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The knife edge of now.

Kaffe Matthews. June 2026



INTRODUCTION.

This article is not about modular synthesis, nor is it an attempt to explain the technical systems behind the electronic instruments I use today. The truth is, I am still unable to explain exactly what happens inside them. These beasts of audio possibilities that excite me in the way a violin did when I was seven, that I am always thrilled to play. No. What interests me is something else: the relationship between creativity and the present moment, and how these instruments have returned me to it.

I did not come to them because I was interested in modular synthesis. I came to them because I needed a way back to creating unique musical experience with all kinds of audiences.

My life as a performing musician began through improvisation. Around twenty-five years before I encountered modular systems, I was working with live sampling and processing, making music from sounds I generated in real time: violin, theremin, field recordings, underwater sounds, orchestras, the journeys of sharks, other performers or whatever happened to be available. Even the fan of a PA amplifier or the hum of a beer fridge could become material.

The starting point for each performance would be a concept and an overall shape from which to lift off. The journey I imagined we might take together. What could happen during the event was the most important aspect. Not the source material, but the possibility of the unknown transformations to come in that space with those people present. Through years of studio practice I had developed ways of shaping and moving sound through parameters such as size, colour, density, position, movement, intensity and proximity. Performance therefore was less about realising a plan and more about navigating the evolving sonic environments as they emerged.

Gradually, however, my focus changed. Increasingly dissatisfied with the limited audiences that experimental music often attracted - largely in specialist spaces, attended by people already committed to it - I found myself asking increasingly simple questions.

Where are the regular people?

My neighbours?

The local community?

How could I interest them in this extraordinary listening experience too?

So I began to move away from the stage and work more extensively with site specific installation, public space and architectural composition. I became interested in creating situations where people could encounter sound on their own terms and at their own pace. Vibrating through their bodies. On the street. Even mobile. Outside the conventions of the concert hall.

I continued to perform occasionally but my focus expanded. To consider the power of the context within which the music is made, performed and received as a compositional consideration. Context determines so much of the human experience and comprehension. Our presence, position within the space. The presence or not of others. Who? The performer, the sounds not on stage being *watched*. An anonymous passing street?

These questions fed into the increasingly structured work I began to build using multichannel systems and carefully prepared sample libraries. The material remained my own, and I was often still live processing, but the outcomes were predictable. Performances became more of a task, less about discovery, more about complicated technical build and more about the execution of that event. How well did I realise something I had already created?

Then came COVID and the realisation that I had drifted away from something essential. I missed risk. I missed standing in front of an audience without knowing what might happen next. I missed the unique atmosphere created by a particular group of people gathered in a particular place at a particular moment. Most of all, I missed the feeling that whatever was unfolding between us would never happen again. The vitality of that act that somehow holds something essential about being alive.

Let us return to uncertainty.

To improvisation.

To noise.

To intensity.

To tiny and vast.

Then, in 2021, I was introduced to a small modular instrument designed and built by programmer, theorist and artist Martin Howse whom I had known for more than twenty years. Called *All the Colours of the Noise*, it was unlike any instrument I had ever previously encountered.

Martin remained characteristically mysterious about how it functioned but I was hooked by the thinking behind it. Rather than being designed and built around straightforward technical logic, the instrument emerged from his research into the writings and systems of the fifteenth-century English alchemist George Ripley. Its architecture was informed by ideas of transformation, energetic relationships and alchemical process rather than certainty, efficiency or control.

The result was an instrument whose behaviour was often difficult to predict and impossible to fully explain. What immediately attracted me was not simply the sounds it might produce, but the possibility that it might require a different way of listening. Rather than rewarding mastery, it seemed to reward attention. Rather than offering control, it continually returned me to uncertainty.

Over the years that followed I acquired two further units and began performing with them regularly. Together they transformed my understanding of improvisation, musicianship and what it means to remain present within a performance.

To the creative demands of what I call *Now Time*: the continually unfolding present in which listening, decision-making and action occur simultaneously with whoever is there to witness or be a part it.

