FUTURE HEADS
PART 3

11 THE LISTENER
Rob Young (opposite)

Recently, the art rock band Franz Ferdinand paid tribute to The Fire Engines, a largely unknown Scottish band from the 1980s which had a crucial influence on the sound of this spectacularly successful modern group. Music can lie dormant in this way for decades and suddenly awake, triggering off cultural chain reactions. Much of the most ingenious and creative music of the past 50 years – whether it's late-period Beatles or astral jazz traveller, Sun Ra – has tended to stick together elements of what's gone before and tweak them into alien shapes.

In more recent times, the 'sampler' has profoundly changed the way in which music is composed – and producers have barely even made a dent in the vast library of recorded sound that's there for the taking. In the future, there will be more and more ways of messing with it. Future versions of software such as Metasynth and AudioMulch will mutate digitised sounds or allow musicians to build 'virtual instruments' – microcultures of sounds that interact with each other in semi-random routines.

The future of music holds a struggle for supremacy between formats and a revolution in the way the industry does business. Record companies are now starting to recognise the potential of customers downloading tracks for themselves, but the de-materialisation of digital sound (with increased use of technology such as MP3 players) will bring on the slow death of the CD. Labels will therefore be forced to broker new kinds of relationships with their artists. Musicians will have much greater control over the distribution of their own work: no need for a record deal when you can sell your music directly to fans.

There's a theory that just before the sun finally goes supernova, there'll be one last perfect day on Earth. Whichever year that is, it'd be fascinating to witness how our descendants commemorate that moment, and to hear the music of that distant future at one final gig.
Rob Young is Editor-at-Large of *The Wire* magazine and Editor of *Undercurrents: The Hidden Wiring of Modern Music* (Continuum Books)

12 THE THEORIST
Lisa Randall

It's the near future that interests me. Close to Geneva, a new research facility will become available in 2007, which will be able to detect gravitational signals from astronomical objects and might also have the ability to detect signals that can give us insight into the very early universe. They might detect signals from phase transitions – analogous to ice turning to water, but indicative of far more exotic phenomena, like the universe exploding exponentially. Or they might tell us that the number of influential space dimensions has changed as the universe evolved.
Lisa Randall is Professor of Theoretical Physics at Harvard University

13 THE DESIGN EXPERT
Richard Seymour

The 21st century's principal technology, genetic modification, won't stop with animate objects. Once we can control composition of cellular growth, we'll discover that we can program organic materials to create many objects that we, at present, build. The power source of many future forms of propulsion, for instance, may well be glucose – powering artificial 'muscles' to create dynamic motion. Put simply, we will 'grow' many objects. Whilst we're doing this, we may well assign certain objects a rudimentary form of 'intelligence' at the same time. We may wash our clothes in semi-sentient washing devices that actually 'digest' dirt. We may drive to work in 'mechanical animals'. We may, at the same time, enhance our bodily dysfunctions (hearing, walking, seeing) with enhanced bio-prostheses, which will give us all amplified abilities. It's an exciting future, but the trick with the runaway march of bio-intervention will be in knowing where to stop!
Richard Seymour is a Director of product design consultancy, Seymourpowell Ltd

14 THE FUTUROLOGIST
Ian Pearson

The UK government is considering a new system that will link cars to a Global Positioning System. This will allow speed limits to be automatically enforced: your car will know the speed limit for the road you are on, and will automatically brake or ignore the accelerator to keep you within the limit. Leeds University, which has been running a trial of this technology, claims that this will save about 1,000 lives every year. I very much doubt that, and expect that it will actually increase road deaths, not decrease them. But by 2020, we will be getting real intelligence built into our vehicles. This will take over driving almost completely and will allow far more cars on the road to drive much faster, closer together, and with very few accidents. Cars will link together electronically to allow them to be co-ordinated without the misunderstandings and sluggish reactions of human drivers.
Ian Pearson is a futurologist working with British Telecom

