: Gell 1977), and that this transformed sensibility has manifold consequences in the domain of cognition"[235]

Furthermore, Gell suggests that "The value systems of New Guinea 'forest' cultures seem to emphasise sentiment .. more than the cultures of the open plains... Here, in the vibrant, tactile, scented gloom is the landscape of nostalgia and abandonment.... Hearing is (relatively) intimate, concrete, and tactile, whereas vision promotes abstraction."[loc.cit]

Feld talks about a concept of sound, *dulugu ganalan* 'lift-up-over-sounding', which has enormous potential for anyone considering using sound in any way other than the most mundane accompaniment to pictures. It presents fascinating challenges to the would-be sound producer.

"Unison or discretely bounded sounds do not appear in nature; all sounds are dense, multi-layered, overlapping, alternating, and inter-locking. The constantly changing figure and ground of this spatio-acoustic mosaic is a 'lift-up-over-sounding' texture without gaps, pauses or breaks." [loc.cit].

In a recent paper in the World Forum for Acoustic Ecology Soundscape Newsletter, Feld coins the term 'acoustemology' - an ellision of 'acoustic' and 'epistemology' - to describe his concern with "acoustic knowing as a centrepiece of Kaluli experience; how sounding and the sensual, bodily, experiencing of sound is a special kind of knowing, or put differently, how sonic sensibility is basic to experiential truth in the Bosavi forests. Just as 'life takes place' so does sound; thus more and more my experiential accounts of the Kaluli sound world have become acoustic studies of how senses make place and places make sense."[1994:6]

Sound v Noise

Finally, I should like to offer a couple of distinctions which I have found helpful, and which suggest fruitful areas for experimental work, both theoretical and practical. The first distinction is between 'sound' and 'noise', the second between 'quiet' and 'silence'.

I don't think we use the terms 'sound' and 'noise' indiscriminately. The first, I should have thought refers to what we hear as having a pattern or meaning, whereas noise is more likely to refer to what we cannot identify. The lack of structure in noise results in its being unplaceable, semantically speaking, in one's soundscape. There's no doubt we also tend to give a positive value to sound and a negative one to noise, so that, although we can, of course, identify a road-drill, it's a dreadful 'noise' more than 'sound'.

Quiet/Silence

The commonsense definition of both 'quiet' and 'silence' may be absence of sound, but reflection makes it clear that neither term can refer to the total absence of sound, but rather to the absence of noise. 'Quiet' is often associated with 'peace' - not necessarily by contrast to war, but certainly by contrast to an involuntary involvement in activity. The total absence of sound is a virtually unnatural phenomenon, to be found only in the anechoic area of a sound studio, so perhaps silence is better thought of as the absence of chatter, or any foregrounded, attention-demanding sound. In such a silence we may, for instance, become aware of our own sound-making - breathing, say, or footsteps.

A sociologist who points up differences in Eastern and Western notions of silence is Keiko Torigoe of the Sacred Heart University in Tokyo. She quotes the guidelines for a contest run in the Nerima district of Tokyo in 1990:

"Just as we have our own favourite places where we enjoy beautiful scenery, each of us must have a place where he or she finds his or her own special silence. Please let us know about the places where you enjoy your favourite scenery of silence. Where in Nerima Ward have you found this silence ?" [Torigoe 1994:6]

One aim of the contest organisers was to understand "the meaning and substance of 'silence'" and to approach "the acoustic environment from the viewpoint of silence rather than that of noise" [loc. cit]. As Torigoe says, "in Japan we define silence rather differently from the western understanding of it as the absence of sound" [ibid]. The contest, indeed, "established that all silences are not the same and that silence can exist in various ways as appreciated by the residents of Nerima Ward. The sound level meter is not the only way to understand silence." [op. cit: 7]

A couple of examples from the ten kinds of silent place identified in Nerima Ward.

