



ANTHONY CUTHBERTSON MEETS LEE ROURKE



‘Everything I write is somehow struggling against the ongoing gentrification I see around me’

With two novels, a short story collection and a poetry collection all forthcoming, the writer talks of the place where it all started

If Lee Rourke had a place, like Joyce had Dublin, or Hemingway had Paris, his would be Hackney. The borough and its surrounds have shaped and influenced both him and his work like that of few other writers in recent years.

“Hackney has played a major ‘role’ in my life,” Lee says. “It had to. I threw myself into Hackney and fell in love.”

When Lee moved to the borough ten years ago from his hometown of Manchester, he became involved in the “fragmented” literary scene. As his relationship with Hackney developed, so did his writing, in the form of a collection of short stories entitled ‘Everyday’, and eventually his first novel, ‘The Canal’. It is

for this that Lee is probably best known. Winner of The Guardian’s ‘Not the Booker Prize 2010’ and currently being made into a feature film, the book is both set in and inspired by the places and characters around where Lee once lived.

It follows the story of an unnamed narrator who, bored by the monotony of a nine-to-five existence, resigns himself to a bench by Regent’s Canal. Day after day he remains there, watching the world go by.

The novel shows the worst sides of Hackney – the street gangs, the violence, the stench, the filth, the “unremitting decay” – but the book is not a critique of the borough, it is a much broader reflection of modern life and mod-

ern living. Hackney, with its diverse history and complex polarities just offered the platform from which to portray these ideas.

“Everything I write is somehow struggling against the ongoing gentrification I see around me,” he says. “This money-mad creation of unreal realities which people buy into – these sterile, glass-fronted box apartments springing up around the dead, stagnant water of the canals of London are a fine example.”

Lee describes this gentrification as being “viral in the area”, a fact that saddens him. The result, he says, is the marginalisation of older communities.

“Most of what happens in The Canal happens in Hackney on a daily basis. The events

are based on real events. Although, The Canal is not a ‘realist’ novel in that sense: these events merely haunt the novel, as does Hackney itself.”

Although he has recently moved away, Lee’s time in Hackney continues to influence both him and his work, the foundation from which he developed into the author, poet and literary critic that he is today. “I’ve always wanted to write, I think, although if I could do something else I would.” Lee concludes: “Writing is hard work.”

Lee has two novels forthcoming, ‘Vulgar Things’ and ‘Amber’, and a new short story collection, ‘I Like To Be Stationary’. His debut poetry collection, ‘Varroa Destructor’ is out at the end of February via 3AM Press.

“
*I threw myself
into Hackney
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”

URI
GELLER

BEYOND *the* BEND

Uri Geller is known the world over as “the famous spoon-bender”, considered by most to be nothing more than a harmless eccentric. **Anthony Cuthbertson** on the mindbending truth that lies behind his career in show business. Portraits by **Thomas Chrisohoidis**

Almost forty years ago in a laboratory at the Stanford Research Institute, Uri Geller dumbfounded a group of scientists with his apparent ability to read minds. They could not explain his demonstrations: in controlled tests he was able to replicate the size and shape of drawings locked in safes or in rooms several hundred metres away through what he claimed were his psychic abilities. They concluded in the journal *Nature*: “As a result of Geller’s success in this experimental period, we consider that he has demonstrated his paranormal, perceptual ability in a convincing and unambiguous manner.”

Such validation was to be the launchpad that catapulted Geller into the world of television talk shows, sell-out performances and celebrity stardom, and a career that has drawn in some of the most powerful, wealthy and famous people of the past 50 years. In all that he has achieved over the decades, he is still undoubtedly most famous for his ability to bend spoons.

“Directly, there are thousands of spoons out there that I’ve bent,” he tells me. “But indirectly? Millions.”

He welcomes me into his mansion on

the banks of the River Thames with a tight handshake from a slim, strong hand. As we talk over a cup of tea he twiddles a gold teaspoon, given to him by a Nigerian King, and ponders the object that has so defined his career.

