My responses in bold. I hope I answered your questions and solved some of the 'mysteries.'

Week 5 Review

This past Tuesday evening in class we had three really amazing musicians come in and perform. It was Molly Dean, Rachel Price, and Dan Zamzow. When you say that there are flaws in the recordings, do you mean on our technical end (as in pops or clicks or things that involved the gear we were using) or as a performance flaw? Because when I listen to these tracks I don't hear really any performance issues. You can hear the strings moving though when the guitarist is playing, it seems to stand out a little. Also there's a little high frequency fuzz, and I'm not sure if that's because we're recording to tape, or if there's some RF interference in the cables.

The flaws are in the recording. But first let me explain how the signal gets from the 4-track to the mp3s you see on the class web page...

After each session, we do a rough mix on the Mackie, it goes through an optional graphic EQ and a Compressor / Limiter directly to the CDR. This is called the 'raw' version. I listen to the mixes in my car on the way home and I know immediately whether the mix and the spectral (tonal) balance is in the ballpark. Once home, I import the CD, save the raw versions and then apply a multi-band processor, saved as the 'proc' version. Once the

mp3 versions are complete, I then upload the audio and update the web page.

For whatever reason - perhaps I was tired - I made the processed Molly

Dean tracks brighter and that revealed the distortion. FWIW, on that day, I
believe I put you in charge of overseeing the record rack and monitoring
the individual tape tracks.

If you compare the raw and processed versions, you should notice both the spectral changes as well as how the added treble made the distortion more obvious.

Week 6 Review

During this week, we did a practice with Junebug, where we recorded but I don't believe the tracks will be on their album. While listening to Beards, I thought that overall it sounded better than week 7. This is because I think it's mixed a little better perhaps. The one thing that stands out is that the bass isn't as in my face as in the week 7 tracks. The sound overall seems quieter though, which maybe that's why, but I felt like it sounded like a better mix, even though there seemed to be some hiccups in tracking. It also sounds like there is less reverberation on Anthony's vocals.

However, when listening to Hell Bent, it seemed like somewhere it was lacking some quality. It sounded almost like it was recorded in a garage to me, but

technically I'm not sure how to describe that, almost like it was missing something. I think that the same thing goes for Fluffy Little Hands.

You are the second person to confuse the demo versions with the week-7 tracks that we recorded. I don't know when the demo versions were recorded, but they were not recorded during the rehearsal that we sat in on at the end of week-6's class. Both recordings were posted strictly for comparison, a before and after. (You might recall that both the 24-track machine and the tape were problematic that day.)

The idea is that, as producer, you'd want to listen very closely to the demos and live performances in order to create a strategy for the tracking session. From those two experiences, I 'mostly' knew what wasn't working. I thought Anthony's guitar parts were not dynamic, not tight and not lean enough to be effective - they were too ringy, jangly and got in the way of his own singing. Similarly, Tony's cymbals were too bright relative to his kit. His kick drum was too resonant and the snare not bright enough.

Because I respect John's abilities as a guitar player, I relied on his judgment and ability to communicate. This worked out very well during both week-7's tracking session as well as week-8's OD session. Together we were able to get Anthony to not play in areas where his parts weren't working (wk-7) and then work on finding just the right parts, instrument (acoustic or electric) and sounds for the ODs (wk-8).

Similarly, Mason was kind enough to borrow some better cymbals - I think we had three sets to play with and chose the best, darkest and least splashy. Considering how much compression is used on drums during mixing, it is important to have 'understated' cymbals. Do you know whay 'understated' means in this context?

Week 7 Review

This week in class we were tracking three songs for Junebug and Student Run Records. We began by setting everything up and getting levels. I was having issues with documentation because only part of the input list was written on the white board. I wrote down everything that I saw but it wasn't everything. Also, after we had set up the tape machine I had left.

My questions about the session are about how Anthony did when being isolated from the band, in the iso booth. Was there any bleed, did he have to be moved/other things be moved to work out better?

Anthony was put in the room for several reasons. During the 4-track sessions (wk-3), band bleeding into the vocal mic was a problem. I also felt Anthony might be more comfortable singing in a controlled 'headphone environment' rather than competing with the band. AND, I needed the band to hear him, so isolating him minimized the potential for feedback, especially when you consider I pumped him into the classroom speakers.

Did you guys end up switching up the song structure at all?

I answered this in the Week-6 reply, but no, mostly we played with the arrangement, not the structure.

What sorts of issues came from recording (Did all of the equipment work right away, or were there technical difficulties?)?

Week-7 went pretty well, considering the 'pressure' to get something useable for 'the record.' Eric Bull dropped by while I was still connecting all the extra preamps, Paul was obviously excited, and on top of all of that, the remote for the tape machine was still funky. I ended up using the remote for the 'floating' Studer (the one that bounces between 7 and Master Mix). I still need to fix the remote that lives with that machine.