This article explores that territory. It considers creativity not as the execution of knowledge but as a practice of attention. It argues that uncertainty is not an obstacle to artistic work but one of its essential conditions. Most importantly, it asks what happens when a performer repeatedly returns to the knife edge of the present moment.

1. What is Now Time?

Now Time is not a theory. It is not a compositional method or a technical process. It is a lived condition that is always present. That we all experience when we decide to take time and tune into it.

The sun rises, falls, we wake, we work, we sleep, we recover and do it all again. We live within this. This linear time, which we also experience as a flow from past to future and back again. As we age, this linear time also appears to circulate. Patterns reappear. Ouroboros. The serpent eating its tail around the earth. As musicians we spend huge time working daily with linear time before a performance. Preparing gear, rehearsing material, designing systems, constructing instruments, composing structures, imagining outcomes. Much of this work is necessary. With no preparation there is no basis from which to work.

But during performance, something else happens. The weight of preparation disappears and attention becomes entirely focused on what is occurring now. The sound that is present and changing as soon as we choose to hear it. The space. The audience. The tiny shifts in energy. The possibilities emerging from one second, second? What is a second? To the next. This is what I call Now Time. An awareness of the present. When clock time disappears.

Now Time exists in the act of play. Hopefully it exists in performance too when the audience are present and the space is unknown and fear or something, maybe stress, or no electricity do not distract, - other things like sickness, sleep, travel, grief, hunger (good) are somehow always overcome. No, I think this extraordinary focus that appears in the live becomes something like musicianship. When the performer can hang on to their attention. When what happens belongs to nobody but it communicates with everyone.

I became aware of this quality long before I encountered modular instruments. It was present in my first experiences with improvisation. When the unknown sounds emerging would tell me

where to go, or when an audience's mood or lighting altered the atmosphere of a room. When linear time disappears and opens lateral so that the performance branches and spreads mycelial. When listening ceases to be the monitoring of a process and becomes the process itself.

I work with these instruments today as they intensify this experience simply because they constantly generate unknown situations. I have created simple set ups within them that allow many and precise variations which feedback into each other, so generating another set of infinite variations. My work therefore is to learn how to encourage and then deal with the outcomes.

This approach invites participation, not command. And this is the heart of their fascination. As a result, performance becomes less about controlling events and more about maintaining a state of heightened awareness.

Watch out for the temptation, especially for someone coming from a classical or trained musical background, to intervene too quickly. To grab control. To prevent surprise. To not welcome unknown or seemingly shocking sounds. To fill every silence. To steer every process. To correct every deviation trying to create an intended path.

Sit back.

Listen.

Wait.

Not yet.

Sometimes a sound can appear insignificant, too dull to bother with, but wait and it could begin to reveal thrilling and unexpected complexity. Sometimes a violent sound that bangs in brutal in fact is worth taking time with. An apparent failure can open a completely new direction. Sometimes the most musical decision is to do nothing at all.

In this sense, Now Time requires trust. Trust in the instrument. Trust in our own listening. Trust that uncertainty is not a problem to be solved. No. In fact it enables a sensitivity and enables a vulnerability. The performer as receptor. Strong. Entering a performance without knowing exactly what will happen carries genuine risk. Things can fail. What is failure? Ideas can collapse. Attention can drift. Yet, it is precisely this possibility that creates the intensity I seek.

And the audience recognises this too.

Whether or not they understand the technical details of what is happening, people can often sense when a performer is genuinely present and responding in real time. They can feel the difference between witnessing the execution of a predetermined sequence and participating in an unfolding situation whose outcome remains unknown.

This shared uncertainty creates a commons. Performer and audience occupying the same temporal space. Both encountering the work simultaneously. Neither knowing exactly where it will go next.

For me, this is where creativity lives. Not in the instruments. Not in the technology. Not even in the sounds. This wide ranging palette of timbres that I choose are my taste. No. The creativity emerges in the continuous negotiation between intention and circumstance, action and listening, decision and surprise. It exists on the knife edge between what is known and what is about to happen.

That knife edge is what I call Now Time.

