MORE THAN MEETS THE EAR
(A Closer Look at Recording)

A Thesis

Presented to

the Chancellor's Scholars Council of

The University of North Carolina at Pembroke

In Partial Fulfillment

of The Requirements for Completion of

The Chancellor's Scholars Program

By

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4-28-98

Faculty Advisor's Approval 

Date 4-21-98

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The topic which I have chosen to do my project on is music. Music is a very interesting and fun subject for me to discuss as well as perform. I have always been interested in music. It is something that I have chosen to make a career. Unfortunately there are people who do not care about music as much as I do. They do not know what hard work and determination is involved in producing a piece worthy of performance. Most people think that you enter a studio, record and that is it. I am here to let everyone know this is not all that is involved. The process involved in producing a decent piece of work is much more complex than that. This is one reason why I chose my particular project.

The title of my project is "More than Meets the Ear" (A Closer Look at Recording). I feel that this is an appropriate title because I am going to give a deeper view of what it takes to record music. In order to do this, I first had to learn about the different processes involved in recording. From my own knowledge, I knew that there had to be a performer or group, some recording equipment, and someone to do the recording. After further study, I found that there must be a talent scout or at least someone who has a talent and wants others to know of this talent. There also must be a producer a person who oversees the recording and the whole operation. The producer has to be the person in charge, keep order while in the

studio, as well as give stylistic advice. The producer also has to know the legal aspects of business. This is because there are copyright laws which must be followed. A good recording is worthless if you can't use it because of some legal clause that could foul up everything. The producer has the most important job of all. Next there must be an engineer. This is the person who does the actual recording and mixing down of the final project. The engineer must know his equipment well in order to get the best usage from it. This person also has to be well versed in the latest technological vocabulary and equipment. The engineer controls the quality of the recording by the equipment he possesses. The engineer has many different jobs to perform.

While in the studio, as the engineer, I had to keep track of each track or recording which is recorded. This becomes very important during the mixing down process. The mixing down process is when all the tracks and effects are mixed together or combined. This process balances the sounds evenly so that the best quality of sound is achieved. The engineer also has to keep up with the studio time. Most engineers charge by the hour. I kept a log of what performer I worked with, how long we worked in the studio, and what song was recorded. This is why the engineer is very important. A good engineer can make almost anyone sound good on a recording. As the talent scout, I went in search of fresh new talent. I had to audition the people I thought I could use for this project. I listened to some of their music and then made my decision. As the producer, I tried to put the

performer with a song that I thought would best display their talents. I also had to arrange times for the people to meet if they didn't know each other. I had to make sure that their personalities would work together. I had to arrange times when we, the performers and myself, could get together and do the actual recording. I also had to keep order while in the recording session. I also gave comments on what I thought would help make the song better during the recording session. Some people make their living on performing just one of these jobs, yet I have successfully accomplished work involving all three.

The performers I have chosen are people I already know. Some of these people are performers, vocal, instrumental, or both, while others have a talent for writing lyrics or music for a song. A few of the vocalists I have are Jamaine Pearson, Michelle Locklear, Marie Locklear, and Julia Locklear, Theric Brown, and Kevin Whitmore. All these young people are very talented, and I feel that they will do well on this project. A lyricist is Abigal Floyd. Musicians include DePree Dangerfield, James Chavis, Karinga Grant, and maybe even myself. These are just a few musicians I have chosen.

All the music and lyrics will be originals, or at least original versions, which I will take the responsibility of having copyrighted. This way everyone will get his or her due credit. This also alleviates some possible legal problems.

Next comes the actual recording. None of this has been done just yet

because I have been making myself familiar with the equipment the music department has on campus. Once I learn more about it, the songs and music have been written, and the singers as well as musicians know their parts then the recording will begin. As I said above an engineer has to know his equipment in order to produce a good product. Becoming familiar with the equipment involves researching the tools I'll be using. This also means learning the skills necessary to operate them.

This project is one that is worth the time and effort put into it. This project has taught me a lot about how to organize and coordinate people and their talents. This project also gave me a chance to do things that I have always wanted to do, such as recording and working with people who are very talented. I was the person who brought talented people together to make a piece of music that is not only good to listen to but also shows that there is more to recording than just hitting the record button.

