




'BRAUERIZING' THE MIX

Michael Brauer has mixed countless singles and albums over the years, developing his own approach to compression along the way. 'Brauerizing' the mix, as he calls it, is his (trademarked) signature.

Text: Paul Tingen

Photography: Michael Brauer

 The New York-based star mixer, Michael H. Brauer, has a reputation for eclecticism, both in the wide variety of artists and genres he's worked with, and in his approach to mixing. His credit list is certainly very impressive and exceptionally wide-ranging, featuring stellar names like The Rolling Stones, Coldplay, Prefab Sprout, Was (Not Was), James Brown, Aerosmith, Jeff Buckley, David Byrne, Tony Bennett, Billy Joel, Rod Stewart, Paul McCartney, Ben Folds, Pet Shop Boys, Bob Dylan, Willie Nelson, MeatLoaf, John Mayer, Martha Wainwright, Pete Murray and many, many others.

As for his approach, Brauer has become legendary in the mix world for his liberal and innovative use of compression. His room at Quad Studios in New York, sports an amazing amount of outboard gear, including an extravagantly large battery of well over 40 compressors. Brauer applies some of these in an idiosyncratic multi-bus compression approach that he's developed over the last 20 years, which has become so refined and specialised that it's informally now referred to simply as 'MBC'. Of course, MBC also neatly encapsulates his initials, though Brauer himself now prefers to call his approach 'Brauerize' multi-bus compression, a name he's now even trademarked. (See the box for an extensive explanation of this compression technique.)

MIXING IT WITH THE BEST

Michael Brauer has come to his position at the top of the mix world by studying with the best. He climbed

the ladder from the proverbial tea-boy beginnings to staff engineer at Media Sound Studios in NYC during 1976-84, picking up tricks of the trade from the likes of Bob Clearmountain, Mike Barbiero, Tony Bongiovi, Harvey Goldberg, and others. He subsequently went freelance and graduated to the role of occasional producer, but for the last 15 years or so he has preferred to almost exclusively work as a mixer. Ironically, given the absolutely massive amount of outboard in his studio, Brauer likes to de-emphasise the importance of technology and prefers to talk about feel and colours.

When approached about giving us the lowdown on his mix of Coldplay's hit *Violet Hill*, Brauer warned that he might not be able to remember what effects he used, because, "when I'm going for a sound, I only think about the end result and pay very little attention to how I get there. It's not about the toy, it's about how you use it. Also, I've mixed some 200 songs so far this year and I tend to wipe the slate clean after every mix to keep my head from exploding! For me, it's more important to discuss bringing out the spirit of the song. The tools and toys are simply an extension of that thought process. I think it's important for people to understand that it's not the great toys and desk that make for a great mix, it's about being creative and visualising how the song should sound and feel."

"Mixing is like a performance. I used to play



drums, now I play an SSL. I don't label the tracks on the desk, I memorise it all and then I just mix. I constantly ride the faders, and I will occasionally even vibrato a fader. It's a feel thing. To me the desk is an instrument, and I have eight million different strings and tunings behind me in my outboard racks."

INCREDIBLE

A few weeks after our initial conversation, Brauer is on the phone from his mix room in New York, recall notes in hand, in an effort to try and remember as much as he can of his mix of *Violet Hill*. The mixer's relationship with Coldplay goes back to their debut album, *Parachutes*, which earned him – and the band – a Grammy for Best Alternative Album in 2001. The New Yorker also mixed the band's third album, *X&Y*, and was involved in the mix of nine out of the 11 songs on the band's fourth and most recent effort, *Viva La Vida or Death And All His Friends*, released in June this year. *Viva La Vida* famously includes Brian Eno in the production team (in addition to Markus Dravs and Rik Simpson), which led, if nothing else, to a lot of free additional publicity for an already extremely famous band.

Singer Chris Martin has declared in various interviews that *Viva La Vida* spelled a new direction for the band, and the first single, *Violet Hill*, features Eno-esque soundscapes and heavily distorted guitars, elements that had hitherto not been at the

heart of Coldplay's trademark sound. Several people were involved in the mixing of the album: Andy Wallace, John O'Mahoney, Rik Simpson and Markus Dravs, but eventually Coldplay returned to their tried and tested relationship with Brauer to finish it off. Unusually, two of the album tracks – 42 and *Viva La Vida* – ended up as hybrids of mixes by Simpson and Brauer.

"The engineer, Rik Simpson, did an amazing job on some of the mixes," relates Brauer. "On 42, Rik combined his mix with mine and the pairing felt amazing. For *Viva La Vida*, Rik actually *added* his mix *underneath* mine, placed way low and out of phase, so there's this weird thing going on in the background.