2. Attention as Musicianship.

So what now is musicianship? Traditional musical training teaches and requires precision, accuracy, a certain kind of reliability and ultimately control of the instrument. They are valuable skills I admire and respect but they are not always the skills needed for improvisation.

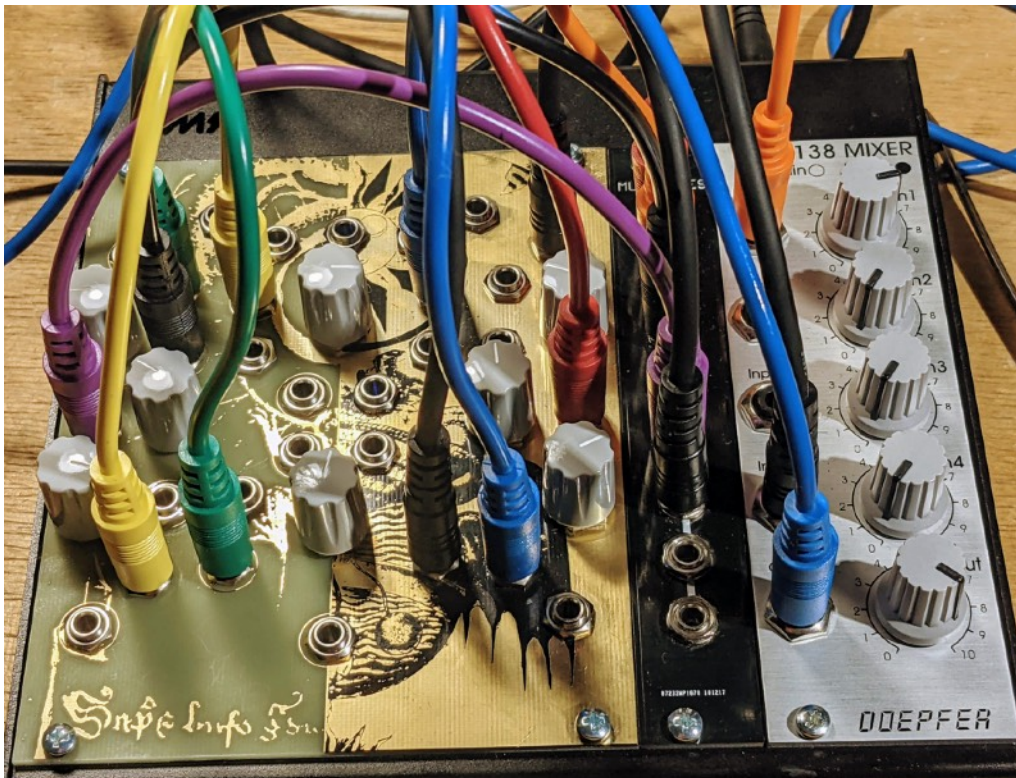
Working with unpredictable instrumental systems demands something else. A sensitive awareness, calm, trust and also an ability to hold back. The performer doesn't shape the music alone. The appearance of the music shapes the performer. It is a reciprocal and intertwined relationship. Sounds can suggest actions and unexpected events can require a change or adaptation. The challenge then becomes about maintaining an awareness of presence which is able to recognise these invitations when and as they arise.

This is where Now Time and musicianship intersect.

The musician's task is no longer only to demonstrate knowledge or expertise but to remain available to what is emerging. Technical skill remains important, but it serves a different purpose. Rather than imposing predetermined outcomes, it supports responsiveness.

In this sense, attention becomes a form of musicianship in its own right. The quality of a performance may depend less on what the performer knows than on how completely they are able to inhabit the present moment.

