

Classic TRACKS

TOM DOYLE

Back in 1988, with the release of an album, *The Trinity Session*, recorded almost entirely in a single day, Cowboy Junkies became arguably the first band to create the music sub-genre which would later become known as alt-country. A slow-burning, atmospheric take on country music, at a time when most artists were relying heavily on programmed sounds, the Canadian four-piece's second long-player was all the more remarkable given that it was recorded live at Toronto's Church of the Holy Trinity around one microphone, namely a Calrec Soundfield.

Today, the producer of *The Trinity Session*, Peter J Moore remembers that for him and the band, the album's distinctively sparse, reverberating sound was a reaction against the MIDI-dominated musical styles of the '80s. "I was angry that music had gotten into drum machines and MIDI," he says. "No humanity, no nothing. I'm listening to these recordings from the '50s with two or three mics and I'm going, 'Man that's real music.'"

Moore remembers experiencing

Cowboy Junkies 'Sweet Jane'

In 1987, swimming against the tide of MIDI-powered pop records, Cowboy Junkies went into a church to record an album into a single microphone in a single day.

something of an epiphany when it came to the idea of developing his single mic technique. "I got a Billie Holiday record from the German masters which were kept in proper climate-controlled vaults. I put it on and I thought, 'Oh my God, why did we go away from that? Why aren't we still doing this?' That right there, that's when I really got into the single mic recording."

This notion dovetailed with the ethos that the members of Cowboy Junkies shared about making more naturalistic recordings of their alternative-edged country. "So I think it was the pendulum

swinging," Moore says. "The stars lined up and it just happened to be that we were the innovators. The band and myself were sympatico. They wanted to get out of this MIDI and synths artificial thing."

Then as now, Cowboy Junkies are based around a family unit — singer Margo Timmins, guitarist Michael Timmins and drummer Peter Timmins, along with bassist Alan Anton. *The Trinity Session* was to produce their best-known track, a beautifully drowsy cover of The Velvet Underground's 'Sweet Jane' (based on the version recorded at Dallas club End

The musicians arranged around the single Calrec Soundfield mic. Margo Timmins was positioned outside of the main circle, but is represented by the Klipsch Heresy monitor on the right-hand side.

Of Cole Avenue which appeared on 1969: *The Velvet Underground Live* rather than the faster rendition, missing the bridge, featured on 1970's *Loaded*).

Since its initial release, Cowboy Junkies' 'Sweet Jane' has gone on to appear on numerous film soundtracks, including *Natural Born Killers*, *The Good Girl* and *Flight*. For his part, Peter J Moore is in no doubt as to why their version of the classic song has stood the test of time.

"It's Margo's delivery," he says. "It's just so haunting. It's the lonely girl in Alabama on the porch on a hot night and she's just slowly getting the words out of her mouth."

Microphone Experiments

The unusual circumstances surrounding the recording of *The Trinity Session* can be traced back to Peter J Moore's days as a DJ specialising in punk and new wave on the CHRW-FM station of the University of Western Ontario in 1976. "Radio shows had to be around 40 percent Canadian content," he recalls. "It was a great idea, and if it hadn't happened, we wouldn't have had a Canadian music industry. There was very little punk music being recorded or commercially available, especially the Canadian stuff. So as a matter of necessity, I started recording. Not because I was wanting to be a recording engineer so much as I wanted to fill my 40 percent slot so that I could then play all the British imports."

At the time, Moore was at the university doing his masters degree in anthropology, which also involved him doing some recording. "I was doing a lot of Nagra and mic recordings of indigenous music," he says. "I was a crazy audiophile though. I built my own Dynaco amps when I was like 12, 13 years old. I was really very much into electronics. I built my own speakers when I was 14."

To fill his Canadian quota of punk bands, Moore began going to clubs and recording live performances using a Kunstkopf dummy head microphone. "Sennheiser made one, the MKE 2002," he remembers. "It came with a mannequin which had defined ears, or you could take the mics off and wear them yourself. So for a lot of live shows, I would wear them myself and walk around until I found the

best-sounding place in the room and stand there and record. But then later I would gaffer tape a tripod with the dummy head onto a pub table, and that way I could dive in the crowd and keep dancing."