15 THE SEER
Graham Flint

In the future, sensors will be embedded in the things we wear. Not only will these sensors increase our awareness of the surrounding environment, but may allow information to be transmitted to friends elsewhere. Viewing devices will become less obtrusive, eventually allowing wearers to switch between their view of the real world and a 'virtual world', relayed to them via wireless link. Instead of sharing experiences after the fact, we'll share them in a contemporaneous fashion. In a sense, we will be able to take our friends along on a vacation, rather than telling them about it upon our return.
Graham Flint is a scientist and helped develop the Gigapxl camera (www.gigapxl.org)
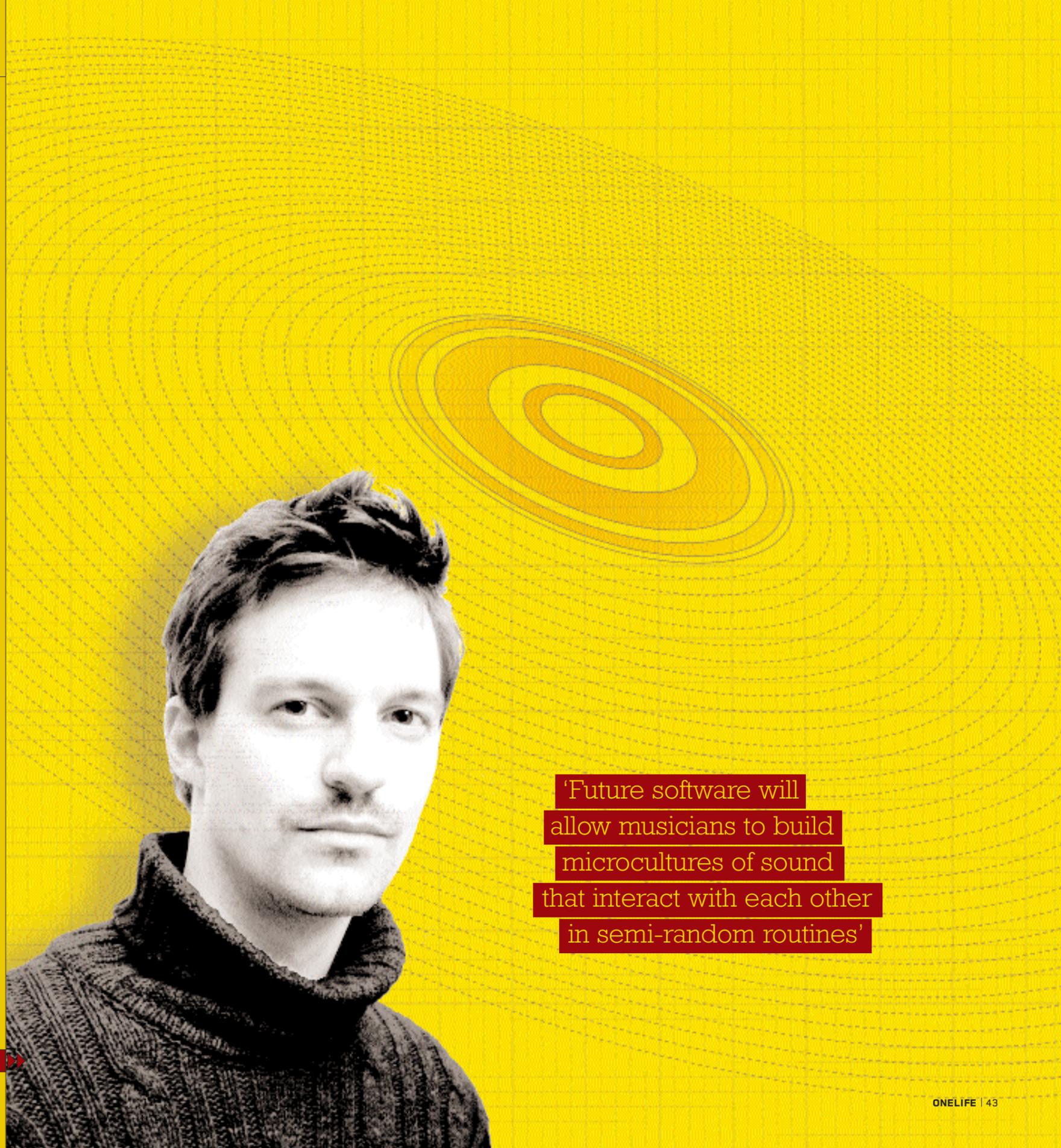
'Future software will allow musicians to build microcultures of sound that interact with each other in semi-random routines'