3. Meeting the Instrument.

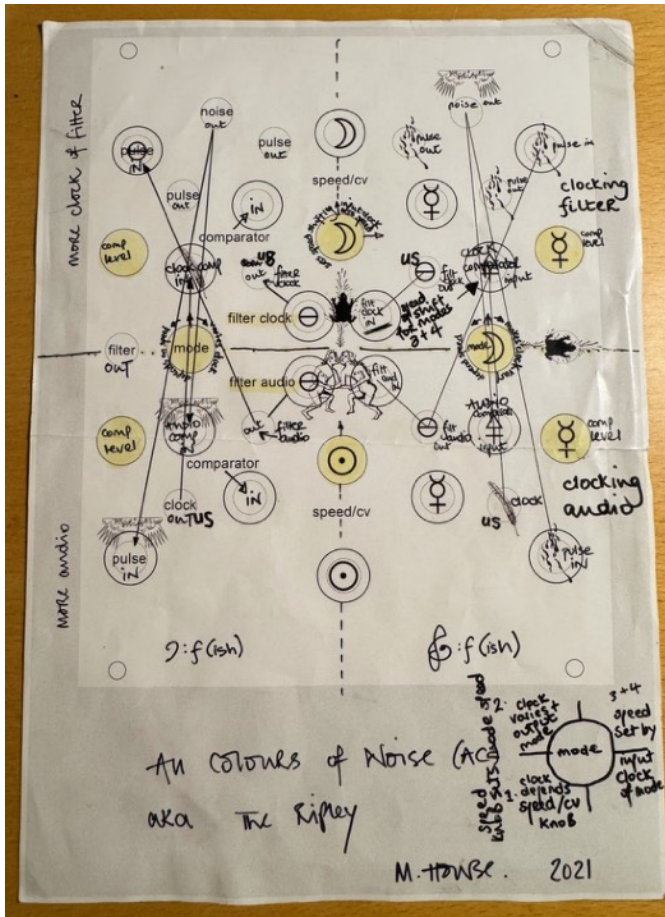


The first performed Ripley connections. October 2021.

September 2021 and I am alone in my studio with *All the Colours of the Noise* aka *The Ripley*. Away from Martin's fast explanations and the connections of many cables, changing this one to show that and that one to show this, I am floundering. I cannot generate anything like the colours we were hearing together. I remind myself I am a beginner. I get out the technical sheet and begin wiring outputs to inputs, trying to understand practically what these terms mean.

What is a comparator? A decision maker. If the incoming voltage is above a certain level, it does one thing; if below, it does another. But feed it a constantly changing noise voltage and tiny changes can produce wildly different outcomes.

And what is a clock? Not a clock in the sense of linear time. More like a pulse generator. Speed it up, slow it down, multiply it, divide it, feed it somewhere unexpected.



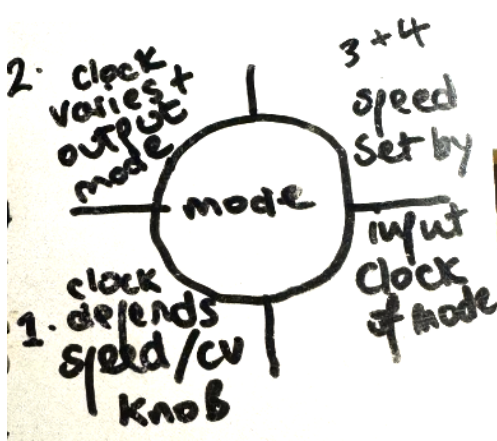
And a pulse? Bang. A single event. So what is the difference between a clock and a pulse? A clock generates continuous pulses. So if a pulse is a kind of trigger, stimulating an event, what happens if something irregular is used to generate pulses?

Already I'm intrigued. Simple ideas creating extraordinary complexity.

Then there are the two Mode knobs. One immersed in green on the left, one in gold on the right. These are essentially the mamas of the whole system: tiny in action and massive in outcome. Each knob is divided into sixty-four settings arranged in four quarters. My diagram shows what these different modes do, or what I think they do. When I make the smallest possible turn, something massive may happen, or nothing at all.

The Ripley Wiring Sheet.. 2021

I wish these knobs were huge lockable steering wheels, as on a ship or lorry, lockable with a foot pedal. I must not twiddle them so much.



I consider, reconnect, listen. A few blips and pops appear. Occasional swathes of noise. Over time, more. I think I am beginning to understand what is happening, only to discover that what I thought I understood behaves entirely differently tomorrow.

Agh.

Persist.