Quickly, Moore's radio show, which he presented under the name Simon Less, gained a reputation for his recordings which aurally airlifted listeners directly into the middle of the Canadian punk scene. "'Cause it was binaural recording," he says, "we'd tell them, 'Put your headphones on at home'. That was the most invigorating thing for them. 'Cause you felt like you were right in the mosh pit."

From here, Moore began his own punk label, Silent Head, recording bands in a rehearsal space he'd set up in his house. By this point he had moved on from the Kunstkopf to a pair of Fostex ribbon mics. "I was using them as a Blumlein pair, so that's two figure-of-eights at 90 degrees, one over the top of each other, producing a clover-leaf pattern," he explains. "I built my own mic preamps designed exactly for the ribbon mics. So I was using the Valley People module and Jensen transformers and I had all handpicked military resistors. Really esoteric, crazy stuff. It sounded amazing. I built my own plexiglass rigging, so it would be easily mounted and I could get the mics in close."

Further encouraged by the results, Moore founded his company MDI Productions and began to record other forms of music, including classical and jazz, before beginning to work for ADCOM Electronics in Toronto designing studio spaces, giving him a deeper knowledge of acoustics. "I realised that no matter how much money you spend on your bloody sound system, if you've got a shitty-sounding room, you're not gonna get anywhere," he laughs. "So I started learning about how to make bass traps and how to properly contour the sound of a room."

For the punk club recordings, due to its portability, Moore had used a TEAC PC10 cassette recorder. "It was one of the very first attempts at a professional cassette deck recorder, with balanced XLR ins," he says. "Then I had a Revox B77, later on a PR99, which I used for my more serious recordings."

The Blumlein Group

It was in 1985 at a dinner party thrown by Greg Keelor, guitarist/singer of Canadian country rock band Blue Rodeo, that Moore found himself sitting across the table



Artist: Cowboy Junkies
Track: 'Sweet Jane'
Label: Latent Recordings
Released: 1988
Producer: Peter J Moore

from Michael Timmins and Alan Anton of Cowboy Junkies. "We were talking about digital recording," he recalls. "They'd just got back from England and they'd heard about someone using Sony Betamax digital recording. I said, 'Well I've just started doing digital recording with my Blumlein setup.' They were quite interested in what I was doing."

At this point, Moore had developed his Blumlein recordings to factor in musicians sitting behind the microphones, meaning he could now include larger groups of players and position them across the stereo spectrum. "When you have a Blumlein setup," he says, "in the front of the microphone, along the lateral line, you have our universe. Then behind the mic, you have a parallel universe. So you can put things around the clover leaf and space them away from the microphone in such a way as they all appear as coming in stereo in front of you."

"I couldn't put everyone on top of each other to get close to the mic. So I came up with the idea of spacing everything in the clover leaf properly so it could create this beautiful stereo image, but then I could bring everything closer to the mic."

In exploring this technique, Moore was in effect live mixing the musicians, employing the same kind of floor 'marks' that are used for actors in stage and film. "So the mandolin player, that's his verse position," he says. "One foot closer is his chorus position, and another foot or 18 inches in would be his solo position. I've got faders on top of their heads [laughs]. People said, 'What summing amplifiers do

»

Margo Timmins was positioned about 30 feet from the main mic singing into another Soundfield mic. This was then fed into the Klipsch Heresy monitor placed in front of the main Soundfield mic.



» you like?' I'd go, 'Air.'"

Using his Blumlein setup, Moore first worked with Cowboy Junkies on their 1986 debut album, *Whites Off Earth Now!!*, which was recorded live in a garage behind a house the band was renting in Toronto. "It was just a very small concrete garage in the back of the yard," he remembers. "It was a little cement bunker. I put a mattress in front of the drums so that they wouldn't be super loud. The way I treated Margo's voice was I thought, 'We're not using acoustic guitars, we're using electric guitars, so why not use an electrified voice?' I had her singing through the PA."

On *Whites Off Earth Now!!*, Moore used a proto-digital recording setup comprising a Sony SL-2000 Betamax-tape-based recorder and a Sony PCMF1 Digital Audio Processor. "That was the actual A to D to V, let's call it," he says. "The Beta machine is merely a data storage device, so the processor is the A to D, as in the D is converted to black-and-white video. You see black and white squares, a million of them going by you."

