

I suppose music technology is just like any other niche in that as you disappear deeper down the rabbit hole, it gets harder to find the other rabbits. Tom Jenkinson would probably qualify as an actual mole by this point were you to fully consider his 15-year reign as the premier virtuoso figure in glitchy drum and bass. But his albums as Squarepusher have also reached into other territory – most famously *Music is Rotted One Note*, on which he played every instrument himself; a one-man band without any sequencers hosting a jazz-fusion cafeteria food fight. Starting with 2008's *Numbers Lucent* EP and its follow up, *Just A Souvenir*, he moved into a friendlier version of digital music. But 2009's *Solo Electric Bass* is exactly what it implies – and the guy's got some serious chops.

All this constant reconfiguration points to a generally restless and adventurous nature, but what's especially impressive is just how deep his reach extends when it's finally time to change course. He writes his own software for MIDI and audio processing for most of his digitally-minded projects using the deepest nether regions of audio creation platforms, like Native Instruments' Reaktor Core Technology. It's quite astonishing to think that Jenkinson can create music in this fashion at all, let alone come up with something that's truly beautiful.

You've been making extremely technical music since 1996. What spurred you on to record on your own versus a commercial studio?

One of the things that really compelled me to want to work with technology on my own was that when I'd gone to studios, I'd found that they were quite stale environments. It didn't seem like a place for experimental work. If I don't feel like I'm making a reach into new territory of some kind, whether it's musical territory or exploring new technological applications, then I think I'm wasting my time. I still don't have a massive amount of contact with that world – I've always operated in an isolated environment. That started off because that was the *only* way I could do it.

When I was kid I didn't have the budget to go to big studios-I had to basically use my initiative with the limited things I could get my hands on. But it set a pattern. I want to set things how I want to set them, and that means some pretty unorthodox ways of connecting all the gear together. It's one of the advantages of being a self-contained operation. If I need a piano part on a track, I'll just practice until it's done. I don't play the piano, but I will if it requires it. I'll attain the knowledge rather than wait. In the early days, as I said, I didn't have the money to pay; and these days I haven't got the patience to wait and explain the ideas to people.

My understanding of your approach has always been that knowledge is a prerequisite to creation. On one hand the learning curve might be prompted by something specific, but on the other hand it's like, "Let's get this out of the way," in order for the creative possibilities emerge. Those two seem like they're in conflict.

It is awkward. In some situations you're making it up as you go along, so in that sense you're attaining knowledge but you're using guesswork. You're speculating on imagining a particular point and you're speculating on the routes to how to get there. It almost sounds like a cliché, but for me it's about always trying to play spontaneity off of a rational, logical, rigorous approach. Without any logical analytical approach, you're high and dry. It's different if you've got the musicians, engineers, producers and so on. They can occupy different mental spaces. I'm doing everything, so I have to encompass all of it in one person. The most stressful times to me are when I'm trying to get takes down: I'm trying to get the sounds right *while* playing, and the two mentalities are slightly different. I think to play really well you have to let go to an extent – you can't just sit there thinking about the procedures when you're trying to deliver a musical performance. It's multitasking; switching from one mentality and flipping back.

So what are your tactics for juggling them?

I've always had an interest in how the technical aspect of recording music affects the affective or emotional experience of listening to it. I could save myself a lot of effort by getting an engineer in, but my worry is that I'd be explaining ideas to people. I'd have to convey a musical idea verbally to somebody – translating from one language to another. In my head the links are direct. If I'm relying on a verbal form of communication, "I need this kind of sound," then I'm stuck in this dreadful territory, like music journalists or critics when they try to convey a sound using words. I try to avoid doing that at all costs, because I'm not sure exactly what connotations these words might have. In my head I've got very specific connotations. I have a very specific texture that correlates to the experience of green. There's no point in saying, "I need this to sound green" to an audio engineer. I remember reading about Captain Beefheart, and that's one of the ways that he would communicate with his musicians – using evocative phrases to get specific kinds of performance out of them. Personally I don't have any faith in my ability to convey music verbally. If I do it myself, I'm working 18 hours a day to get what I do done. I'm just not confident in the alternatives, I suppose.

It almost seems like the actual signal chain is between your brain and the speaker.