Get out the manual and understand it my inner voice still says. I return to this daily process on and off over weeks, having periods when I acknowledge defeat, leave it, then return. But. I have to admit to myself that there is an insidious and growing horror crawling within. I don't truly like the sounds I can currently make. Am I barking up the wrong tree?

Martin had showed me the instrument alongside other devices sending control voltages from external sources. Over all these years I have never really investigated synthesis. My analogue foot pedals died years ago. Mistake. I have used Max/MSP and Pure Data, but always with another artist who would build patches for me that I would then use and develop. I love the idea of coding. I have tried repeatedly to learn it but have never got very far. Instead, I have decided I am not a coder and instead collaborate with people who are.

I continue to pore over the wiring diagram. Read the manual again. The language is difficult to track. Every sentence contains terms I do not understand. Then something happens. I revisit Martin. Then revisit the diagram. Redraw it. Carefully rethink the whole system.

Then I begin to patch and play. Re-patch and play. At first I follow solutions that correspond to what little understanding I have. Pulses and clocks. Comparators and noise. Inputs and outputs. The filters. Perhaps this creates bass. Perhaps this affects speed. Perhaps this is the effect of the symmetrical butterfly winged design.

Noise, colours, lightning, square waves and clocks, vomited wings and feathers mashed through salt, fed by mercury to feed the final output, the Toad, then to recirculate, aiming for Gold. But is this where I got it wrong? Because the more I try to understand the instrument by solving it, the less I am able to play it.



Live with the Ripley, Bourogne, 2023, Samuel Carnovalli.

Eventually I stop insisting on understanding first. The traditional approach to learning an instrument – gaining expertise through methodical repetition in order to predict outcomes and execute intentions – is entirely wrong. I begin connecting things through ideas rather than certainty. I follow hunches. Listen. Let the instrument answer.

Only then do I realise that these instruments are not waiting to be mastered.

They just need to be met.

Interesting things start to happen.

This is how to understand it.

Play.

On the horizon I have a commissioned solo to open the Madeiradig festival, playing at the Casa das Mudas theatre. A large stage. Even though the Ripley is becoming meaningful, I have extended my set-up with a live sampling and granulating app running on an iPad as well as a small analogue synth providing bass or pulses as and when I need them. Both are new systems and instruments in every way, the oversensitive touch of the iPad, the dry skin of my hands, my failing eyesight and the size of the display next to the app's potential. Here, again, a tiny gesture can create massive changes, from joy to horror in the microsecond. But with the familiar danger and vitality of live sampling as a process with which I have performed for around 30 years, I have a known board from which to spring in the moment. I am compelled and consumed, clear and thrilled by the coming danger. It's as if this thick paper bag has been removed from my head.

December 2021. Madeira. My first solo performance with the system. The audience response is immediate and generous. I am hot with hope. I perform in Lisbon three days later. I am more confident. The musical outcome is quite different. A packed artists studio, not a huge theatre. Midweek, freezing, windy, on the edge of town. Yet the audience energy is extraordinary. Grinning. Excited. Shouting at the end. Their presence has shaped the music. Moments of Toad. Alchemical.

[LISTEN 1](#)

Now I know that I am no longer looking for instruments I can master. I am looking for instruments that can continue the conversation. I dispense with the synth. I let the Ripley play me. More listening. Less action. Multiple doors are opening.

Back in the studio, the Ripley's vocabulary begins to blossom and I trade my small iPad for a full-size screen in order to develop the live sampling and granulation side of the performance. I still think that live sampling remains one of the most important tools available to the electronic improviser and live composer. It allows moments to be captured from an unfolding stream of

uncertainty which can be transformed into material to be shaped, organised and reintroduced as required.

It enables a degree of determinacy within indeterminacy. Any sound can be seized, held, replayed, transformed, layered or simply stored for later use. The more I work with the granulation, the more I discover its extraordinary sculptural potential. Not simply to transform sounds, but to construct objects. To use solitary or from which to build.

Straight lines.

Points.

Wedges.

Clouds.

Spheres.