I've been with Coldplay from the beginning and I know the kind of things they're after, in terms of mixing. It's not always evident though. If you push up a Coldplay mix, it usually feels great, and yet you can always take it a lot further, to the point that it just sounds incredible. I don't experience that with many other bands. Chris is usually the only person I deal with when I mix, and he's always the one with the vision. He goes totally by feel and he keeps pushing me."

COLD RECALL

The mixes for *Viva La Vida* took place in February and March of this year. "In this case I mixed the record alone," recalls Brauer. "I'd send them a song a

day. They'd live with it and then I'd recall each song and make the changes. Some songs only needed one recall. Others had the arrangement changed, or parts added, and then I'd recall it again or simply remix it from scratch. I'm not afraid to do that. After a couple of hours of mixing, I might even pull back all the faders and start again. There are times when I've gained a better understanding of where I want to go and realised that the approach I'm taking is not going to get me there. So I change. The process of getting there during mixing is always a search. If I don't like what I'm getting, I drop it; if I like it and I feel good, I carry on. I don't remember how I got there or the gear I used. I only remember that I felt good. That's all I care about. It's not like: 'wow, I can apply this to every song.' That'd be foolish. What works on one song won't work on another song 99.9% of the time, even when it's the same artist."

CALL IT INTUITION

Brauer agrees with the assessment that his mixing approach comes across as very intuitive. "Yes. I want to feel something great in the first 15 minutes. The first thing I do is try to get a groove going, so I'll search for that. It may be just a vocal and a piano, and a guitar with a loop, but if someone walks in 15 minutes after I've begun mixing they're not going to hear just a kick. They'll be saying, 'wow, that feels cool!'. I still have a long way to go, but it already feels good. I don't have the energy or patience to have to



Artist: Coldplay

Producers: Markus Dravs, Brian Eno and Rik Simpson.

Writers: Guy Berryman, Jonny Buckland, Will Champion, Chris Martin.

Mixed by: Michael H Brauer at Quad Studios in NYC on an SSL J-9000

“I’m a fan of the analogue world... you know what you’re getting. The ceilings are soft and musical, the sonics remain intact, and you don’t get that digital crap-out sound when you hit the ceiling.”

wait two or three hours until I start to feel good. I want to start feeling good right away; that’s why I’m mixing!”

Brauer’s focus on feeling good and de-cluttering his mind also extends to limiting the amount of tracks that he mixes. “Some songs come in with 100 tracks, but I’m not going to mix 100 tracks!” he explains. “My assistant knows my priorities and he knows that whatever the session is, it will be a maximum of 44 tracks. So when he prepares the session he comps things down to that. Of course, if there’s a part that sounds like it may need special treatment he’ll leave it on a separate track, and when I listen to what he’s done, I may break things out again. But I tell people who plan to work with me: ‘look, I’m not going to mix 200 tracks on the desk for you, so the best thing for you to do is give me the stereo blends that you like.’”

“I want it to be as simple as possible. I’m happy to mix 16 tracks. The simpler the better. I don’t want to have to fight my way through a mix. Most people are already listening to certain parts mixed down. They may not be printed that way, but the blend will be clear. If you have 18 different synthesizer sounds, and have been living with one particular blend, give me that blend and print it! It’s not that I’m lazy; I’m just not going to spend eight hours trying to match something that somebody else already loves. I have enough work to do already.”

VIOLET HILL – PURPLE PATCH

Michael Brauer: “The hardest challenge for me with *Violet Hill* was finding the right vocal sound. I also really wanted to highlight the edgier side of the band that they obviously wanted to show in this album.

So I worked hard to make sure the guitars reflected the anger in the song, without them being too harsh. It was important to retain the integrity of the band – they’re not a metal or hard rock band, after all. You still have to maintain that certain Coldplay sound. I wanted to enhance as much as possible the arrangement of the song, which goes from a power chorus down to an intimate moment where everything just dries up and all you’re left with is Chris and the piano. I wanted the listener to be able to follow the story. My objective was to simply enhance and show – Coldplay is a band that has a lot of depth in their songs.

“The ProTools file of *Violet Hill* was actually a pretty small session. I have just 35 tracks here on my track sheet. There’s kick, snare, stereo hi-hat, stereo toms, three or four mono rooms and stereo cymbals rooms. That’s 12 tracks for the drums. There are two bass tracks: DI and amp bass. There are stereo chorus guitars, a mono verse guitar, an acoustic guitar, and a guitar solo, so that’s five tracks of guitars. Then there’s a stereo piano, a stereo keyboard track, and the stereo ambient wash that starts off the track. Finally, there’s Chris’s lead vocal and some ‘church group’ backing vocals.

