

these materials in real time. The results were recorded by carefully manipulating the knobs and controllers on the panel of the vocoder as if the music was played live in a real-time performance. I added a third track with a spoken voice with no effects, except for a few sections on the tape that were cut and spliced backwards. All sounds were taken from recordings of my own voice. The speech has no specific meaning as I invented all the words and phrases myself. My intention was to let the musical message be conveyed by the intrinsic musical attributes of human speech (i.e. rhythm, melodic contour, dynamics and voice color, etc.), as opposed to the meanings dictated by the grammar and lexicon of a specific language.

*Eduardo Reck Miranda was born in Porto Alegre, Brazil. He studied information processing technology at Universidade do Vale do Rio dos Sinos and studied music at Universidade Federal do Rio Grande do Sul. He studied music technology at the University of York in England and completed his studies in music at the University of Edinburgh in Scotland. In the mid-1990s he joined the staff of the Department of Music of the University of Glasgow, Scotland, where he lectured on music technology and composition for some years. He currently divides his time between Brazil and France and conducts research in the fields of linguistics and music for Sony Computer Science Laboratory in Paris. He is the author of the book Computer Sound Synthesis for the Electronic Musician (Focal Press, 1998) and the editor of the book Música y Nuevas Tecnologías: Perspectivas para le Siglo XXI (Editora L'Angelot, 1999). His compositions have been broadcast and performed in concerts and festivals worldwide, including Festival Música Viva (Portugal, 1999), Seoul Computer Music Festival (Korea, 1998, 1999), International Computer Music Conference (China, 1996) and Synthèse Festival (France, 1995, 1998). Miranda was one of the founders of Nucom/SBC, the Computer Music Interest Group of the Brazilian Computer Science Society, and he chaired the Second Brazilian Symposium on Computer Music in 1994.*

## WENA WENDLOVU

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*Wena wendlovu* (He Is the Great Elephant) developed from approximately 15 minutes of sound recording at the public wedding ceremonies of Zulu King Zwelethini to his fifth wife, Mfumelela, in 1993. This part of the wedding took place outside Ulundi, in the KwaZulu-Natal province of South Africa. I participated in recording DAT for several days as part of a team organized by Christine Lucia, then head of the Music Department at the University of Durban-Westville. The original tapes are now a part of the music library archives there, available for study by future generations of students interested in music and culture in the region.

While the wedding itself progressed over several days, the Saturday ceremonies included both Christian and Zulu marriage rituals, each with appropriate dress and music. Musical performances by local and foreign ensembles were given in front of the king and invited guests alongside an impressive presentation of costumed warriors from the Zulu clans displaying power and respect before the king. Shortly before the principal ceremonies, the appearance of a Portuguese dance company before this audience of richly costumed chiefs in their finest skins and feathers created one of the anachronisms explicit in *Wena wendlovu*. During the entire festivities, in the bride's parents' homestead and at the king's palace, the

pace conducted was not what was set down in the published program: it was at once slow, then frenzied, developing in intensity of metaphor and finally dissolving into the dusty landscape. The ceremonial pacing was dictated, I was told, by the spiritual presence of ancestors from both families. What was the imagery engendered by the ancestors of both families? Would they be happy with the union of the couple? Was there competition that would stand between the couple longer than the stick-fight competitions of the boys from both families that took place over the course of the festivities? The sounds of the king's praise singer intermingled with those of the drummers and the *amahubo* (praise/identity chants) of the warriors.

Foreign impatience can claim any number of delays to "the ancestors." This was a convenient explanation for anything that seemed unprepared. We outsiders are all such cynics, I think. There was much more going on than what one could hear and expect from the beautifully printed wedding program. I, for one, was quite happy to take the presence of unsettled spirits to heart. The aunts brushed a path in the presentation circle for these past and insistent guests. The bride waved her domestic knife at them. The chiefs drove up in their Mercedes to celebrate them. There were layers of worlds that day. Come. We shall be present before the king and weigh the health of this union. We sharkskin-suited Japanese businessmen, children of Cetswayo, American State Department officials, Mothers of Sarafina, radio announcers, American academics, Impis for a bowl of soup, and school children—gentle ancestors and spirit demons all. We would do well to remember them in our own ways. Here, in *Wena wendlovu*, is a shortened version of this sound construction for a ritual performance venue.

*Daniel Wyman, a native of Los Angeles, studied composition, music history and film scoring at the University of Southern California. His principal instructors included Fredrick Lesemann, Ingolf Dahl and film composer David Raksin. Concurrent with his studies, Wyman began working with electronic music pioneer Paul Beaver, creator of the Nonesuch Guide to Electronic Music. With the initial loan of the Parasound Studios (owned by Paul Beaver and Bernard Krause), Wyman and Lesemann founded the electronic music and recording arts programs at USC. Wyman began composing for film and television by joining producer/director John Carpenter to create the music for Assault on Precinct 13, The Fog, and the original Halloween. Joining two partners, Peter Bergren and Robert Walter, he created Sound Arts, one of Los Angeles's first commercial electronic music studios. As principal composer/electronic orchestrator for Sound Arts, he created many sound tracks and sound designs, including television series and specials, films, a Broadway musical, theme park sound effects, commercials, and electronic programming for numerous recordings. He has written concert music for various ensembles and electro-acoustic combinations, including chamber concertos for viola and bassoon. He has had commissions from the Stuttgart Days for New Music, Musik der Jahrhunderte Festivals, San Jose Dance Theatre, San Jose Chamber Orchestra and the Times Square Music Ensemble. In co-production with saxophonist William Trimble, Wyman released a CD entitled Duo for Saxophone and Composer, available through X-Dot 25 recordings and Gnorble Music. Since 1988, he and his wife Marilyn Wyman (of the Art History Department, San Jose State University) have pursued studies and projects focusing on the arts in South Africa. They have worked with the University of Natal, Durban; the University of Durban-Westville; and the Trade Union Research Project. Wyman has included many elements from his South African experiences in his music, ranging from use of material from fieldwork tapes of Maskanda and gumboot music to melody fragments coming from Zulu public ceremonies.*