When it came to the recording of *The Trinity Session* a year later, although DAT machines were in use by this point, their sale in North America had been banned by the RIAA (Recording Industry Association

of America), who feared that their domestic use would kill off sales of the burgeoning CD format. "I used to go down to New York City," Moore recalls, "and you could go grey-market in the appliance stores. Under the table they were selling, illegally, grey-market DAT machines."

Instead, however, Moore stuck with the Betamax format having upgraded his setup with a Nakamichi DMP100 digital processor. "I modify everything I own," he points out. "Nothing I own is stock. I'd ripped out the electrolytics and put in high-quality audio capacitors. Plus, Apogee — who were a very new company at that time — were making these little purple A-to-D discrete circuit modules. So I actually had to cut holes in my Nakamichi to install them. It looked like a hot-rod car

with fins sticking out of it. 'Cause I'd taken it to the nth degree and wanted it to sound better and better. So, contrary to the myth, none of the masters that you hear with the Cowboy Junkies stuff come from DAT."

Meanwhile, mic-wise, Moore's recording world had opened up when he first encountered the four-capsule Calrec Soundfield while recording a jazz trio side by side with Stanley Lipshitz of the University of Waterloo's Audio Research Group. "It was in a small chapel where these private jazz concerts were put on and recorded," Moore remembers. "Anyway, Stanley Lipshitz is there with his headphones and I'm sitting beside him because we both set up our gear close to each other. Halfway through, I give him a bit of the elbow, and I offer him my headphones, just say, 'Hey, take a listen to this.' He puts them on and he looks at me and he smiles politely and turns and gives me his headphones. I went, 'Oh my God, what the hell is this?'"

"All my Christmases came at once. 'Cause it was the binaural sound which I was so intrigued by, the feeling that you're there. A Soundfield microphone records perfectly equal below it, above it and around it. I call it a spherical microphone. As soon as I heard this

Soundfield, I approached Calrec to become a dealer for ADCOM. I couldn't afford one. It was \$14,000 back then and it still cost me almost \$9000 wholesale."

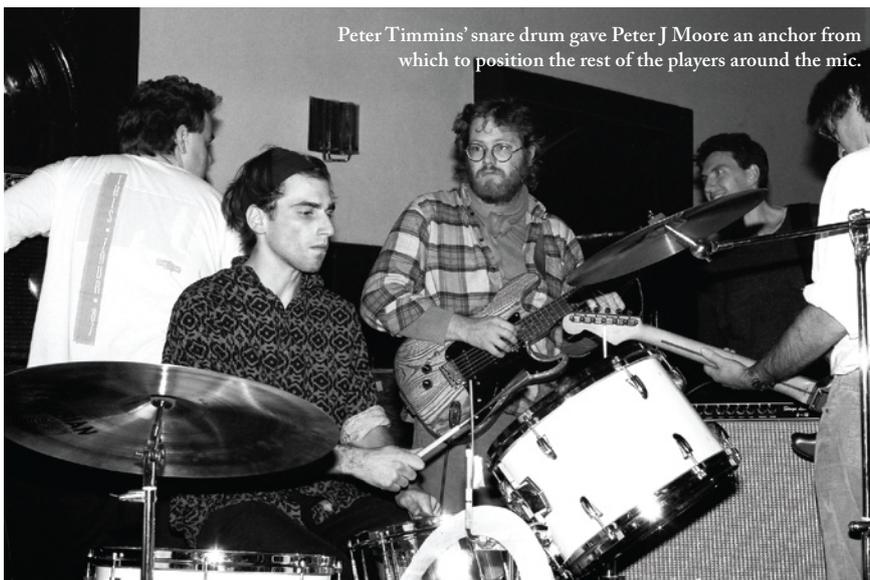
When it came to the location for the recording of *The Trinity Session*, Moore already knew the Church of the Holy Trinity, having in 1985 used it to digitally record the soundtrack for a Japanese mini-series called *Chasing Rainbows*, set in the prohibition era in the States and involving hours of jazz and orchestral recordings, sometimes treated as if they were being played through a Victrola gramophone. "It's an 1840s church," he explains. "It's old wood floors and the pews slide, they're not permanent. Early coarse stone work. Not a fancy church in any shape or form. But acoustically, the soft stone was gorgeous and the roof was all big oak rafters, as was the nave."