“I look at it as an art object. It’s beautiful, it’s sensual, it is thousands of years old. People make fun of me, ‘Oh, the spoon-bender’. Hey, I deal with things that have fed you for centuries.”

It is clear from his surroundings that spoons mean more to him than just an act. His garden contains spoon sculptures, his home is peppered with spoon-inspired ornaments, and, as he shows me later, his beloved Cadillac is adorned with over 5,000 spoons, forks and crystals.

But there is much more to the man than contorted cutlery. Running in tandem to his career in show business is a far more mysterious and intriguing side to the 66 year-old that has remained largely out of the spotlight. Beyond bending spoons and mending watches, Geller has been employed variously as a dowser, a remote viewer, and, perhaps most intriguingly, a secret government agent.

A new BBC documentary by Oscar-winning film maker Vikram Jayanti charts Geller’s career as a ‘psychic

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spy'. In the film, 'The Secret Life of Uri Geller', Jayanti documents his involvement with the CIA and other intelligence organisations, which all started with the experiments at the Stanford Research Institute. The scientists working at the SRI were in fact reporting their findings of Geller's abilities directly to the CIA.

Not long after these early experiments, he was recruited by the CIA in Mexico with the task of flying alongside KGB agents on commercial flights, attempting to erase the contents of floppy disks that the agents were carrying. Whether or not Geller was successful remains to be proven, with neither the CIA nor the KGB ever likely to reveal whether this worked, though he does say that after the first mission he was asked to do it again.

The senior CIA officer that handled Uri Geller's case, Dr Kit Green, was so convinced by Geller's ability that he authorized the expenditure of around \$20 million for research into the paranormal at the SRI.

In the documentary, Jayanti talks to scientists from the SRI and powerful friends of Geller that include the Prime Minister of Israel, Benjamin Netanyahu. There is not one that offers any scientific reasoning behind Geller's "powers", and at no point does Jayanti imply that Geller might be a shyster.

"Uri has a controversial reputation. A lot of people think he is a fraud, a lot of people think he is a trickster", Jayanti said when the documentary was first screened at the Sheffield Doc Fest in June, "but at the same time he has a history of doing things that nobody can explain."

Throughout the film, Geller remains coy about his involvement with any of these agencies, going only as far as to say: "The camouflage for me is 'hey, I'm innocent, I'm a showman'. But there is that other side to Uri Geller, and that side is the dark side." He concludes: "I will always make sure that the final truth is never known".

Geller tells me that the documentary was a difficult thing for him to do. "I was absolutely shocked at some of the things that were said as any intelligence agency has very strict prohibitions." He "neither confirms nor denies" that he was involved in the Israeli hostage situation at Entebbe in 1976, or that he has been tasked with finding hidden North Korean tunnels, or was asked to locate nuclear reactors in Iraq for the Israeli airforce. However, he does admit that in the wake of 9/11 he was once again approached by someone named 'Ron' from an intelligence agency, but he refuses to give the surname or even the agency. It might be assumed that this "reactivation", as he refers to it, was for the purpose of tracking down



MYSTIFIER
Uri Geller
has become
a byword for
bent spoons

help them to make the Soviets sign nuclear arms reduction treaties, I did that."

When I ask him about his relationship with Netanyahu, Geller says that he is still involved in peace-keeping and diplomatic missions, but only "very quietly". It is yet another thing that he doesn't talk about, going only so far as to say: "There are activities that I'm involved with which are trying to gel two sides that are constantly at war."

There is a lot more to Geller that he doesn't want to talk about, or at least is cautious when he does. He tells me that his mysterious parallel career away from show business has also been his main source of income over the years, and it has nothing to do with psychic spying.

"My main financial success came from oil, minerals and gold, not from spoon-bending." He pauses as he notes my surprise. His gaze is intense, even from behind the tinted glasses that he is wearing. "There are many companies that use me,

"DIRECTLY, THERE ARE THOUSANDS OF SPOONS OUT THERE THAT I'VE BENT, BUT INDIRECTLY? MILLIONS."

private and national. Most of the people that hire me are believers, the CEOs, the directors of the companies."

