Exploring the Nexus of Sound, Art and Culture in a Multimedia Community Project from Regional Queensland, *Sweet Sounds of a Sugar Town*

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INTRODUCTION

It has been suggested that "the nexus of sound, art, and culture is particularly rich and open to intervention..." (Drobnick, 2004: 10). This paper explores just such a nexus in the production of *Sweet Sounds of a Sugar Town* (2005), a multimedia CD/DVD and collaborative community project focusing on the soundscapes of the sugar industry of Central Queensland. In particular, it describes some of the production processes, technological aspects and aesthetic choices informing how music was used to help document the aural ambience of a particular place and industry.

Interest in soundscapes – the sonic world around us – has been championed by scholars and composers such as Schafer (1994), Truax (1996) and Westerkamp (1990), as an approach to understand better the way sound is produced, perceived and given meaning by individuals and communities. Truax (1978: 127) defines the ecology of a soundscape as "the relationship between individuals and communities and their [sonic] environment". Schafer (1994: 7) provides a useful – and encompassing – definition of a soundscape: "[it] is any acoustic field of study. We may speak of a musical composition as a soundscape, or a radio program as a soundscape or an acoustic environment as a soundscape". This definition is useful in my description of *Sweet Sounds* as a project that combines various kinds of soundscapes – natural, agricultural, industrial, social and musical – into a new hybrid designed specifically to represent, reflect and recount the soundscape ecology of a particular region, city, industry and socio-cultural group.

Music is a key component of *Sweet Sounds*. The CD contains 8 compositions and the DVD contains related video, still images and oral histories featuring women and men of the industry. Inspired by the industry's natural and industrial soundscapes and rhythms, the music for the CD was composed, recorded and mixed first and then the images and oral histories were added for the final DVD to enhance and contextualise the 'sweet sounds'. The final CD/DVD garnered unexpectedly wide circulation locally, nationally and internationally – perhaps because it was an unusual approach for documenting a community and an industry via sound, sight and story.

Before delving into some facets of *Sweet Sound*'s production, a bit of background on the region of Central Queensland and the area surrounding the city of Bundaberg is useful because the project arose directly from a mandate to represent sonically, visually and historically a region, a city, a major industry and a socio-cultural group. The Central Queensland region of Australia is known mainly for a resource-based economy of coal, cattle and sugar, the latter especially around the city of Bundaberg, whose very name points to its multiracial/multicultural heritage: 'Bunda' being the name for a local Aboriginal tribe and 'berg' being the Germanic name for town. The sugar industry around Bundaberg and the neighbouring cities of Childers and Hervey Bay dates back to the 1870s. After the displacement or demise of many of the Indigenous people who had inhabited the area for millennia and the arrival of European immigrants in the 1860s, imported labourers cleared and tilled the previously impenetrable scrub country and planted sugar cane. The working and living conditions were harsh, as were the modes of the early 'recruitment' from the present day Solomon Islands, Vanuatu and Sri Lanka. The majority of the labourers were later deported after the implementation of the White Australia Policy in 1906. South Sea Islander labour in particular was crucial in transforming the Bundaberg area from a 'feral' to a 'refined' landscape, a process that irrevocably also altered its soundscape.

Today (2007) Bundaberg has a mixed agricultural economy including sugar (producing approximately 20% of Australia's production) but also increasingly other large-scale crops such as citrus, macadamia and vegetables. Tourism and an influx of baby-boomer 'sea-changers' have also arguably helped

transform the area from ocker bucolic to borderline trendy. It even has a university campus and governments have invested in infrastructure, partly because it is a notoriously fickle swing electorate at federal and state elections. Notwithstanding recent economic and demographic changes, sugar remains iconically linked to the region and the word 'Bundaberg' is often followed by the word 'rum', although ironically rum production is a minor facet of the sugar industry.

THE ORIGINS OF THE PROJECT

The project arose from the confluence of the agendas and interests of several key collaborators. Firstly, as academics at a 'regional campus' of a 'regional university', part of our job description is to 'engage with the local community'. A campus-based group called the Bundaberg Media Research Group (BMRG) had initiated several community-based projects involving the local art centre and South Sea Islander and Indigenous peoples. They were interesting projects because even a community as small and outwardly unremarkable as Bundaberg can have an interesting history. To assist in the projects the university provided reasonable quality video cameras and sound equipment in the expectation that more projects – and publications – would ensue.

Secondly, the National Library of Australia (NLA) had been a collaborator on some of the projects and had provided professional quality digital recording equipment and microphones, which meant the BMRG had the technological means to do 'industry-standard' recordings. The National Library also had an institutional interest in what they termed 'endangered industrial soundscapes' and the sugar industry qualified as both 'endangered' and 'industrial' and had a soundscape that had not been extensively documented. They were also very interested in archiving oral histories from regional Australia. Thirdly, there was a talented young local drummer and composer, Dane Costigan, who was open to the idea of doing 'something different' musically although at the early stages it was unclear what it would be and how it would be achieved.

