

'American Epic': Jack White on a journey through recording history

A conversation with the former White Stripes frontman about technology, vinyl and the birth of modern music



YESTERDAY

Introduction by Bernard MacMahon, director

‘Ten years ago, my partners Allison McGourty, Duke Erikson and I set out on a journey to uncover the story behind the vast recording of ethnic, rural and regional music across America in the 1920s.

Desperate to find new music to keep their sales alive, record labels set up recording studios across the US, inviting all-comers to go along and cut a track. In this way, rural country singers, blues singers, singers from the mining communities of West Virginia, and Cajun, Native American and Hawaiian performers

brought their own styles and stories to be recorded. This was how musicians such as the Carter Family, Charley Patton, Mississippi John Hurt and many others were discovered.

Our search took us from New York to Oahu, and we uncovered hours of unseen film footage, photographs and testimonials from the last surviving witnesses to these extraordinary events that shaped our musical world today. Our research forms the basis of a three-part documentary, *American Epic*.

We collaborated with sound engineer Nick Bergh, who had restored the first electrical recording system that made these recordings possible and catapulted the world into the 20th century. No one had seen one of these machines in almost 90 years.

As a director, you can tell a story in film with old archival footage and interviews with witnesses to those events, but there is nothing more enlightening and revealing than actually trying to do it yourself. The *American Epic sessions* were designed to put into practice what they did back then, a process shrouded in mystery. It is impossible to express how much we learnt by doing it.

We recorded three weeks of live sessions, inviting musicians including Elton John, Willie Nelson, Ana Gabriel, Rhiannon Giddens, Raphael Saadiq, the late Merle Haggard, Jack White, Los Lobos, Steve Martin and Beck to cut a live three-minute track using the exact machine that Jimmie Rodgers used to cut his first records in 1927. The disc is cut on a lathe driven by a weight and a mechanical pulley that allows for just three-and-a-half minutes of recording time. Once started, the recording cannot be stopped.

I invited T Bone Burnett and Jack White to produce these sessions. This is a conversation I had with Jack in the midst of that hectic and unforgettable period.'

Jack White on machines and music

Bernard MacMahon: *The Western Electric recording system is an incredible invention — America basically designed this technology and built this thing, which has revolutionised music.*

Jack White: What's great about America is that someone will work hard in a garage or a basement somewhere and invent something life-altering for everybody. The next step is to figure out how to make money from it. People initially think, "Oh, that's terrible, they take something beautiful and trash it to make

money from it.” But that’s where the beautiful part comes in, because once you try to make money from it, then happy accidents start happening.



Mississippi John Hurt, one of the artists discovered through the recording sessions held across rural America in the 1920s

We were extremely lucky in the 1920s and 30s that companies like the Paramount Company and Columbia and Victrola, Victor, RCA, all wanted to sell record players — that was the most expensive part, the records were just novelty things to keep the machines going — to urban and rural people. They would have never recorded race music, as it was called, blues music, unless they wanted to sell record players to African-Americans and farmers.

And that’s how we got all these amazing artists to record who never would have been recorded had it not been for that. And that’s all part of the American way of doing things, which yields amazing results, regardless of the bad side, all the evils of the corporate world. We get happy accidents like this.

BM: *As an artist, is it strange having a medium where once it’s done, it cannot be altered? That’s it, it’s finished?*

JW: I’ve always been a fan of constriction, I’ve always liked boxing myself in. This type of recording is exactly the way my brain wants to work, within its parameters, you know. If you told me we only have 30 minutes and we have a stand-up bass and a kazoo, we need to record something and make it happen, I would like that challenge a lot more than, “We have a million-dollar project, take all the time you want.”

There’s nothing beautiful about that. But if you can get something to happen and make it come off beautifully you can say we really accomplished something, we made it happen inside this box . . .



A pulley-driven Scully Lathe, part of the Western Electric recording system

I really do love recording this way, because it's so self-contained. Everything is finished in the moment. You have it the way you'd hope it to be, immediately, live, and that's a beautiful thing for every artist to experience at some point in their life.