His career as a dowser - someone that attempts to locate the position of oil and minerals beneath the earth without using scientific apparatus - began in the early seventies, at a time when his celebrity star was shining the brightest. In the same period that he was filling stadiums with his shows and baffling millions with his spoon-bending and mind reading displays on prime-time television, Geller was also being taught how to dowse by Sir Val Duncan, the former chairman of the British-Australian mining company Rio Tinto. By now it is unsurprising to hear that he is reluctant to talk about how much

Osama Bin Laden and other terrorists through remote viewing.

How high up the order of command Geller's missions went is not clear, though it is known that President Jimmy Carter was a known believer in the paranormal and that Uri Geller was present at his inauguration at the White House in 1977. An article that appeared in the New York Times in 1984 reported that "in 1977 President Carter ordered the Central Intelligence Agency to conduct a high-level review of psychic research behind the Iron Curtain in an attempt to assess a possible Soviet threat". Later, in an interview with Moon Magazine, Geller divulged: "When the Americans asked me to come and

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he continues to do it, saying that the companies, “are afraid of controversy. They don’t want shareholders to know that they are using dowisers because there’s so much technology out there to use.” Indeed, the only comment that Rio Tinto

were willing to give me on their relationship with Geller was: “That was a long time ago”.

He does, however, tell me that he has made a considerable fortune from it. “My success rate is very high, otherwise I wouldn’t be living in such a, you know...” He gestures at his opulent surroundings. Geller’s mansion, which he shares with his wife Hanna and brother-in-law Shipi, is a scale replica of the White House in Washington, complete with additional wings that he added to make the resemblance even greater. Inside are marble floors, silk-lined walls, and a bathroom that contains gold taps and a marble toilet - something he bought for his late mother after she told him as a child that only a king sits on a marble toilet. (Despite these trappings, it is perhaps curious to note that Geller does not touch money; he refuses to carry a wallet or credit cards, instead getting Shipi to handle all of that.)

Garnering fame and fortune through acts that have no scientific rationale is sure to attract naysayers and critics. They claim that every one of Geller’s powers can be explained using stage magic techniques. By far his most persistent critic, the magician James Randi, says that if he is indeed using his mind to bend spoons, then: “He’s doing it the hard way.”

Those that make claims that Geller is a fraud can find themselves threatened with legal action. Randi himself has had several lawsuits brought against him by Geller, resulting from books he has written and interviews he has given, while other notable defendants have included Nintendo and Timex.

When a video appeared on Youtube in 2007 discrediting Geller, a takedown notice was filed by Geller as it featured an eight-second clip that he claimed copyright over. The reason for having the video removed, however, might have less to do with copyright infringement and more to do with the fact that it rubbished some of Geller’s techniques. The video had been uploaded by Brian Sapien, co-founder of the atheist activist group Rational Response Squad (RRS). Sapien went on to sue Geller, with Geller filing a counter-suit. The matter was eventually settled out of court, with the clip remaining on Youtube.

Sapien claims on his Twitter profile that he has “proudly led thousands away from religion!” and continues to confront what he considers to



be irrational claims, like those of Geller. He believes that there simply isn’t any scientific proof that techniques such as dowising work, and that paranormalists like Geller might be in denial.

“Paranormalists may

PHYSICS AND PSYCHICS Geller at the SRI in 1974 - scientists there were convinced of Geller's abilities

be so far removed from reality that they forget that they are making up their claims”, Sapien tells me, before suggesting that they might in fact be conartists. “Either way, they don’t deserve any credit from rational and sane people for anything but entertainment.”

One year after Geller’s run-in with Sapien, he appeared at a convention of magicians to accept – somewhat controversially – an award for his services to the promotion of magic. When asked at the ceremony whether he was a magician, Geller gave what some believe to be a very telling response.

“Let’s say I wasn’t real, let’s say for the last years I’ve fooled the journalists, the scientists, my family, my friends, you. If I managed to fool them, I must be the greatest.”