D-Day

On November 27th 1987, Moore and Cowboy Junkies arrived at the church and began to set up, with the ambitious plan to record enough tracks for an album in a single day. "I only had one day, but I knew the church very well," he points out. "There was a cloakroom in the back to one side where we'd already made little notches in the bottom of the door so the cables could run through. That was my control room. It was probably 10 by 12 feet, the size of a small living room. I'd already cut SONOpansound panels that were up on stands that I could walk in there and throw up. The setup for me, technically, I could do quickly."

Monitor-wise, in his cloakroom control room, Moore set up a pair of KEF P60s. His next task was to find a suitable place in the main body of the church to position Peter Timmins's drum kit. "I had someone hammer the snare while I stood where I thought I'd put the mic," he says, "moving the snare back and forth along the centre line of the church until I got the perfect 'bah'. So where I found the sweet point for the snare, that was my anchor point, then I worked backwards from there."

"I'm pulling back the microphone 'til I get the drums sounding really good. Probably six, seven feet away from the kick drum. Once that's established, there's your canvas. The Calrec was exactly at my ear height. I'm six foot, so the mic is probably at five foot, six inches, because the reflections off the floor are just as important as the reflections off the ceiling."



Peter Timmins' snare drum gave Peter J Moore an anchor from which to position the rest of the players around the mic.

The less controllable sound emanating from Alan Anton's Roland bass amp proved more problematic, until a hasty solution was found. "I put that on a chair and I found a spot, but it sounded like hell," says Moore. "With Perren Baker who

was my assistant, we grabbed this big old carpet that we found in one of the other rooms and we laid it behind his amp right down to the floor because the speaker was open-backed. So we blocked the back wave of the amplifier. But that took a long

time before we figured that out. Alan was always very unique. He tuned D-A-D-A, which made his bass lines interesting. That sliding, glistening bass line is one of the charms of the band."

When it came to guitar amps, Michael Timmins and his older brother John, who played on some of the tracks, respectively used a Fender Twin and a Fender Precision Reverb II. With the drums and bass in place, Moore could then 'paint' his stereo image, positioning the guitarists and various others guest players around them, namely pedal-steel player Kim Deschamps, harmonica player Steve Shearer, accordionist Jaro Czwewinec and Jeff Bird on fiddle, harmonica and mandolin.

"If I put an instrument behind the microphone on the right-hand side, it appeared on the right-hand side in the front of the stereo image because it's a mirror," says Moore. "My drums were my anchor, so then Michael's guitar was on the left-hand side of the drums on, let's call it, the positive side, and then the pedal-steel amp was on the right-hand side. The >>

» accordion player was on the back side, along with the mandolin player. I kind of left that area open."

For Margo Timmins's vocal, Moore now had a pair of heavily modified Klipsch Heresys — a PA that was in fact high-end hi-fi speakers, one pointing at the mic, and another used as her monitor. "The Klipsch speaker for Margo's voice was dead centre on the back side facing the drums about six feet away," he remembers. "She could hear herself perfectly 'cause she had a Klipsch Heresy pointed right at her. She's singing on a second Soundfield. The beauty of the Calrec was I could turn it into an absolute mono shotgun mic pointed right at her, so I wasn't getting any feedback. She was probably about 30 feet away off to one side. She was not in the centre of the room with us."