The precinct of Chyoumei Temple. This silence was termed 'The Silence of Shrines and Temples'. The entrant who chose this place was a seventy year old man who made his own tanka (a short poem) to describe it:

In the grounds
 Of Chyoumei Temple
 Nothing but the cry
 Of a summer bird
 Interrupts the silence

The Sanpouji Pond in Syakujii Park. This silence was termed 'The Silence of Plentiful Water' and was described by one of the entrants this way: "The heroes of this space are water, birds, insects and the sound of the wind."

In fact, when Torigoe visited it, she was "surrounded by a surprising variety of natural sounds, such as the water birds flapping their wings and the sound of running spring water."

As Feld argued with regard to the Kaluli soundscape, these people are not exclusively responding to isolated sounds - sounds of something - and their appreciations are not of individual sounds, and only partly sounds in relation to other sounds.

Their perceptions are of a complex whole, which includes the space in which the sounds occur, an acoustic space which is shaped by a unique configuration of the landscape in each case - a hill, a dip, a grove of trees, the bend of a river, an expanse of water. For

Torigoe, "Silence .. exists as a synesthesia comprising our total sensations." For her the contest "worked as a new type of socio-audio performance art... [which can] make people conscious about what seems natural to them, or to reveal something important in their daily lives...When it comes to Sound Culture we have to consider not only the sounds we create or we hear, but also the sounds of which we are not conscious, or which we think we do not or cannot hear. Sounds of the past, sounds of the future, sounds in our memories and dreams - all these kinds of sounds should be included." [loc. cit]

The poetry entailed in such a formulation, suggests a fruitful possibility for experimental work - not, initially, for 'making programmes' so much as for providing the occasion and validation for exercises in valuing the soundscape, such as were provided by the Nerima Silent Places Contest.

Such spatiality of sound is, at the moment, technically beyond virtual reality, never mind TV or radio. It's probably also beyond the imaginings of all but the most inventive of current producers, which is why we're beginning to ask our students to experiment in these terms, and, again, I'd love to hear from others taking a similar approach.

In a brief introduction to Japanese ideas about sound, Imada [1994] points to the suggestive force of the absence of discernible sound, through two illustrations. The first, is of people gathering to listen to the sound of the bloom of a lotus flower at a pond in Tokyo. The blooming actually occurs at a pitch below the level of human hearing, but people "wanted to listen to that phantom sound. The experience was a kind of communal auditory hallucination." [5] Perhaps it was a matter of drawing upon things inside themselves rather than responding to external stimuli.

Secondly, in describing a sound installation in a garden, Imada draws attention to the delay between water being introduced to the 'suikinkutsu' and its effect being heard. He says that not only did people "appreciate the sound of the suikinkutsu itself, but also the time spent creating the sound." The delay "had the effect of directing [their] listening to other environmental sounds in the garden" [loc.cit] The idea of pleasure in delay sits strangely in contemporary western culture. No wonder Imada describes the nature of sound as being in accord with the most fundamental and intuitive principles of a culture.

The ethnographic accounts of Feld, Stoller, and Gell suggest ways of thinking about and through sound that are of potential importance to students whose professional interest nowadays must be about ideas as much as technology; who should not allow themselves to be limited by the taken-for-granted assumptions of what constitute human sensory boundaries; whose brief must be international rather than local; for whom old structures both of the media industry and of the production process have largely disintegrated.

On the one hand, the next generation of producers and consumers are being raised in a visually dominated culture. On the other hand, the Kaluli and the Umeda of PNG remind us of the acoustic and cognitive spaces from which we have excluded ourselves. The crux of the Umeda ogre episode was not whether on this particular occasion a man had been pursued by an ogre, but what constitutes evidence for the existence of ogres in principle.

Anthropology shows that belief systems are systems, i.e. they are structured, and that structure implicates the aural as much as the visual. Furthermore, in giving people access to other belief systems, we should, as Bloch says, " make much more use of

descriptions of how things look, sound, feel, taste" [1991:193]

Whether events such as this weekend succeed in inducing any communal auditory hallucination remains to be heard. It can certainly be a spur to experimentation for those who would re-calibrate our sensory equilibrium. I wish us all understanding. May it be in your ear - you'd better believe it.

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