It seems unlikely that after all the lawsuits filed and books written that this was in any way an admission to the fact that he is nothing more than a magician, and he is adamant when he tells me that although he might not fully understand

“SCEPTICS WOULD SAY THAT JESUS CHRIST WAS A MAGICIAN. I BELIEVE THAT HE HAD SUPERNATURAL POWERS.”

it, he definitely is a believer in the paranormal. Four years ago he bought an island off the coast of Scotland, convinced that there was Egyptian treasure buried somewhere on it. At the time of writing, none has yet been found.

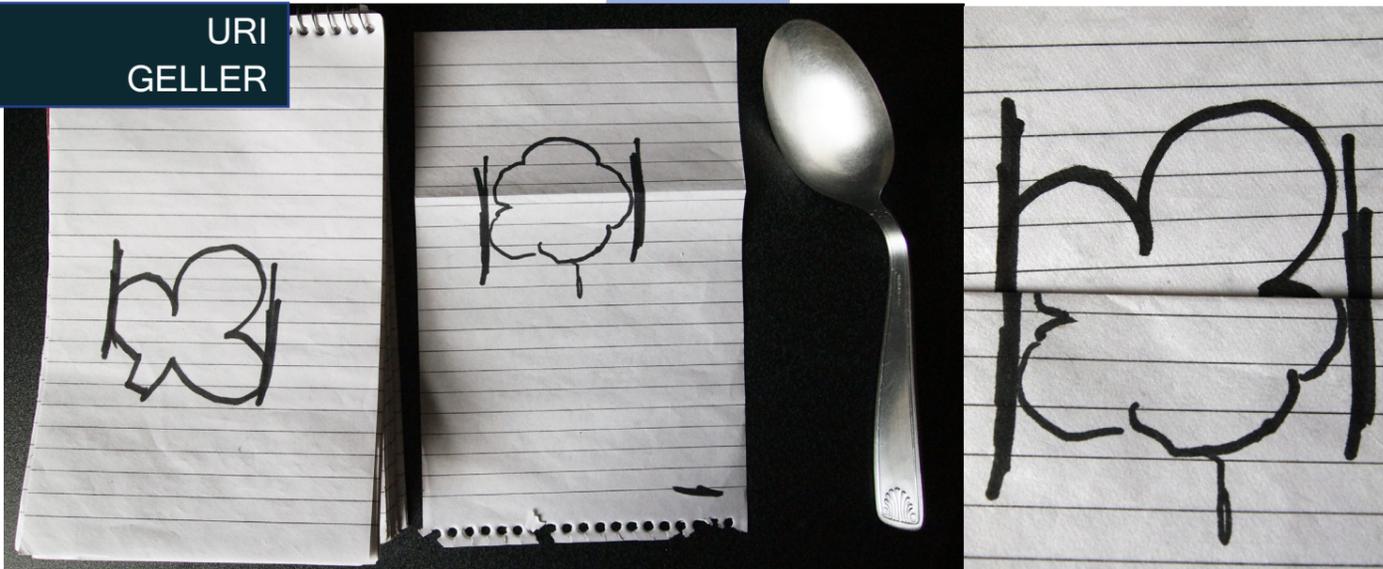
His belief in the paranormal and supernatural seem completely at odds with his religious beliefs - he’s a practising Jew - that are evident from the mezuzahs and other religious paraphernalia that share the same space as his spoon ornaments and crystals. I ask him whether they clash in any way.

“They absolutely tie in. Every bible is absolutely riddled with supernatural tales. Moses and the Red Sea, you’ve got all these powerful stories that are incredible and I believe in them. Whether it’s the bible or the Koran, or the Kabbalah, Torah, or whatever all other religions believe in, I also believe in them.”