These three key collaborators were augmented by the crucial interest of Bundaberg Sugar in the project, partly because the manager at one of the mills (Neale Kent at Bingera Mill) was an ex-drummer and appreciative of Dane's skills and partly because the company was in the midst of major challenges in the industry and he saw the historical value of documentation. After doing some initial on-location recordings and filming (at plantations, mills and trains) as well as some oral histories with women and men from the industry, the project eventually took shape as a multimedia project that would combine sound, sight and stories to narrate an overview of the sugar industry of the Bundaberg region. It made no claims that it could be comprehensive but it could strive to be innovative. It was very much a 'learn as you go' project as individual members of the BMRG had some technical and administrative skills but had never worked on project so large and complex. My personal involvement was as Executive Producer, studio musician, on-location Sound Recordist and Co-producer of the music. What follows is an example of how the production team combined the sugar industry's soundscapes and rhythms and its images with new music by Dane Costigan and others to craft something innovative for Central Queensland and for the sugar industry.

EXAMPLES OF MUSIC'S ROLE IN THE PROJECT

The project's musical goal was to create "compositions inspired by soundscapes and rhythms of the Bundaberg Sugar Industry", as the *Sweet Sounds of a Sugar Town* (2005) CD/DVD is subtitled. Those compositions had different provenances and each one was organic in the sense they took shape both in and out of the studio context. The music was intentionally eclectic and each track is stylistically different. That production decision was partly due to how particular industrial rhythms suggested particular musical rhythms. For example, while listening to the syncopation of the overhead irrigators I picked up a guitar and started strumming along in a 'Latin-ish' feel with a major 7th chordal structure, which fit rhythmically and musically and was unlike the feeling of the other tracks. Such decisions were also partly due to Dane's preferences and playing styles. Serendipity played a key role in composing the music. Sometimes an unexpected or synchronistic sound or rhythm or aural ambience would inspire the composers and engineers to take the composition somewhere else than where it initially seemed to be going, which is arguably one of the true joys of production. Sometimes also a studio musician would come up with an improvised melody or inflection that enhanced the chordal structure or timbre of a track.

For the natural soundscapes, all sounds used were recorded on-location, except for two or three ecologically valid samples that were taken from a CD of Australian frog sounds. Many hours of recordings were gathered. The sounds of the birds, insects, frogs and cane toads all had their own musicality and rhythm. They were evocative not only of place but also time of day or night, weather and even humidity. The sounds ebbed and flowed and in a sense created self-contained, self-referential natural compositions in and of themselves. For the industrial soundscapes, all sounds were also recorded on-location and again many hours of recordings were gathered. For example, because at the time of the project the Bingera Mill only operated 5 days a week, it would be 'fired up' very early on a Monday morning. Several hours later the cumulative sounds of the mill would generate a soundscape with a plus 90db noise floor. This meant that hearing safety equipment had to be worn, a definite challenge when trying to monitor live recordings with headphones. Like the natural soundscapes, the sounds of the tractors, trains, trucks and milling equipment all had their own musicality and rhythm.

Musicality was integral to the soundscapes. For example, the overall chordal 'hum' of the Bingera Mill was in the key of D and could also shift between a Dmaj7 and a D7 chord depending on the cane variety being processed. Rhythmicality was also integral. The diurnal and nocturnal pulse of the natural soundscapes and the often metronomic metre of the industrial soundscapes meant there was an element of predictability in what otherwise could be construed as a chaotic confusion of unrelated sounds and rhythms. At plus 90db, the mill was definitely noisy but the soundscape comprised more than just noise. There was an internal logic to what seemed to be random but not necessarily unrelated rhythms: they were all part of a highly industrialised production process converting raw sugar cane into the refined sugar we have with tea or coffee. There was also a range of frequencies to contend with from the deep almost subsonic throb of the steam fired generators to the almost supersonic whine of the centrifugal separators as they spun the water out of the raw sugar to produce different kinds of refined sugar.

Although the project was based on soundscapes and rhythms, integrating them with new musical compositions was a primary challenge, and from a music producer's perspective, it was this facet of the project that offered the biggest potential rewards.

AN EXAMPLE OF THE MELDING OF SOUND, SIGHT AND STORY

In order to explicate some of the processes of production mentioned above, I will explore one particular composition from *Sweet Sounds of a Sugar Town* that epitomises the kinds of challenges and solutions that arose. The production process of each track contains overlapping elements of sound, sight and story and it is through deconstructing them that they can be separated out. During the processes of production and post-production and in the end product CD/DVD they are interwoven into a comprehensive whole.