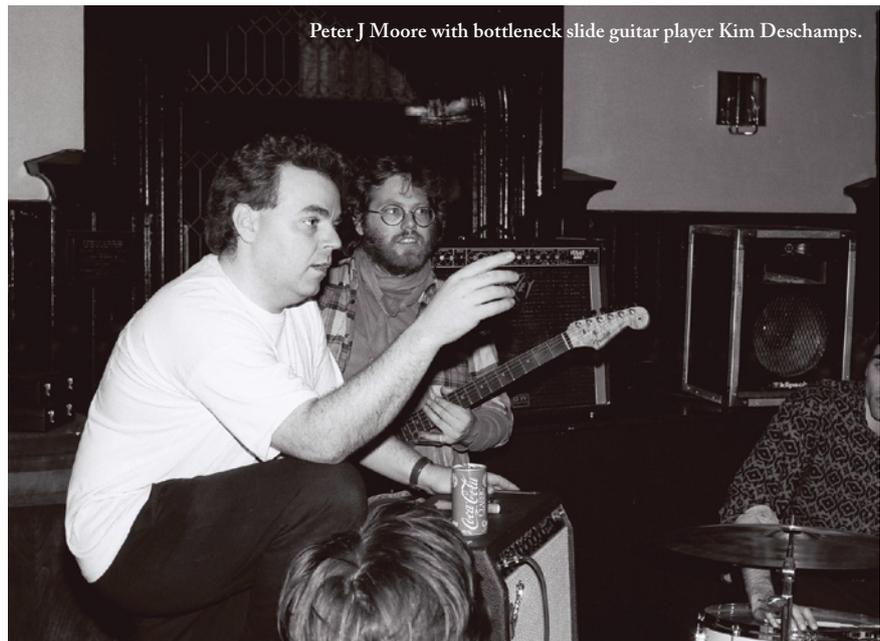
Problems

With all of the equipment in place, Moore and Cowboy Junkies began to do test rehearsals through the songs, starting with the ones with the sparsest instrumentation. Immediately, though, a problem became apparent, which would test the assembled's patience throughout the day — the amount of radio frequency interference picked up by the Calrecs.

"Downtown Toronto has the CN Tower which is a huge broadcast tower," Moore explains. "There's tons of RF. There'd be many times we'd have to wait a bit. Steve Jagger from Calrec said that they figured that the RF was so strong in Toronto that it was actually arcing across the capsule, so it didn't matter how well I shielded everything.

"We'd have to stop the recording or I'd have to make a judgement call 'cause it was a fantastic take. You didn't hear it during the music so much, but at the beginnings and the ends you'd really hear it. It would come in through the speakers on Margo's PA as well, so at points it was pretty bad and we'd have to stop for 20 minutes. It was stressing the hell out of me, man."

Another unforeseen problem was tourists wandering in and out of the church. "We were supposed to have the place to ourselves but they didn't police it," says Moore. "Also, too, a lot of the musicians who were waiting to play were a problem, 'cause they're hanging out and chatting and smoking and making noises. It was like, 'Hey guys... shut up.' There were other technical issues too. I was getting overloading as things started



Peter J Moore with bottleneck slide guitar player Kim Deschamps.

getting cranked up a lot louder. I had to redo my whole gain structure between the mic and the mic preamps into the recording machine."

Enforced stops aside, the first song that everyone agreed was a master take was 'Sweet Jane'. "The first serious take was 'Blue Moon Revisited' around two thirty or three o'clock in the afternoon," Moore remembers. "But we gave up on that song at first because there were too many problems with it, so we went to 'Walking After Midnight'. Then we went back to 'Blue Moon'. So around four o'clock in the afternoon is when we start 'Sweet Jane'. But the RF buzzing was going insane. Finally the buzzing calmed down and it was the third take. When she broke into that bridge, it was heaven sent. 'Cause everyone knows the song, but people aren't that familiar with the original Velvet Underground version."

From here, the team worked intensively, nailing a further 10 songs, finishing with 'Walking After Midnight' just as the witching hour itself approached. The church was only booked until 10pm, so Moore bribed its caretaker with five dollars to allow them to work for a further two hours. "Yes," he laughs. "It cost me 100 dollars to rent the church, I think it cost me 20 dollars for the pizza to feed the band and I just gave five bucks to the caretaker of the church. So it cost 125 dollars to make that record, on those terms. Not to mention I had a bank loan for a \$9000 microphone! I was in hawk up to the eyeballs. But yeah, we

didn't load out until midnight."

As it turned out, not everything on *The Trinity Session* was nailed on the day, and Moore and Margo Timmins had to return to the church to record what became the album's capella opener, 'Mining For Gold'. "We just ran out of time and it's an a capella, so I said, 'We can't squeeze it in today because of all the problems, so I'll come back with Margo.' She's not singing through the speaker, which is why it has a different vocal sound to anything else. She's naturally singing right to the Calrec Soundfield."

When it came to mastering *The Trinity Session*, Moore says he used a very specific device. "I was using an FA. You know what that is? Fuck all! [Laughs] There was no mastering. I'd become the AMS rep for Canada and so I used an AMS Audiophile, the first digital audio editing thing that you could use to do a crossfade up to five seconds. I was set up in the warehouse at ADCOM with the KEF P60 speakers, and if you want to call it mastering, I was mastering the record in a warehouse. But all I was doing was editing. I couldn't even do level adjustments."