The acclaimed journalist Jonathan Margolis was Geller’s biographer and before meeting Geller he insists that I read the book, ‘Uri Geller, magician or mystic?’ It is a fascinating read written by

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MIND GAMES
The drawing duplicated by Geller, together with the bent spoon. The vertical lines were drawn by Geller to show the preciseness of the sketch

someone who can only be described as a convert. Starting out as a sceptic, throughout the course of the book Margolis is completely taken in by Geller's spell. He writes: "I have a suspicion that a hundred years from now, the sceptics will seem in retrospect like superstitious primitives who missed the big picture... If it should turn out in the future that Uri was, indeed, a Jesus figure, I should be a little surprised, but delighted. It will have meant, for one thing, that I have accidentally written the Bible." Later, when talking about Jesus, Geller tells me: "sceptics would say that Jesus Christ was a magician. I believe that he had supernatural powers."

Not only do his beliefs encompass the supernatural, paranormal, and every written doctrine that he's ever heard of or read, he tells me that they also include the idea that we are descended from aliens. This seems to only heighten the enigma that surrounds Geller.

"I don't quite buy into Darwin, that we crawled out of the muck. I don't believe in evolution. I'm not close-minded to it, but if I had to categorize it, I would go for an extra-terrestrial explanation, that we are from different stars in the universe, that perhaps a UFO crashed on planet earth a quarter of a million years ago and beings walked out and that's how we evolved to what we are today."

Knowing that he likes a coincidence - or synchronicity as he refers to it - and aware of his fascination with the number 11, I tell him that when I put his address into my GPS at my home, it told me it would take one hour and 11 minutes to get there. He shrieks with delight: "You see?"

I tell him also that on the drive over, his old friend and the best man at his wedding, Michael Jackson, was playing on the radio.

"To me that's double validation that you were meant to come here today. No matter what, the universe wanted it to happen. Synchronicity."

He pauses for a moment. "Wait. Let me just check my emails. I would really freak out if there was something to do with this... hang on, let me check." He takes several seconds to scroll through his phone. "No, it's not. They're all spams."

Geller receives more than 300 emails a day.

Some are from children, some from people asking for his help with psychic healing - something that he does not practice - others from numerologists who, like him, obsess over the number 11, and a few from the "mentally deranged". He replies to each one personally. "For me it's just a few seconds out of my day, but for them, it's moving. I have to do it immediately, people think I'm rude. I reply when I'm at parties, I answer while I eat."

Before I leave, Geller is keen to show off his abilities. After a mind reading trick, where he makes a vaguely successful attempt to copy a drawing I have done on a piece of paper, he goes to get a spoon. As he gets up he pauses: "Did you bring one?" Sheepishly, I reach into my bag and bring out one I had carefully selected earlier from my cutlery draw at home - one usually reserved for digging in to a stubborn tub of frozen ice-cream. "Oh, that's huge," he exclaims as I hand it over.

He proceeds to rub it and sure enough, when he holds it up it is slightly bent. He takes me outside into his garden to feed the ducks - two wild maynards he's named Emilia and Acer - and when we return the spoon is bent at a complete right angle. If it is a trick, I don't see it.

With all that his career has encompassed, I ask

THE SPOON IS BENT AT A COMPLETE RIGHT ANGLE. IF IT IS A TRICK, I DON'T SEE IT.

him how I should refer to him. Before he answers, he first tells me that he is an "expert in PR", able to mould and shape his career as the times change. He has previously called himself a psychic, a mentalist, a paranormalist and telepathic. "Today, I call myself a 'mystifier'". It is a title that he coined because, "it's not here and it's not there, it's a great term. It's like what my career was all the time: Mysterious. It encompasses everything."

This mysteriousness reaches even to the point of answering my final question and the most fundamental thing there is to ask of him: does he really have supernatural powers? To this he replies with a smile: "I will let my audience decide that." ■

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Graphene

Age

The potential of a new material, widely hailed as a 'miracle substance' with 'revolutionary potential', is only just beginning to be realized. Stronger than steel, more conductive than copper, and as flexible as rubber, graphene could cause a paradigm shift in the materials industry

By Anthony Cuthbertson

BUSINESS | UK

In late 2003, in a small laboratory at The University of Manchester, two Russian physicists were working on one of their 'Friday evening experiments'.