Tom Jenkinson
is Squarepusher
by Vijith Assar

Yeah, that's an interesting idea. One of the things that got me into electronics as a kid were pathways. I loved looking at maps and figuring out the way roads would divide and meet up again and cross over. It's almost like an aesthetic approach to electronics. I love the picture of electronics; imagining the different voltages and how they'd be affected by different components while traveling around bits of the circuit. I had a circuit diagram for the first stereo hi-fi amp I owned, and I used to look at it for hours. Maybe that says something about my personality. But this idea of pathways has dominated my approach to music. In fact, that's what I'd say to anyone who is trying to work in a way similar, or related, to what I'm doing. In order to really work fluently in a studio you need to have a model, or virtual image, of all those pathways in your head. If I'm running bits of data through it, I run it through the same pathway in my mental image, and then I know exactly what the results are going to be.

What do your patches look like? You can build your own user interfaces. Do you drag everything around to make it pixel-perfect, while aligning things inside the Reaktor windows?

No, no. All my programming is hacks. I love the concept of a very elegantly developed solution to a problem and a well executed piece of programming. But, in reality, my approach to programming is very much a means to an end and it's operating within quite strict time constraints. A really conscientious programmer makes remarks everywhere, explaining why this is there and what data it's sending to this bit and what sequence it's operating in. When I go back to these things I've created it's a bird's nest, spaghetti, nonsense – I've got a photographic memory for that sort of thing, so once I see it, it's like, "Oh yeah," and I'm back. I can understand why someone who analyzed my work would think, "This guy is a fruitcake." [laughs] I didn't study any programming or music – it's all been self-taught. I sometimes blush when I hear audio engineers talking about certain things. I didn't even know what gain staging was until about five years ago.

High-level DSP [digital signal processing] is often very difficult math. How does one end up self-taught?

Well, I'm not saying I just pulled it out of thin air. Curtis Roads' *The Computer Music Tutorial* is on my shelf. I haven't read it cover to cover, but maths was part of my education, so I'm very much at home with it. I absolutely love the world of numbers – it fascinates me and animates my imagination. The ideas of certain special relationships between numbers correlating to sounds – I'm in heaven when I'm thinking about that. I think a lot of people, and for good reason, would find it quite abstruse and quite unmusical. Turning that cold arithmetic into something that is an emotionally rewarding experience fascinates me. I'm not saying there is any magic in it at all, but it approaches some kind of alchemy.

But you also said earlier that you always require some sort of experimental edge to what you do. Do you feel sometimes that the emotional and the experimental are at odds? It's very hard to identify with something you haven't heard before.

That's an extremely good point. How do I answer that? You're saying that the struggle to have emotional substance and also my technical interest – that maybe these tendencies pull in different directions? I absolutely agree with you. I suppose my answer is my work. These are my solutions to that – or proposed solutions, if you like.

How do you feel about the relationship between the electric bass guitar (as your main instrument) and your computer programming? It almost seems like there's a divide there, because you can't actually plug a bass into it.

Well, you can and you can't. There are ways around it. In the late '90s, when I was still recording on multitrack tape, I did a lot of stuff by recording at half speed. What I'd do is run the tape machine at 7 1/2 IPS and pitch everything down an octave, play it at half speed so that the tracking and timing issues would diminish once I put it back to 15 IPS. With MIDI conversions I have to play so cleanly and so robotically. It takes all the expression out of my playing because expression just confuses MIDI. I mean, you can get a *little* bit, but beyond a certain amount it gets lost. Also processing the bass sound – there's so much you can do to make it sound like a synth.

What about computers versus live instruments? I think it's pretty obvious you're going to say that a computer is just an instrument.

Yeah.

But there is clearly a difference between them. Even if you're into the idea of wiring your brain into a computer and just using it as an expressive tool, what is the line between a computer and an instrument?

I do see what you mean. The conventional platitude would be, "Hey man, a computer is just another instrument." But I agree with you; there is always a line. The line I see is that with a computer you're always thinking ahead. With an instrument you've gotta think in real time. You've gotta be doing it in real time – there's no planning and there's no thinking ahead. I suppose the whole thing gets extremely blurry. Now with editing techniques and software you can turn a bunch of disconnected little bits of playing into what resembles a single smooth instrumental take. The difference is primarily in that real time experience of making the music, but in the end there is very little difference. It's an instrument – even a musician is just another sound source.