“As I do with all my mixes, I mixed *Violet Hill* almost entirely in the analogue domain, using ProTools only as a tape machine. The band had already printed their plug-ins, so I don’t know what they used. I laid the tracks out on the desk, with the most important instruments right in front of me and the things that come in and out of the song elsewhere on the console. Needless to say, I’m a fan of the analogue world, because I grew up in it. It’s very immediate; you know what you’re getting.



➔ BRAUERIZING A MIX

Michael Brauer’s multi-bus compression technique, referred to as MBC, or Brauerize, as he now calls it, essentially replaces the final stereo bus compression with four different types of sub-stereo compression, connected to buses A, B, C, and D. This allows him to differentiate the kinds of compression the drums, bass, guitar, keys, vocals and other parts of the arrangement receive. A, B, C and D come up in the centre section of his SSL 9000J, and go straight into the summing amplifier for mixdown to stereo, with the final stereo compressor barely acting.

“You have to understand that this style of mixing is 180 degrees different than the regular approach,” elaborates Brauer. “In the regular approach, everything is already compressed when you bring your faders up, so you’re mixing with pre-fader compression, but in my approach you’re mixing into compression, meaning post compression.

Once you get your head and ears around that, and you know how to ride your mix into the sweet spot, it’s great. Pushing the compressors past their sweet spots results in a smaller sound instead of a perceived bigger sound. It’s critical, of course, that you calibrate your ABCD compressors first – I describe how to do this on my website: www.mbrauer.com.”

In line with his intuitive approach, Brauer continues with an analogy that explains what mixing into compression feels like. “Let’s imagine there’s a thin rubber sheet in front of me that I put my hand against. If it’s really thin, and I push my hand into it just a little, there’s not a lot of resistance. If I push harder, there’s more resistance, to the point that if I push too hard, it becomes counterproductive. As I let go, the sheet will go back to its default position, or it might bounce back and forth a little bit. If it’s a thicker, older sheet of rubber, it may have more

resistance, and it might release slower. Mixing into compression is like this. If you push the music into a nice sweet spot, it’s great.”

According to Brauer, he began developing his multi-bus compression method in 1985, while mixing Aretha Franklin’s mega hit *Freeway Of Love*, which was produced by Narada Michael Walden. “Michael wanted more bottom end, and I was already mixing right at the edge of what the console could do. When I added more bass, the stereo compressor went whacky and the vocal went down. But if I turned the compression down, the level was too high. It was one of those situations where I felt like I had no more options, because the whole mix was riding on the final stereo compressor. I was up against the wall and it was a feeling I never wanted to repeat. I needed to figure out how to make sure that if I had a great sound on the stereo bus, adding another instrument to it wouldn’t destroy the

compression. That was the objective. I was working at Right Track in NYC at the time, and they had a new console, the SSL 6000, which had an A, B, and a C bus. I soon realised that these three stereo buses allowed me to separate out the compression for different instruments. It sounded big because there was no stereo compressor holding everything down at the end. I could get internal dynamics going between drums and guitars, or vocals and bass. It was almost like having counter compression going on.

“When mixing, I’m searching, searching, until I know I’m on the right track. I have a million options, and that’s exactly the point. If one doesn’t work, I try another. I keep hitting buttons until I go, ‘wow!’ We have maybe 2dB of dynamics to play with today, and even that gets squashed to 0.5dB. This mixing style gives the impression that you have way more dynamics than you actually do.”



The ceilings are soft and musical, the sonics remain intact, and you don't get that digital crap-out sound when you hit the ceiling. I don't have anything against plug-ins, but I have to say that mixing in the box doesn't interest me. I get a great sound the way I'm working now, so why change? But if I hear something that sounds better as a plug-in, I go for it. For instance, there are certain plug-in bass compressors that I use, and I'm increasingly using Altiverb as well as plug-in de-essers. The new Sony Oxford and the Eiosis are great de-essers."

MIX CHAINS

DRUMS: Neve 1083, Compex, Urei 1176, Pye, Chandler EMI.