Otherwise, everything pretty much worked, we just took the time to get good sounds - from the bass (easy) to the cymbals (harder, lots of swapping) and then to Anthony's guitar (hardest, but well worth the effort). It was very helpful to know, in advance, that the Cascade VinJet ribbon worked well on his voice. I knew my amp would be easier to control than his, which helped alot. The hot rod deluxe has stupid amounts of gain and is very unwieldy to control.

When listening to the tracks that you've posted online, I noticed that there is quite a bit of reverb on Anthony's vocals for the Destiny track. Was this done with effects or was it from the hallway microphones?

Not 'reverb,' but tape delay. For all vocalists, it is important to come up with a 'signature sound,' from mic, preamp and compression to the type of effects that complement the voice and the parts of the song - verse, chorus, bridge.

For the Handle Bar track, I noticed again that there was a lot of reverb on his vocals, was this done on purpose?

Yes! Do you think it is too much?

Overall, I thought that the tracks had a very good quality, especially since they were all playing in the same room for the most part. Was there certain reasons why you chose the microphones you did (In terms of polar patterns, responses, etc.)?

I learn alot from the 4-track sessions because so few mics can be used. I know that the crotch mic will work IF the drums sound good to start with, that the cymbals and drums are a good match (one doesn't overpower the other) and if the drummer has a good, consistent touch. It's important to me that the snare be equally bright as the cymbals - Tony's snare was darker, so I bought him a new head and we experimented with cymbals. Dillon was kind enough to take the time to tune the drums, which was very helpful.

Similarly, when there is only one mic and one track for electric guitar, I leanred that ONE ribbon mic can do the job. As with the drums, the amp has to sound good and the player has to be 'sensitive' to the recording process. Getting the amps of the floor works really well - if you were at rehearsal, I think you will agree that the guitars are much more distinct, clear, not muddy. All of the sound is the amp and the mic and the player

(not in that order). No EQ was used during tracking except for one of the solo guitar mics..

Ally Hustings Analog Technologies Eddie Ciletti

Week Eight Review

This week we spent doing over dubs with Junebug from the previous week.

We started by setting up the guitar amp, as well as the bass amp. The bass amp was placed on top of a KRK speaker, which was on top of a stool. I believe it was the fathead microphone that was placed on the amp?

A shure SM-58 was on the SWR bass amp for overdubs. During tracking, Dillon's Electro-Voice RE-11 was used. The Fathead was on the guitar amp. As well as on top of that there was another device that helped to route signal from the bass amp to the KRK, so that it was louder.

That 'device' is the instrument preamp we build in electronics class called the JFET. It is used to 'split' the bass signal into two parts - the 'Loop-Thru' and the Line-Level outputs.

The Loop-Thru is the same level as the instrument and feeds the SWR bass amp, which is not loud enough by itself - it's only a practice amp. The JFET preamp section has a built in optical limiter that ONLY the KRK gets via the amplified Line-Level output.

We were recording to the Studer, and instead of punching in on tracks, we recorded to new tracks because we had extra.

My questions involve more of just some basic ones, because I was also not there for the entire class the week before. First, it seemed like when we were plugging the microphones into the mic lines, they weren't numbered,

ALL of the mic lines are numbered 1 thru 8, which is confusing, even for me! There are FOUR different 8-channel 'snakes' - not all get used - three are boxes plus there's a long cable with female XLRs. On the boxes, the XLRs are labeled 1 thru 8. On the 'individual' cable snake, numbers 1 thru 8 are printed on the wire jackets.

I was wondering if in that room it matters which input we plugged the microphones in to.

It does and it doesn't! In the studio are three 'DB-25' multi-pin connectors each being good for 8 channels. There is a connector by the funky piano, a connector in the booth and THREE connectors on the panel by the MIDI keyboard. Two of the three connectors are mults from the aforementioned 'funky piano' and booth locations. The third connector is specific to the MIDI keyboard location. In the control room, all three groups (of eight) can be patched so that all 24 inputs show up on the patch bay.

I know that we were going to different tracks on the Studer, I believe 16, 17, and 18 at least, so I was curious to see if that was merely a bussing issue that was done on the board and then routed to the Studer.

A bit of both. The Studer inputs show up on the patchbay. The Mackie is used 'just' for mixing and bouncing, the latter via busses 7 & 8. A pair of

wires from buss 7 & 8 run to the Studer and can be patched into any pair of tracks.

Also, when it came to using the delay because there wasn't a pedal, was the only delay done on the tape machine on the left hand corner of the room (The small black one that I was using)?

In all cases, whatever tape machine is used for echo, will be brought up on the Mackie so we can control the 'return' as well as the amount of 'spin - or number of repeats - as well as the EQ. If the echo is 'critical' to the sound, it will be printed to the Studer. This was the case with the solo guitar. We OD'd three pairs of solo tracks that I carefully bounced to two tracks, included the tape echo.

I'm also curious to see how this will be mixed, because I've never seen mixing done totally analog, without using Pro Tools or other software at all. How does it get "printed" and finalized?

The next two classes will be dedicated to 'technical production' and mixing.