Now to the actual project. From here on I will give an account of what I went through and the events that happened as I was carrying out my project. I will also include some of the problems.

To begin, I had to learn the equipment I would be working with. The major equipment involved in constructing my project is housed in Moore Hall, on the campus of UNC Pembroke. This is the building where I spend most of my time since I am a music major. The room that most of my time on this project is being spent is on the second floor, room 209. In

this room there is a lot to behold if you are entering for the first time. It is not the most glamorous or high-tech studio you have ever seen, but it is equipped enough to get the job done. When entering this room the first thing that you see is the piano. After this your eyes begin to pan the room. While panning the eyes catch glimpses of microphone stands and many different types of cords, all of different sizes, shapes and colors. There are many pieces of literature on the shelves as well as other electronic devices spread across the room. As the eyes pan further, they come to the heart of the studio. Here there is a computer, a synthesizer, and recording equipment. Before even attempting to begin work in this studio I first had to understand about the equipment and how it worked. To do this I had to seek the help of someone who knew more about this studio than I did. This person was Dr. Larry Arnold. He told me where the manuals to all the equipment were as well as actually showing me how to get around the studio.

The first thing I became familiar with was the eight track cassette recorder. A track is an individual channel on to which something can be recorded. The one in the studio is a Tascam 238. Besides the basic cassette recording and playback controls, it has a variable tape speed and pitch controller. It has a digital counter and some memory buttons. This studio also has a four track cassette recorder by Tascam. It has basically the same functions, but it does not have a digital counter. I also learned how to operate a Yamaha four track cassette recorder which has a digital

counter. The Tascam four track can record on all four tracks at one time. The Yamaha can not do this. The four track machines both have small self-contained mixers. The eight track recorder does not have a self contained mixer. It must be connected to one.

This brings me to the next piece of equipment I learned about, the mixer itself. This mixer is an Alesis 1622. Before I continue, I must explain what a mixer is and its function. The mixer is the piece of hardware that combines the recorded signal with the effects. The mixer allows you to get the best blend possible to ensure a good recording. This particular mixer has sixteen channels. Each channel has its own controls. The first is the input trim. This is how much of the original recorded signal is going through the machine. The range on this is negative ten to positive thirty. It is best to get as close to zero as possible. For this machine distortion begins around positive twenty. Distortion is the one thing not wanted for a good recording. Next is the equalization. It has highs and lows. The signal can also be taken off the mixer to have out-board effects placed on it and then brought back to the mixer. This is accomplished with the help of pre-sends, post-sends, and faders. Pre-sends are before the signal is sent to the fader, post-sends are the signals after the signal is sent to the fader, and faders control overall channel volume. The compressor is connected to the pre-sends. The compressor is an instrument which does just what it says. It compresses the sound. It is used to cut unwanted sounds and machine noise out of the recording.

This compressor is also equipped with a gate. The gate is another way of reducing unwanted sounds. The gate opens and closes according to the settings. It lets sound through when it is open and does not when it is closed. The next section on the mixer is the post-sends. These are effects which happen after the signal is sent to the faders. The Midiverb 3 by Alesis, as well as the Alesis M-EQ 230 are connected to the post sends. The Midiverb is a sixteen bit simultaneous multi effects processor. This is what puts reverb and other effects like delays onto a sound. Reverb is when the sound is bouncing off another object. It is not an echo because the initial attack is not being repeated. A delay is more like an echo. This is because the sound is heard after the original has been heard. There are ninety-nine programmed effects to choose from plus space for you to create your own. The next section on the mixer is the on/off section. These are a series of levers which send the signal to the master fader, sub master fader, mute the sound, or solo the sound. Under these levers are the pan knobs. These send all of the signal to the left speaker, right speaker, center the signal between the speakers, or some combination. The mixer also has a monitor volume control. The monitors are the speakers that the sound comes through. The monitor can also be headphones. When recording, the microphones are placed directly into the mixer.