Nine times out of ten, these offbeat, interest-driven experiments went nowhere, or when anything did happen they would be of no use or have little practical application. Indeed three years earlier, one of them had earned himself an Ig Nobel Prize in physics – awarded for particularly trivial achievements in scientific research – for one such Friday evening experiment that had led to the magnetic levitation of a frog.

The particular experiment Andre Geim and Konstantin (Kostya) Novoselov were working on that evening looked to be going the same way as the countless unsuccessful ones before it. They had already failed twice and were about to give up trying to isolate the perplexingly illusive two-dimensional material known as 'graphene', when Kostya suggested Scotch tape. It was an idea that, seven years later, would earn the pair an actual Nobel Prize in Physics.

Writing with an ordinary pencil onto paper, Kostya used the tape to lift off the top layer of graphite from the page. When they observed it, Andre and Kostya realised to their amazement that they had succeeded in producing the first isolated flakes of graphene, previously thought unstable in its free state. It was the first of a "stream of coincidences" that would lead to some remarkable results very quickly. "One glance at it and we knew – that it must be it", Kostya says. "I tried it and within a few days we had a working device."

By pure serendipity, they had also chosen a very particular substrate that could make it possible to actually view this one-atom thick material. "This was a huge coincidence – just unbelievable. It was only a few months later that we realised how lucky we had been."

In October 2004, a paper published in the journal *Science* reported their findings and opened up the scientific field to the discovery and understanding of this new material. Inevitably, better and more efficient methods of producing graphene

were realized, allowing for the possibility of the manufacture of devices such as touchscreens that could use graphene in a practical context.

Most significant of all in the discovery of this material, was its versatility, cost and abundance. Dubbed the 21st century's answer to plastic, and a potential successor to silicon chips, graphene is cheap to produce and plentiful, unlike, for example, the rare earth metals that currently enable the latest smartphones and tablets.

A 'miracle material'

SINCE ITS DISCOVERY, THE PRACTICAL applications of graphene haven't stopped growing. 200 times stronger than steel, as flexible as rubber, and able to conduct electricity better than any other material at room temperature, graphene can do the same as many other materials, just better. The list of its possible commercial applications is as broad and impressive as its abilities; everything from electronics, to body armour, to desalination and water purification technology.

In 2008, a team of scientists from Columbia University, New York, proved that graphene was the strongest material ever measured. Professor James Hone who led the team, said, "It would take an elephant, balanced on a pencil, to break through a sheet of graphene the thickness of Saran Wrap."

Last month it was revealed in an article published in *Nature Communications* that a team of scientists, led by Professor Richard Kaner from UCLA, has developed a way to mass-produce graphene micro-supercapacitors – devices that can charge and discharge electricity a hundred to a thousand times faster than standard batteries. This could have profound implications on the future of battery-powered devices, in that the source of power would no longer lag behind the technology it supports.