Most on-location recordings were made using a pair of Schoeps CM-5 condenser microphones connected to a Tascam DA-P1 recorder (set to 16 bits/48k) recording onto DAT tape. Later, the recordings were transferred to a Pro Tools platform for the studio sessions. The main way of melding music with the sounds or rhythms of a soundscape was to privilege either one or the other. A useful example of privileging a soundscape's rhythms is the track '3 Trains, 1 Dog and a Couple of Crickets'. The liner-notes provide a succinct overview:

This composition is based on the distinct rhythms of three separate trains: one fully loaded high-speed train, one train shunting in the Bingera Mill marshalling yard and one hauling empty bins. During the second section Dane plays a purloined piece of railway track and some 'fish plates', the narrow pieces of metal that join railway tracks together. The dog was recorded near the Avondale Tavern while we were on-location late at night. It gave a great impromptu performance, as did the crickets.

In the Bundaberg region, trains are a major means for transporting harvested sugar cane from the plantations to the mills, which are linked by extensive rail networks. The upkeep of rail lines and engines is a year-round activity although most of the work is conducted during the 'crush season' when trains work day and night. The mills need a steady supply of raw sugarcane to be economically efficient and the trains help supply it.

The initial phase of music production involved on-location recordings. It was soon obvious that different kinds of trains carrying different loads at different speeds had quite distinct rhythms and sounds. For example, a train hauling 40 empty bins from the mill at 100 kilometres an hour was very clattery whilst when it returned hours later to the same location fully loaded it was a much more ominous sound, especially when the sound recordists were standing within several metres of the track in order to get the optimal positioning for the microphones. By the time the same train got into the mill's marshalling yard, the speed of the train was greatly reduced and one could sense via the deep frequencies and ground vibrations the great weight being carried by the rails. The duration of the recordings also varied and a recordist could wait for hours for a train that whizzed past in minutes or even seconds.

Different kinds of microphones and miking techniques proved useful in capturing the varied train sounds. Some recordings used a pair of condenser microphones in an X-Y configuration to get a sense of a left-to-right or right-to-left movement across the stereo spectrum. Other recordings used condenser microphones in a Mid-Side configuration to capture another variety of sound movement. In order to capture the deep rumblings of a train moving over the tracks two techniques were useful: one was to place single or paired Pressure Zone microphones under the tracks; another was to record from under a rail bridge with a mono shotgun microphone pointed upwards at the undercarriage to capture reflected sounds. Along with curves along a rail line, switching points where sidetracks joined the maintrack proved to be excellent sites for microphone placement. Each had non-standardised gaps between sections of rail. Thus the 'clickity-clack' created by each section differed sonically and rhythmically and that variety could be used compositionally.

Once the numerous recordings of trains were gathered it was still unclear exactly how to use them. They were certainly rhythmic but most were very short. Consequently, as mentioned in the liner-notes, it was decided to integrate three separate kinds of trains into one longer piece. A composite CD of numerous recordings of the three trains was prepared. Dane listened to it and decided which ones he thought would be most suitable for what he had in mind compositionally. The next step was to extract sections of the recordings and create 'loops' from them, which would serve as a 'click track' once we got to the studio. We decided we would try to keep the compositions at around 5-6 minutes' length because it would help keep them focused. Filling up too much time with images would also present a considerable challenge for the video editor. For these reasons we set ourselves general time limitations.

In the studio sessions, Dane used a large drum kit made by Mapex along with Bosphorus cymbals and Trueline drumsticks (these companies provided him with sponsorships at the time). He played to the loops of the three distinct sections and we felt that the recordings sounded excellent as separate entities. They captured a full range of frequencies from the bass of the double kick drums and floor toms to the treble of the splash cymbals and also the cane-knives we had bought especially for the sessions. However, we also felt it would be beneficial to have some kind of narrative – musical or thematic – to link the sections into a cohesive whole. Aside from people obsessed with trains (and we encountered some of those during the project), we surmised most people would find some kind of narrative or 'story' helpful, even if it was very loose and impressionistic and more implicit than explicit. So we implied a narrative by scripting what resembled a 'public service announcement' common on local radio in sugar growing regions where cane trains operate only seasonally. The video editor Brett Charles, who had worked in radio and knew exactly how to make it sound realistic, voiced it. It was underscored by some 'country-ish' music (the instrumental tag to Seaman Dan's 1999 song 'Little Pony') that suggested a rural ambience. Even though the song itself has nothing directly to do with the sugar industry, it sounds like something people in Central Queensland would listen to in their trucks and on their tractors while working on a sugar plantation.