When recording some of my project, I could run the instrument straight into the mixer, but I could not do that with the voices. For this I

had to use microphones. The microphones were then connected directly into the mixer. The microphone was usually placed on a stand. Sometimes the performer would hold it in their hands unless the performer was an acoustic instrument. Then it, the microphone, had to be placed on a stand.

Because I was not working in a professional studio with sound proof rooms, the recordings were not as clear as they could be, but they turned out remarkably well for the conditions. After recording each project, I compared them to each other. I noticed some problems that were common to each of them. There were also some specific things I had to do with each recording also.

The first problem I encountered was the specific location to do the recording. Location recording is a science within itself. Since no studio was available I was forced to record in the best acoustically balanced room possible. These places, because of my location, were houses or dorm rooms. Along with these areas comes the uncertainty of outside noises. The types of noises range from neighbors mowing their grass, thunder storms, the phone ringing to the opening and closing of doors, and people yelling down the hall. These were outside noises over which I had no control. I had to be prepared for these noises as well as prepare the performers for them. There were also some other noises that I could control such as the 60 cycle hum which comes from a light bulb due to the grounding, an aquarium bubbling in the back ground, and the wind from a ceiling fan. I could turn these off and eliminate them. All these were

noises which I had to plan to encounter. I learned this and prepared myself accordingly.

Once the noise problem was somewhat eliminated, the next problem that was encountered involved administrative activities. These included finding a time everyone to meet and record, deciding with the artist on the exact sound wanted for the recording, controlling the recording session, and dealing with any other mishap which happened during the recording session. Finding a time that everyone could meet was the most difficult. Everyone has a totally different schedule and they don't always work together. I had to work around my school work as well as the performers other obligations. Just being a good administrator may not work when administrating during a recording session. I saw this because during a recording session the administrator had to know what is going on, how this is going to be accomplished, as well as have a vision of the finished product when the project begins. This role is usually given to the producer.

Deciding on the particular sound brings up another problem. This is determining where the microphones will be placed. This was very important because the microphones pick up direct sound or ambient sound, sound from inside the room. I had to decide where would be the best place to get the best sound possible. I had to look at each group, the song, the style of the piece, and the sounds that would be possible from the room. I tried using different microphone placement other than direct micing on

some of the songs I recorded. One technique I used was to put two microphones together to form an X-shape this is called a stereo pair. Then I centered the group around them. This recorded the whole group at one time instead of a single person. This type of microphone placement also gave me more of the ambient sound. It gives a totally different sound when you listen to it as compared to each person singing directly into a microphone. Because I recorded more of the sounds that were in the room, I could use less reverb when mixing down to final cassette form. I also had to adjust the microphone levels with each project. All these factors are very important in order to get a clean and clear recording.

I really enjoyed working with each of these groups. I feel that I have learned a great deal by performing this project. Even though it is far from finished, I feel that I have accomplished many goals I set for myself.

Chris McIntyre

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TAKE SHEET

ARTIST/GROUP Scott, Jermaine, Kim, Chip ENGINEER Chris McIntyre

DATE 3-4-97 TIME IN 10:15pm TIME OUT 12:30am TAPE SPEED 9.5

MASTER TAKE	TITLE	TAKE	CODE / TIME	TAKE	CODE / TIME	TAKE	CODE / TIME
1	A Song (You touched my) Life	1	0000	2	0323		
			0310		1030		

TAKE SHEET

ARTIST/GROUP Heaven Bound ENGINEER Chris McIntyre

DATE 3-14-97 TIME IN 4:30pm TIME OUT 6:15 TAPE SPEED 9.5

MASTER TAKE	TITLE	TAKE	CODE TIME	TAKE	CODE TIME	TAKE	CODE TIME
1	There is A Name	1	0000				
			0601				

TAKE SHEET

ARTIST/GROUP Heaven Bound ENGINEER Chris McIntyre

DATE 4-6-97 TIME IN 1:30 TIME OUT 3:30 TAPE SPEED 9.5

MASTER TAKE	TITLE	TAKE	CODE TIME	TAKE	CODE TIME	TAKE	CODE TIME
1	He's Coming Back	1	0000	2	0534		
			0519		0930		

TAKE SHEET

ARTIST/GROUP Heaven Bound ENGINEER Chris

DATE 4-12-97 TIME IN 4:00 pm TIME OUT 7:30 pm TAPE SPEED 9.5

MASTER TAKE	TITLE	TAKE	CODE TIME	TAKE	CODE TIME	TAKE	CODE TIME
1.	He will love You	1	0000				
			0412				
	He Brought Me Out		0420				
			0840				