"I always put samples behind the kick and snare. I've built up a collection of a few hundred different kicks and snares, so I can try different types. This is where I spend a lot of time searching for the right sound. I may spend two hours trying to get the drum sound right. This is not to say that the original drum sounds in *Violet Hill* were bad, in fact they were great – I'm simply building on top of them, not replacing them. I can't remember the last time I actually replaced a drum sound. I just added a little bit to the kick and snare to enhance them. The snare sound is very important for a song and sometimes I vary it throughout the song, maybe downplaying one of the chorus snares in the verse, but in this particular case the snare sound doesn't change.

"The main drum sound is coming from Coldplay's snare, which I mixed really loud. They had a nice overhead snare sound that already had reverb and stuff on it that was also very important to the sound. The kick and snare both went through my Neve 1083 EQs. I put the room sounds through my great, very vicious, British Compex compressors. I also put the cymbal room sound through the Compex. These guys make the sound grainier and more aggressive. The toms, which were really well recorded, went through my stereo Pye compressors to make them

more explosive, and these were also sent to my stereo 1176 compressors and my Chandler EMI compressors. The 1176 and the Chandler are also explosive, so basically the tom sound was f**king explosive! I maybe added a bit of compression on the hi-hats, and did very little with the mono overheads."

BASS: Ear 660, Altec 436b, DBX160, Akai S612, Moog MKPE

"The bass was interesting. I had the same bass track coming back on two channels and on one of them I had the EAR 660 compressor going into an Altec 436B compressor going into my Moog MKPE three-band parametric EQ, all going via the inserts. That channel was for the low end, giving the sound its fullness. On the other channel I had a dbx160, crushing heavily, with the bottom end taken out. That gave the bass its punch and midrange. I also sent the basses to an Akai S612 sampler. A friend of mine turned me on to this. I don't use it as a sampler, but as a distortion device. If you put it in 'microphone' mode and overload it, you get really nice warm distortion that you don't really notice, but it sounds good. If I want something more vicious than the Akai, I'll use the Culture Vulture, which is one of the best pieces of equipment for adding some attitude. It's great when tracks are recorded too cleanly. Finally the basses, like the drums, went through Bus B in my multi-bus compression setup, which consists of ELI Distressors going into my Avalon E55 EQ"

GUITARS: EMI Chandler TG1, Lexicon PCM42, API 525, API 5502, Roland Dimension D SDD320, Watkins Copy Cat.

"Normally I send each side of a stereo guitar to my EMI Chandler TG1, panned left and right and coming back on the console, but I didn't in this case, so I must have felt that it sounded bad. It might have taken away from the tightness of the guitars. The band had already recorded them very tightly, so

instead, I didn't add anything to their stereo chorus verse guitar. I also had a mono verse guitar, which I sent to a PCM42 delay, set at 224ms and panned to the opposite side. Every time the guitar strums it goes over to the right. On the acoustic guitar I did what I normally do, which is to send it through my acoustic patch: an API 525 compressor going into an API 5502 EQ. That's a great combo – I've been using that chain for years. It makes an acoustic guitar sound very natural and full, and gives it great presence without sounding processed. In this song it's not very evident, because the acoustic guitar isn't very important, but on their song *Parachutes*, it's pretty obvious, and I used the same patch back then. There was no insert on the solo guitar. I did have a Dimension D SDD320 chorus on it, which spreads the sound naturally, and this went to a Watkins Copy Cat Echo unit with a fairly short delay. Otherwise it's totally dry, no reverb, hardly any EQ. Again, it was so well recorded, it didn't need a lot of work on it."

KEYBOARDS: Urei LA3A, Focusrite 115 HD, Neve Portico 5014

"The piano had my regular piano insert, which consists of two Urei LA3As going into my prototype



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If you send everything to reverb, you don't hear it, but if you send only one thing to reverb, it'll be huge.
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BRAUER'S BOOMBOX

Michael Brauer: “My main monitors are ProAc 100s, which I use with the incredible Transparent Audio cables and my Chord SP1200C, which is a great amplifier. I also have some bigger ProAc’s that I use to mould my bottom end and get a physical feel for the mix. But most of my mixing is done listening to my little Sony boombox. It sits behind me, on my rack #2, about 4 1/2 feet up from my ears and six feet back, and I listen at a medium-low level – around 84dB – which is really important to be able to hear accurately what’s going on. Because the speakers of the boombox are relatively close to each other, I essentially listen in mono. The Sony is like a magnifying glass, it tells me whether my mix sucks or not. I use it in the same way other mix engineers use NS10s, and I also use NS10s occasionally for another perspective. But the Sony gives me a much more accurate picture.”