Do you feel that you program like a musician or play like a programmer?

That's a very good point. People will talk about "playing with feeling," but what someone might describe as "feeling" is a particular kind of idiom to me. It's a particular set of guidelines, "You hang on this note, you bend before going to the next one and then you slide up here." That gives you what then passes for "feeling" in a soulful kind of way. Or any other kind of idiom, like the rock soloing idiom. There are guidelines, and the people who do it most convincingly would probably brush away any kind of suggestion that they're following guidelines. Even if you can't break it down entirely into lists of instructions, there are typical hallmarks to what people would describe as "playing with feeling." For a while I was trying to extract that – I was trying to play like a robot, with no feeling whatsoever; to extract all conventional idioms and make it sound totally mechanical, like a sequencer. One of the first things I did in order to achieve that was the half-speed tape thing, because it completely interferes with human fallibility regarding timing. The whole thing just goes unnaturally tight. That was governed by the influence of programming on my playing, but it's not the only example. My album *Hard Normal Daddy* was an example of the process going the other way, trying to program like a player. When I meet a jazzier who's into my stuff, they always say, "*Hard Normal Daddy*, man! How did you do that fucking record?" It's just something I was trying to do – program like a player, make it have that swing, with a bionic aspect. That interplay is my schtick, isn't it? Is it? I don't know. But it feels like that's a key. It fascinates me. In the traditional division of labor of music those things are kept apart. But that's one of the things that makes me think, "What happens when you slam them into each other? What is that middle ground like? What is that no man's land between performance and programming?" I'm putting out records as a sort of "publishing the results" of those experiments.

What is it that signals to you when a project is done?

I try to work as fast as possible, and I try to make decisions on the spot all the time. So much of this is arbitrary. So many of these moments where I said, "It's done" – I could have carried on. I could still be making *Hard Normal Daddy*.

At some point you could have been writing your own sequencing software and never even put out that album. Are there breaking points where you think, "I gotta cut my losses on this one. I gotta use a plug-in."?

I've built up such a massive library of what you might call "default" plug-ins – options are there on tap for me now. They all came out of my own research and development, and they're also waiting to be modified. I do have those quick-fix

Introducing the RPQ500



Unlock the hidden potential of your mics - with 80 dB of clean JFET gain and *CurveShaper™* EQ.

The RPQ500 delivers a cleaner, more open, and responsive sound than you've ever heard before.

- 80 dB of Quiet JFET gain
- High-impedance *No Load™* inputs
- *CurveShaper™* EQ for extended highs and articulate lows
- Line-level Input for mixdown EQ
- Output level control
- API 500 format
- **\$649.00** list price



Audio Engineering Associates

Handmade in Pasadena, California
www.ribbonmics.com • 800-798-9127

solutions if I need to just grab it and chuck it in. If a synth isn't quite doing the job I'll swap it out and change it; but they're all things that were borne out of an R&D process. I like to think that gives it some kind of idiosyncratic character. But you get my point? There's nothing wrong with saying, "That's enough." You move on to the next thing and you end up with some sort of progress. I'm so dominated by options that I have to be really brutal about them.

It's similar to the map obsession. You have to pick right or left.

Exactly. You don't just sit there at the crossroads.

But, in spare moments, I'm haunted by the arbitrariness of it all. ☺

www.squarepusher.net

See Vijith's "primer" for Squarepusher at tapeop.com.



bonus article:

<http://tapeop.com/articles/89/squarepusher/>

TAPE OP is made possible by our advertisers.
 Please support them and tell them you saw their ad in TAPE OP.

smarter diffusers for smaller spaces

space saving

wide bandwidth

unparallels walls

cabinet-grade maple

powder-coated aluminum

temp & perm installation



ACOUSTIC-RAMP.COM

RA SOLD & DISTRIBUTED BY
REDCO AUDIO INC.
 AUDIO/VIDEO CABLES • CONNECTORS & ACCESSORIES

800-572-7280 • www.redco.com • acoustics@redco.com

**COMMUNITY, SURVIVAL, AND
THE FUTURE OF RECORDING**

August 2~5, 2012

WWW.POTLUCKCONFERENCE.COM

SPONSORED BY

**VINTAGE
KING
AUDIO**