Using graphene micro-supercapacitors, mobile phones could be charged in a

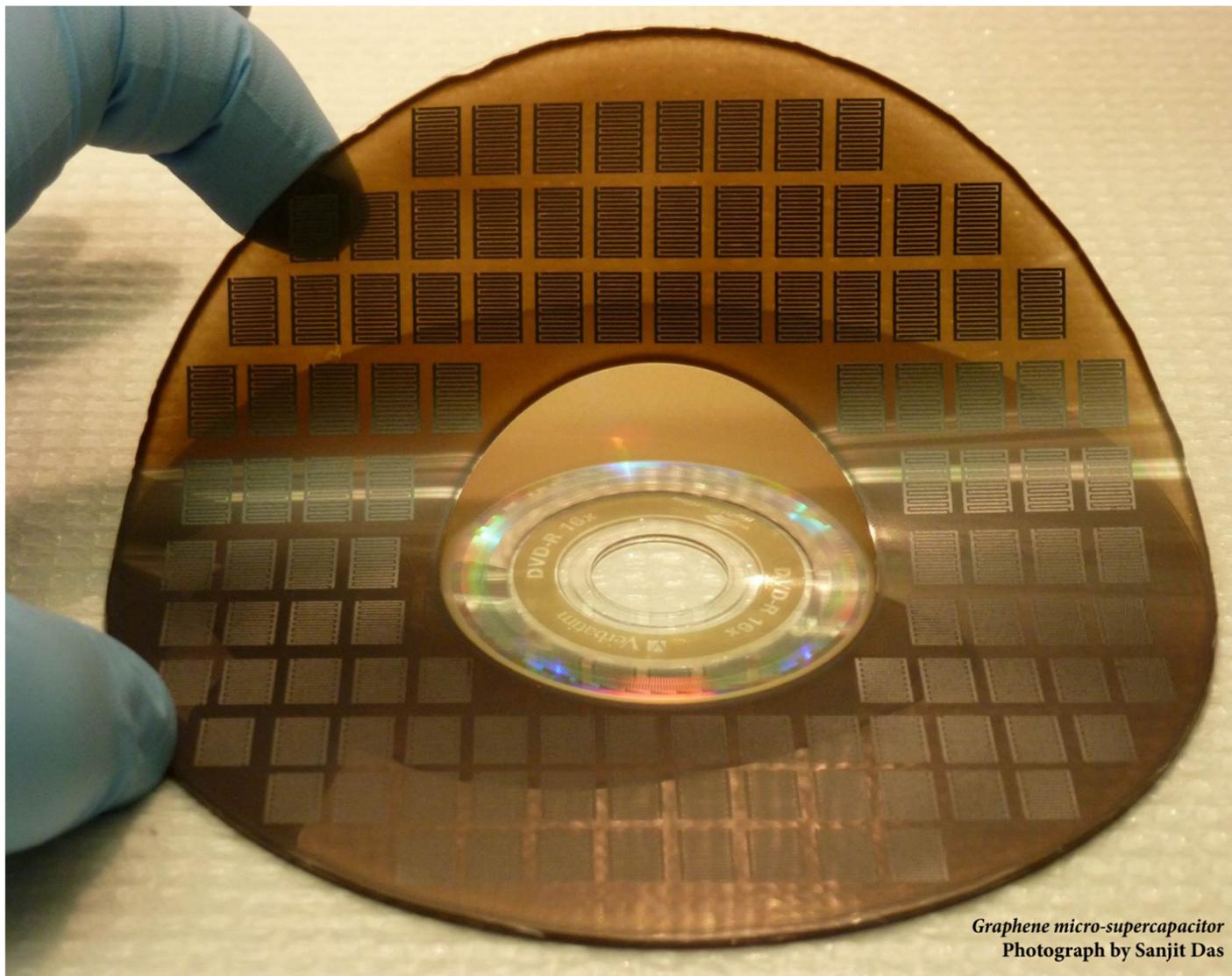
matter of seconds, and even more significantly, electric cars could be charged in the same time it takes to fill a regular car with fuel – and run for longer. By finding a way to efficiently mass produce these micro-supercapacitors, Kaner and his team may have just transformed the way we see and use portable electronic devices. When talking about their discovery, Kaner says, "I thought we had something very important. I thought the world changed at that point".

The full capabilities of this material are as yet unknown. The latest in this long list of incredible properties it possesses was revealed last week in *Nature Physics*. A team comprised of researchers from the Institute of Photonic Science (ICFO), as well as scientists from MIT, Max Planck Institute for Polymer Research, and Graphenea S.L., discovered that graphene was able to convert light into electricity at a higher rate than previously thought possible. What's more, not only would these solar cells be highly efficient, because they are made of graphene they would also be transparent and flexible, making them extremely adaptable. With each new breakthrough with the material, the possibilities appear to rise exponentially.

Whatever capacity that graphene is utilized in, there is one other property that makes it remarkable. As it is composed of just a single layer of carbon atoms, it is not only biodegradable; you could use it in your compost. Therefore, not only does it make items like batteries obsolete in terms of the power it can store and release, it eliminates the environmental hazards that arise when disposing of them.