Legacy

Twenty years on from the recording of *The Trinity Session*, Cowboy Junkies returned to the Church of the Holy Trinity in 2007 for the making of a film and album, 'Trinity Revisited', featuring guests including Ryan Adams, Natalie Merchant and Vic Chesnutt. "I was there as a guest but that was a video shoot," says Moore. "They

were shooting in high def and they had these huge computer servers on the floor. The fan noise was so loud that they couldn't use the ambient mics. It was all close-miked. It's a very cool record unto itself. Geographically, it's a revisiting of the process but sonically it's not."

The passing of time has found *The Trinity Session* become revered by audiophiles due to its purist recording approach and remarkable sound. "I go in an audiophile shop in Benghazi," says Moore, "and guess what they're playing? I'm down at the CES [*in Las Vegas*] and guess what they're playing to show off speakers or amps and stuff? *The Trinity Session*. I mean, it's a ubiquitous record amongst the audiophile industry."

Nearly three decades on from the release of *The Trinity Session*, Moore has remastered the album for an upcoming vinyl release on audiophile label Acoustic Sounds. "I had to go through hoops," he admits. "I had to find a professional duplicating Betamax machine because they're the only machines out there that allow you to access word clock and video

blackening. One thing I did was actually get the levels proper between songs."

For the remaster, Moore employed his AudioCube system. "They're really advanced," he points out. "The plug-ins I'm using are almost 10 years old, but they're still better than anything out there 'cause they're 128-bit. There's lots of EQ on the remaster. There was a lot of sibilance on the original recording, a lot of low-frequency thumping — not musical, but feet hitting the mic stands and causing a lot of low-frequency distortion. So a lot of that was... not removed totally, but addressed. A lot of the sibilance was addressed 'cause one of the best de-essers in the world is the AudioCube de-esser. It actually doesn't try to remove all the 's', it tries to comb filter it out, leaving some of the 's' in there. The sound quality of the new master is amazing. There are plans for it to come out on SACD as well. People who've heard it have been blown away."

Ultimately, Peter J Moore has a simple theory why *'Sweet Jane'* and *The Trinity Session* have endured down the years.



Peter J Moore today.

"We were trying to reach back into the '50s," he concludes. "Them, musically. Me, recording technically. So we both had the same aesthetic. We wanted to return to a previous time, and I think that's what makes it magical." ■■■

Mix with the best!



"Besides the excellent interviews and fascinating, in-depth recording and mixing articles, I can always depend on Sound On Sound for complete, unbiased reviews of the latest pro-audio gear."

Bob Clearmountain, engineer, producer and mixer, Grammy Award winner (Bruce Springsteen, The Rolling Stones, Paul McCartney, INXS)



"As a professional I admire Sound On Sound as one of the most trusted and credible sources of inspiration and information."

Jack Joseph Puig, mixer, producer, Grammy Award winner (Rolling Stones, U2, Mary J Blige, Black Eyed Peas)

SOUND ON SOUND

The World's Best Recording Technology Magazine



This article was originally published in Sound On Sound magazine, **October 2015 edition**



Available on the App Store



follow us on Twitter



find us on Facebook



go to the SOS YouTube channel



visit the SOS forum

Subscribe and Save Money!

Visit our subscriptions page at www.soundonsound.com/subscribe for more information on the Sound On Sound App go to: www.soundonsound.com/app

Sound On Sound, Media House, Trafalgar Way, Bar Hill, Cambridge, CB23 8SQ, United Kingdom
Email: subscribe@soundonsound.com Tel: +44 (0) 1954 789888 Fax: +44 (0) 1954 789895

All contents copyright © SOS Publications Group and/or its licensors, 1985-2015. All rights reserved.

The contents of this article are subject to worldwide copyright protection and reproduction in whole or part, whether mechanical or electronic, is expressly forbidden without the prior written consent of the Publishers. Great care has been taken to ensure accuracy in the preparation of this article but neither Sound On Sound Limited nor the publishers can be held responsible for its contents. The views expressed are those of the contributors and not necessarily those of the publishers.