With modern recording people get used to the idea that they can fix it later, so they don't really put their all into their performance. But most of the great records in the world are the ones where everyone had to have [the music] rehearsed and perfected before they even set foot in the studio. And that changes you as an artist.

BM: *How does it compare to digital recording?*

JW: Recording a new modern record on computer, you've got every trick in the book — autotune, rhythms on a grid so it's perfectly in time and all that jazz. That's not really a challenge. But if you're going to get an amazing take on acetate in this style of recording, then you've really got something to be proud of.

BM: *What does this require of you as a producer? I mean, you've produced a lot of records, your own included. But this seems to require different skills.*

JW: I feel a little bit guilty, because it's almost like you're directing the recording rather than producing it. You're positioning people as if you're filming them in a way. The microphone is stationary, and the performers are like the faders on the mix — how close the mandolin player is, or the fiddle player, is almost like how much you would move your fingers [up and down] on a fader to mix a song.

BM: *You've had to learn the whole way of recording using a gear that no one has used since 1920s. Could you take us through that learning process?*



Charley Patton, whose 'High Water Everywhere' (1929) is re-recorded by Taj Mahal

JW: Most producers and artists don't have access to this machinery, so immediately it's an interesting challenge for me to jump in there and feel what kind of tones come from the equipment, how close can you get to the mic, how loud can you be and how far away can you get and still be picked up.

BM: *Does the machine set up rules for recording?*

JW: The machines *are* the rules. You have to conform to the machines, they're not going to conform to you. I think this style of recording changed people's characters. It made them sing quieter or louder, it made them sing with an accent on certain syllables so they would get picked up on the recording. And that's an interesting bit of side knowledge that I have picked up from this — I think Beck did, too, when he was here recording — of how it changes the character of the artist.



Lydia Mendoza recording "Mal Hombre" at the Texas Hotel, San Antonio, 1934

A lot of those recordings that we've loved for so long were the results of performers having to conform to this style. You know, Robert Johnson may have been altering the style of his singing delivery so it was the correct volume for what was getting picked up. That's what we don't know. But it probably happened quite often. By the end take they're not singing the same way they would have sung if they were in a normal studio, and with better results at times, because it's pushed you to go into a place you have never been before.

'I mean everybody': the artists, from Alabama Shakes to Elton John and Nas

BM: *We had a broad criteria in choosing the artists . . .*

JW: Yeah, height, we went by height mostly . . . No. We didn't really know. I mean everybody — rappers, pop singers or blues singers, country artists, the field is wide open. Because you put anything in front of this machinery, you're going to get an interesting result. I think there's sort of a false search for authenticity in the music world. We start off loving music and then we go, "Oh, I want to hear the real deal thing," and get obsessed with authenticity.

Then later you learn that a band like The Monkees was completely constructed by Hollywood producers — a brilliant band that made brilliant music, and it didn't matter that they were all from the same neighbourhood or whatever. And it was the same with this too.



Bernard MacMahon and sound engineer Nick Bergh working with the reassembled Western Electric recording system

You can take any artist and once you strip the technology away and get in front of this equipment from the 1920s, things come alive. You could probably take the most fake modern pop singer, somebody you abhor, and put them in front of this machinery and something interesting would happen.

BM: *Let's talk about some of the artists. Tell us about Pokey LaFarge.*

JW: I first heard Pokey LaFarge on the radio in the car around Thanksgiving a few years ago and I really loved his voice. I looked him up and eventually had him come and record a single for my record label. And we went on tour together. I love his character and the way he attacks music. He's like a great definition of an old soul. So for this project we thought it would be great if we had someone to record "Saint Louis Blues", which is a really historic song. And Pokey LaFarge and his band are from St Louis. So they jumped at it like madmen, and they did an incredible version.