TAKE SHEET

ARTIST/GROUP Heaven Bound ENGINEER Chris McIntyre

DATE 5-2-97 TIME IN 6:00 pm TIME OUT 8:00 pm TAPE SPEED 9.5

MASTER TAKE	TITLE	TAKE	CODE TIME	TAKE	CODE TIME	TAKE	CODE TIME
1	No Doubt	1	0602	2	overdub 0904		
			1106		1106		

TAKE SHEET

ARTIST/GROUP Heaven Bound ENGINEER Chris McIntyre

DATE 5-20-97 TIME IN 5:30 TIME OUT 8:45 TAPE SPEED 9.5

MASTER TAKE	TITLE	TAKE	CODE / TIME	TAKE	CODE / TIME	TAKE	CODE / TIME
1	He will love you	1	0000				
			0385				
	Interlude (H.B.)	1	0402				
			0605				

TAKE SHEET

ARTIST/GROUP Jamel McIntyre ENGINEER Chris McIntyre

DATE 7-10-97 TIME IN 4:00 pm TIME OUT 5:30 TAPE SPEED 9.5

MASTER TAKE	TITLE	TAKE	CODE TIME	TAKE	CODE TIME	TAKE	CODE TIME
1	Candy Rain	1	0000				
	(Music + Lyrics)		0384				
	I'm Sorry (Music)	1	0405				
			0870				
7-26-97	I'm Sorry						
	Rap + Vocals 1						
9-16-98	I'm Sorry						
	Vocals II						

TAKE SHEET

ARTIST/GROUP Tim & Junior Bloom ENGINEER Chris McIntyre

DATE 7-23-97 TIME IN 3:30 pm TIME OUT 5:30 pm TAPE SPEED 9.5

MASTER TAKE	TITLE	TAKE	CODE TIME	TAKE	CODE TIME	TAKE	CODE TIME
1	Change	1	0000	2	0695	3	1200
			0685		1195		1615

TAKE SHEET

ARTIST/GROUP Universal Vision ENGINEER Chris McInnis

DATE 10-23-97 TIME IN 9:00 TIME OUT 12:15 TAPE SPEED 9.5

MASTER TAKE	TITLE	TAKE	CODE TIME	TAKE	CODE TIME	TAKE	CODE TIME
1	Before I Go	1	0000	2 3	0738		
	(Piano Only)		0730		0780		
2	Before I Go	1	0745				
			0120				
1	Jesus is on the Main Line	1	1276				
			1434				
1	Say Goodbye to yesterday	1	1440	2	1455		
			1453		1623		

TAKE SHEET

ARTIST/GROUP Tim Bloom ENGINEER Chris McIntyre

DATE 2-16-98 TIME IN 4:45pm TIME OUT 5:30pm TAPE SPEED 9.5

MASTER TAKE	TITLE	TAKE	CODE TIME	TAKE	CODE TIME	TAKE	CODE TIME
1	Clean Me	1	0000				
	(Instrumental)		0645				

TAKE SHEET

ARTIST/GROUP Tim Bloom ENGINEER Chris McIntyre

DATE 12-19-97 TIME IN 5:30 TIME OUT 7815 TAPE SPEED 9.5

MASTER TAKE	TITLE	TAKE	CODE TIME	TAKE	CODE TIME	TAKE	CODE TIME
1	Be Alright	1	0000	2	0598		
			0587		1029		

TAKE SHEET

ARTIST/GROUP Chord of Three & Kevin Whitmore ENGINEER Chris McIntyre

DATE 4-23-98 TIME IN 9:00 TIME OUT 11:30 TAPE SPEED 9.5

MASTER TAKE	TITLE	TAKE	CODE TIME	TAKE	CODE TIME	TAKE	CODE TIME
	Live Performance						
	(Three 60 min. Tapes)						
	Hi-Speed						