A swarm of the tiniest of particles fighting. Soft black drops of blood hanging almost motionless in space. A dense wall of texture that can be stretched, curved, folded, lifted or submerged. Sounds can hover, drift, accelerate, collide or dissolve into silence. Sound becomes material. I know what to do.

With all the colours of the Ripley available as source material, and with the increasing fluency beneath my fingers, I find myself able to shape the presence of a moment.

Grab.

Hold.

Mould.

Extend.

Slow.

Sink.

Lift something shining through density.

Cut.

Drop.

Bring up the swamp bubbling.

Allow the system to surprise me, then respond.

The relationship between uncertainty and intention breathes. The Ripley generates possibilities I could never have imagined. Live sampling allows me to recognise and hold them, reshape them and place them into a larger musical context, should and when I choose. I realise again that I am no longer trying to control the instrument. Nor am I at its mercy. We are collaborating. The instrument suggests and I respond. And so the conversation evolves.



In spring 2023, Martin and I discuss some of his newer modules. We discuss their details and I am hooked. The WORM (left), another Eurorack modular, built around emulated speech technologies from the 1970s to 1990s -remember Speak and Spell and The Barbie doll? Artificial voices, phonemes, fragments of language and transformed speech. With the added Howse magic of a further set of COMPOST modes allowing for re-working and transformation, there's a predictability within the possibles, and I jump at the option of having one.

I am also intrigued at having access to a synthetic human voice. Back in the early 1990s, while studying for an MA in Composition and Music Technology, I often struggled in listening sessions devoted to post-war serial modernism. Yet whenever a voice appeared, immediately I would connect. Here was something real to listen to. Not its meaning, neither a word nor sentence or song was necessary. It could just be a breath. No. It was simply the sound of the human. The presence. However strange, it communicated. Magical.



I have to convince Martin that I really want one, that I could really use one, and now. He, however, is much more enthusiastic about another module I should go for.

Caput Draconis. (left) *"A module for gnarlular audio processing, and advanced serpentine all-frequency audio pattern generation, encoding a series of successively pleasurable and tortuous sliding dislocations".* Normally out of stock, he has one left that could be ready to go within two months. We agree. I will take them both.

The concerts continue. International tours, collaborations, solo performances. Yet it takes almost another year before I have serious time with Caput whose variability and mystery I find are somehow much easier to fully understand. And its potential, of course, Howse style, is also enormous.



Caput's 4 symmetrical sides are each a connected shift register, which have 3 knobs and 2 CV inputs. The yellow central knobs are the mode knobs each with 64 modes, as in the Ripley. In the first 32 modes for each side, X controls clock speed. When I get used to the oblique layout of the X and Y's in relation to their specific mode knob, I'm on the way.

However, as with the Ripley, its a while before I get incredible sounds jumping. What they are and what they do though is completely different.

If I feed an audio output from the Ripley into the audio input of Caput, complex dirty punctuated sequences could sound that could be transformed to something else through my tiniest move to another mode. But again.

Moments of total silence.

Head scratching.

Frustration.

Yesterday, I thought this setting created something stunning. Today nothing. It's all about finding something that works, then working from there I say.

Nothing is repeatable.

Sit back. Listen. See what it does. Then move.

[LISTEN 2](#)

At the same time, my iPad technique and granulation practice become increasingly intuitive. Knowledge accumulates beneath my softening fingers. And the funny thing is, it's now the Ripley that has come into its own as the most vital, producing incredible sounds that I can scratch and swoop with trusting confidence, not knowing exactly what has happened, apart from the reconnection of one cable. And I haven't even begun to input my live sampling outputs into the Caput. And some solos use no iPad at all. It's still just beginning.

Villa Kuriosum, Berlin June 2026, image Utku



Last night I played a show in an underground brick cellar in Berlin. It houses a bespoke, powerful, full range and fabulous sound system. It's small and I played at almost twice the density and volume to normal. Not ear screaming or damaging, but physical so that we, packed in tight as sardines, purely vibrated. I have rarely known such intensity. The space expanding and contracting with the music. We were still high on it afterwards. The alchemy.

Was this a moment of Gold?

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