Bettye LaVette is a soul singer from Detroit — it was nice to have somebody from Detroit on here too. Every couple of sentences I sort of laugh when I'm talking to her, because it reminds me of home. Bettye recorded "When I Woke Up This Morning", a Jim Jackson song. And she flipped the gender on it, so she's singing about a guy instead, which I always love. So many of those blues songs are gender-driven.

BM: *And then the Alabama Shakes came in.*

JW: They did "Killer Diller", a Memphis Minnie song from the South, and obviously they're from Alabama. It was great to have people from these different regions do these songs. And they used electric equipment, which was a new experiment for us during this project.

They used electric amplifiers and a drum set. You start having almost a late 1940s, early 50s sort of Ike Turner “Rocket 88” sound to the recording, a very early days of rock’n’roll sound.

BM: *Then we invited the great Ana Gabriel to sing “Mal Hombre” by Lydia Mendoza; T Bone and you arranged the entire thing in that room from scratch on the day.*

JW: Ana was interested in tackling that song because it tells the Mexican-American side of recording back then and their folk music. T Bone and I brought in a lot of different people to play behind her and Van Dyke Parks was able to come in at short notice and play some amazing accordion, which really sealed the deal . . . we had a wall of musicians there, and she is so powerful a singer, we had to move her away from the mic a few steps, because her voice is so powerful.



Ana Gabriel performing 'Mal Hombre', originally recorded by Lydia Mendoza in 1934

BM: *Now the next day we had a pretty interesting group. A couple of people arrived to perform a brand new song they wrote, “Two Fingers Of Whiskey”.*

JW: This is a song Elton John came in with, Bernie Taupin had written the lyrics and sent them over, and Elton wrote a song on camera for this project. This is how he’s always done it.

So how amazing to capture that and go through this machinery, to this 1920s lathe, immediately, as soon as he had written that song. He asked me to sing back-up and play guitar with him. So that was interesting. My job changed at that moment, so it was quite an honour.



Elton John and Jack White performing 'Two Fingers of Whiskey' by Elton John and Bernie Taupin

BM: *You were excited about the possibilities when Nas came on board for this project.*

JW: I was really itching for someone from the hip-hop world to be involved, to highlight the history of African-American music and how much of the language in hip-hop is so similar to the early blues recordings.

It was difficult to find someone who understood that. But Nas was totally open ears about it. He understood the history and how that lineage is important to emphasise. And he's got the perfect style of voice to show people what that's like.

When he wanted to do "On the Road Again" by the Memphis Jug Band I thought that was perfect, because the language the Memphis Jug Band use is the same language that is used in modern hip-hop tracks — language that people who don't like hip-hop would say is offensive and they think is this new thing. But this has always happened. All blues singers use the same kind of language, they were telling stories about similar topics back then.

People don't like to hear about guns being talked about in modern hip-hop, but then you have "32-20 Blues" with Skip James and Robert Johnson and Son House, they were all singing about guns in 1920, or "Stagger Lee" [recorded in 1923]. And you can see the comparison immediately, right there.

BM: *Tell us about Los Lobos. They did a song called "El Cascabel" — that means, like, "the shaker".*

JW: The shaker, the rattler, yeah. That's an almost 100-year-old song. It sounds like the snake is going through the sand or something. I grew up in a Mexican neighbourhood in Detroit, and Mexican and Latino music were played all the time, so I love it. It's the soundtrack to my childhood.

BM: *That's when the machine broke, wasn't it?*

JW: We were just about to do a real take and Nick was winding up the weight when it snapped its strap and the 105lb weight fell to the ground. So we were kind of up the creek there. We wouldn't have been able to record that day, so we had to figure out how to fix it.

BM: *But you could repair it?*

JW: Well, I've been doing upholstery my whole life — at least since I was a teenager, that's when I started apprenticing — and I opened my own shop when I was in my twenties. I still have my upholstery shop today. If this music thing doesn't pan out, it's my fallback trade.

BM: *Tell us about Beck — we were surprised when that crew turned up.*

JW: Yeah, Beck came in with this huge choir. They brought their volume with them. It was the most challenging of all the recordings because you also had piano in the mix, which is a hard one to mic when you have more instruments. It starts to turn to mush.