The next step was to decide what musical instrumentation would help reinforce the implied narrative. The harmonica immediately suggested itself because it combines rural and bluesy connotations and because combining a train and a harmonica is almost a production cliché in country music. Johnny Cash's 1965 version of Ervin and Gordon Rouse's song 'Orange Blossom Special' is only one of many examples of the sonic association of harmonicas with trains. It is also a minimalist yet very

evocative acoustic instrument, which was suitable given that the main musical emphasis of the project was on non-electronic drums and percussion. The introduction of the harmonica in the second section of '3 Trains, 1 Dog and a Couple of Crickets' arguably reinforced the implied narrative but there remained the third section to be dealt with musically. Because Dane's drumming becomes more aggressive in the third section – set up by an insistent hi-hat pattern that precedes the entry of the train loop – it appears Dane is 'leading' the track rather than being locked into or following the metronomic rhythms of the first two sections. Therefore using electric instruments seemed appropriate and we added a Fender Stratocaster and a fretless bass playing very simply to create an edgier, 'country-ish' sound to match Dane's drumming style.

A barking dog is a constant sonic presence throughout the track and we felt it should reappear at the end of the track as part of the narrative. This is partly because it had been an unrelenting and, at times, very annoying element of one of the key train recordings, but also partly because its barking was rhythmic, albeit randomly. So to close the track Dane played a drum pattern to match the dog's barks as the train disappears into the distance on its way to the mill. It was also important to introduce the crickets because one of the revelations of doing the project and recording sometimes very loud soundscapes was that the sounds of the natural environment were ever present even if inaudible to us. For example, the insects and birds that were audible before the conflagration of a cane fire would still be there merrily chirping and singing away as if nothing had happened, as if the adjacent lush green plantation had not been transformed into a blackened landscape of charred stalks. Similarly, if one walked away from the cacophony of a mill or a train one could hear distinctly on the headphones a solitary frog or cane toad sounding its love call or proclaiming its territorial imperative. The fact that the natural and industrial soundscapes existed in parallel sonic universes became more apparent the more we recorded; it left a lasting impression about how we had had to "learn to listen" (Carter, 2004) when at times there was far too much to hear all around us.

Overall, during the project's musical production for compositions such as '3 Trains, 1 Dog and a Couple of Crickets' we had the flexibility to extend and truncate sections as we wished, unlike film music scoring where cue points are all important. The snippets of soundscape chosen were also not sequenced in the exact order of sugar's processing so they were not programmatic. As well, you do not necessarily hear a tippler before seeing it. There was no interest in narratively following a single stick of cane through the mill – that would have been far too programmatic – but we did want to show that processing raw sugar is the culmination of complex processes of agricultural, industrial and socio-cultural production. They all lead ultimately to refined sugar (in various forms such as table sugar or molasses, etc) and the closing static shot of examples of refined sugar serve not only as the 'end' of the overall narrative but also as backdrop for the credits. Sugar has been processed from its raw to refined state and *Sweet Sounds of a Sugar Town* strives to document that process through sound, sight and story.

CONCLUSION

As this exploration demonstrates, *Sweet Sounds of a Sugar Town* provides a useful example of the nexus of sound, art, and culture, and, in particular the key role music performed in its production. By drawing upon natural, agricultural, industrial, socio-cultural and musical soundscapes and recombining them, it reveals and documents some of the relationships that exist between the individuals and communities that make up the sugar industry of Central Queensland and their sonic environments.

ACKNOWLEDGEMENTS

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CONTENTS

Introduction

The Australia/New Zealand branch of the International Association for the Study of Popular Music (IASPM-ANZ) held its annual conference in the South Island of New Zealand for the first time in December 2007. Hosted in Dunedin by the University of Otago, this conference ran over four days and included presentations from 60 participants, including local and international academics and a number of senior postgraduate students.

The theme of the Dunedin conference was *Music on the Edge* – a theme chosen not only to encourage presentations on marginal or fringe topics, but also to reflect Otago's 'edge' position in the deep south of the South Island as well as the culture of alternative music that has long predominated in the local music scene. Paper proposals were invited for four streams: the edge of discipline(s), the edge of popular, the edges of society and the cutting edge, and these are reflected in the papers selected for publication in this volume.

The papers in this volume were all subjected to a rigorous double-blind peer review process involving at least one local and one international reviewer with expertise in the authors' areas of investigation. In addition to the printed version, this volume is published as an online version for electronic download through IASPM-ANZ.

The 2007 conference, and by extension, this publication, was made possible through generous contributions from the Division of Humanities and the Department of Music, University of Otago. I also gratefully acknowledge the many Otago staff and students who gave of their time to assist with conference planning and logistics, as well as the members of the IASPM-ANZ committee. I would especially like to thank the international cohort of reviewers who offered their time and expertise in reviewing and reporting on the papers submitted for consideration to be included in this volume.

Dan Bendrups, October 2008