Focusrite stereo 115 HD EQ. For some additional width, I also sent the piano to a Neve Portico 5014 Sound Field Editor – no reverb. I left the intro ambience as it was given to me. The keys had nothing on them either, not even EQ, just flat, panned left and right. A lot of the tracks had hardly any EQ on them. Again, they did their homework and got the sounds they wanted. They didn’t need me to reinvent the song. What they wanted from me was to get their vision out there. That’s my job.

VOCALS: Waves Renaissance & Digidesign de-essers, AMS, Zoom 1202, Lexicon PCM81, Watkins CopyCat, ELI Distressor, Federal, Gates, Fairchild, Ear 660, Neve 1176, AWA G7201.

“I used two Renaissance de-essers on Chris’s voice, each one doing different things, and then a stock Digidesign de-esser. That was it for plug-ins on this session! The Sony Oxford and the Eiosis hadn’t been released at that stage. The analogue things I did on the lead vocal are really interesting. As I said, I initially mixed the songs on my own, because the band was in England re-recording, so I knew I might have to recall each song. But on this song I pretty much nailed it, apart from the fact that Chris wanted the vocals to be more exciting and different. In the end the vocal had some AMS non-linear reverb on it, while the main sound came from an old Zoom 1202 reverb and a Watkins CopyCat delay, plus a special patch that I created in the PCM 81, which is a much bigger reverb. So it’s a combination of things, but you don’t really notice them, all you notice is that Chris is in a very present, big room. When I hit on this combination *Violet Hill* really became a song; it came alive because his voice was able to fight through all the stuff that was going on yet remain personable. There’s no reverb on the rest of the track, which is another reason why the lead vocal sounds so huge: it’s not fighting another bunch of reverbs. If you send everything to reverb, you don’t hear it, but if you send only one thing to reverb, it’ll be huge.

“For the main part of the song I had a Distressor on the insert of the lead vocal, and I sent this to another five compressors: the Federal, the Gates, the Fairchild 666, the Neve 1176 and another Distressor in ‘Nuke’ mode. They’re all coming back individually on the board, and it was a matter of blending those compressors. As usual, in my way of working, the compressors are there to give attitude and tone, and don’t necessarily compress. For the end bit of the song, where it’s just Chris and the piano, I used the AWA G7201 limiter/compressor. It’s an old Australian compressor that has an incredible air and presence to it. It’s a unique sound that you can clearly hear at the end, as it’s the only effect on the vocal at that point. Finally, the church group background vocals are sent to the same combination of reverbs as the main vocal. No other effects, no EQ. It means that all the vocals in the main section blend together.”

“In addition to all the above effects, all tracks went through my ABCD multi-bus compression system. ‘A’ consists of a Neve 33609 going into a Pultec P1A3S EQ; ‘B’ is almost always an ELI Distressor going into my Avalon E55 EQ; ‘C’ is the Pendulum ES8 tube limiter; ‘D’ at the time was my Inward

Connection stereo tube limiter (currently it’s Edward The Compressor P8). So the bass and drums went through B, the guitars through C (sometimes I’ll send guitars through A and C, or I’ll send them to C and then send them to a mono compressor return – whichever excites them the best), the keyboards went through A, and the backing vocals A and D.

I didn’t put the lead vocals through my multi-bus system. I stopped doing that three years ago. Instead they went through the five aforementioned compressors: the Federal, Gates, Fairchild, 1176 and Distressor.”

MIXDOWN TO HALF-INCH

“I mixed down to analogue half-inch, running at 30ips (no Dolby) +4, on a Studer A820. I love the sound of Studer, and the +4 level allowed me to hit the tape a little harder if I wanted to. Backups are made on ProTools or the Alesis Masterlink L2. Before I go to tape I also put the stereo mix through somewhat of a mastering process. On most of the mixes I used a Shadow Hills Stereo Mastering Compressor going into a Chandler Stereo Curve Bender EQ, but on *Violet Hill* I instead used an ADL 670 stereo mastering compressor. The 670 is a bit darker and it also has a very interesting rhythm. It has a more downbeat feel. The song really came alive when I put it through the 670. It was one more piece of the puzzle that I was looking for.

“When I listened to the song again in preparation for this interview, it struck me how important the edgy sound of the guitars is, and I really like how everything dries up at the end, leaving only Chris and his piano. That’s such a Coldplay signature moment. Most of all, throughout the song you can’t help but follow Chris, and that was my objective. I don’t care about creating a great backing track and throwing a vocal in there. For me it’s always about listening to the story, listening to the singer and holding the listener’s hand through the song. This particular mix is a perfect example of that. You’ve followed the story from beginning to end, and you’re happy to hear the track again.” ■