Beck recording his '14 Rivers 14 Floods'

We had to move the choir almost to the other side of that room for one part of the song to stop the needle jumping out of the groove — there was so much distortion and volume. We didn't want them to lose their energy though. But they figured it out. They moved away from the microphone. But all the while they kept the energy of the whole song going. That was great. But it was very challenging.

'I'd like to do a whole album like this'

BM: *A lot of the people involved in this project look at the digital world with major trepidation. Do you have concerns about it?*

JW: We live in a different time now with music and technology. If you loved music in the 1920s, I doubt that you really cared much about how it was recorded as much as it being clearer or more audible, or more lively or louder. But musicians now have to worry about that because there's so much bad technology out there. Computer plug-ins, like digital reverb, for example, emulate something that exists in real life . . . As a producer you have to know there's a difference between digital reverb and a spring reverb, and a reverb with a microphone in a giant room like this, with a speaker on one corner and microphone in the other.

Some are more romantic and warmer and more beautiful, and others are plastic and harsh and digital and you want to stay away from them . . . [But] this style of recording to acetate, you don't have any of those problems. It's just about the performance and the volume of your instrument or the closeness and proximity of the artist to the mic, which is a lot more interesting and challenging problem than what kind of emulator to plug in.



Pokey LaFarge playing 'St Louis Blues', composed by WC Handy in 1914

BM: *Are there lessons to be learnt from this that could change the way people think about music in the future?*

JW: Almost every one of the artists who's recorded this way has said a phrase like, "Wow, I'd like to record a whole album like this." That just shows you how immediately they're drawn into the style of working. It's not a drag. They don't say, "All this mixing, oh, it's so hard, it would be so much easier if it was just recorded digitally." They're not thinking that at all, they're

thinking, “This is really romantic and look at the end result: I would never have done it this way had I recorded in a modern studio.” So it’s very compelling.

New technology means new responsibility, and I think that’s a problem in the modern era — that people think it doesn’t bring responsibility: “I want the new gadget, give it to me now.” People don’t find it rude to hold up iPhones at a concert, you know, they think it’s fine: “I have this gadget. I’m entitled to this moment.” They don’t care about how it changes the experience of the live performance, how it affects everybody around them, these glowing blue screens between them and what’s happening on stage. And we need to learn there’s a responsibility to that technology, that there’s a time and a place for it.

Vinyl always has an etiquette; you handle it gently, with a respect. You put the needle down, you’re involved. You’re reverential to the art form. Just like in a movie theatre, you’re reverential to the big screen. At home with TV you hit pause, or fast forward, change the channel. There’s no responsibility to the technology. But when you enter a movie theatre and the lights go down, you are reverential to the art form. And I think a lot of the artists are experiencing that when they [come here to] record this way.



Nas performing 'On the Road Again', originally recorded by the Memphis Jug Band in 1928

BM: *To extend that, you could say this is kind of a shrine, people would travel hundreds of miles to record on these machines.*

JW: Recording studios in general have been churches for music, always will be, I hope. When Elvis showed up at Sun Studio [in Memphis] and said, “I want to record a track for my mum,” what he really was trying to do was have Sam Phillips hear him. You had to go to a studio and make it happen. You had to

come rehearsed with your songs, ready to go. So that's like getting on your best clothes and going to church. People are congregating to that spot to see what's about to happen. They're going to do this live and you can't fix it later. Any mistakes that happen are going to be there in the finished product, which is a great place to be. It's a scary place to be for some people, too.

'American Epic', commissioned by BBC TV's Arena and by PBS, continues on BBC4 on May 28 and on June 4; 'The Sessions' will be broadcast after the latter. 'American Epic: The Collection' and 'American Epic: The Soundtrack' are out now on Legacy Recordings; 'American Epic: The Sessions' will be released on June 9 by Columbia Records. A companion book, 'American Epic', is published by Simon & Schuster, £20

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