The Global Race

COMMERCIAL INTEREST IN THIS new wonder material is reflected by the surge in patents being filed for different aspects of it. Since 2004 there have been over 7,000 graphene patents and patent applications worldwide, the majority of which coming from China, the US and South Korea. In the UK there have only been a relatively small 54 patents, over 350 less than Samsung. This is something that George Osbourne looks to be aiming to address, having ploughed £21.5 million



Graphene micro-supercapacitor
Photograph by Sanjit Das

into research to commercialize graphene at the end of last year.

Science Minister David Willetts said: "It's now vital we harness (and) exploit the commercial potential of this astonishing material. This significant investment will foster innovation, drive growth and help the UK get ahead in the global race."

On top of this, a National Graphene Institute is to be built at the University of Manchester - the same place where graphene was first discovered - at a cost of £61m.

However, this is still only a speck of what others are pouring into graphene. The European Commission, for example, announced in January that they would be making a €1 billion investment towards a decade's worth of research and development of the material, justifying such

a fund in a statement that claimed the substance was "set to become the wonder material of the 21st century, as plastics were in the 20th century."

In Asia, the Graphene Research Centre (GRC) at the National University of Singapore has sought to form strong ties between industry and academia. Professor Antonio Castro Neto, who established the GRC believes that such a connection and strong investment is vital if the potential of graphene is ever to be realized outside of a laboratory. "The amount of time before we see graphene used in a wider commercial context is inversely proportional to the amount of investment," he tells me. "As investment in graphene production is increasing worldwide, we may see simple graphene applications in one to five years or so, and high end applications within

five to ten years."

The growing interest in graphene and its extraordinary properties, from both countries and companies, have led some to label this as the dawn of a new industrial revolution. Vincenzo Palermo from the Nanochemistry Lab at the Institute for Organic Synthesis and Photoreactivity (ISOF), in Italy, compares the potential of graphene in transforming society to that of plastic in the 20th century. In the same way that the advent of bronze led to the Bronze Age, and an understanding of polymers to the 'Plastic Age', it is possible we are on the cusp of the Graphene Age, or at the very least the transformation of the information age.

Palermo recognizes that we cannot foresee the full implications of such a new technology on everyday life, but we can

get a glimpse of its potential by looking at the way plastics "rapidly displaced metal, wood, leather, and even fabric for many applications, despite not being capable of a better performance." In relation to silicon, for example, graphene's performance could be "orders of magnitude better," Palermo tells me, "however, rather than necessarily replacing silicon technology, graphene will integrate with it, allowing new revolutionary applications such as flexible electronic devices."

"Graphene will allow information processing and communication to reach a new level of diffusion in our life", he says. "Using low cost devices, transparent flexible displays and touch screens, we will have the possibility to include data and information in virtually any aspect of everyday life."

It has already found use in a commercial context, all be it on a modest scale. Its non-corrosive properties have meant that when used within a polymer composite mixed with paint, graphene can provide a rust-proof coating, already being used on some aircrafts. The next logical step would be to use it on cars and other vehicles.

Living up to the hype

A LOT IS RIDING ON THE PROMISES of scientists. The idea of a 'miracle material' may do very well in grabbing headlines and conjuring visions of the dawn of a new age, but such theories need first be put into practice. The advent of plastic made us believe that a manmade material could transcend the limitations of nature; that something could be strong without being heavy, or soft without the fear of it rotting away.

One need only look at carbon nanotubes, however, to realize that the hype can sometimes severely outweigh the reality. Discovered in 1991, nanotubes hailed the possibility of a space elevator, though clearly that is not happening any time soon. What graphene does have in its favour, though, is the vast range of possible areas where it could prove useful. It means that if it fails to live up to expectations in, say, the field of energy, it may still prove its worth in electronics or medicine.

In an article in *Nature* last year, Kostya,

who is now a professor still studying the material at the University of Manchester, outlined a 'road map for graphene', exploring its future potential in a number of industries. Kostya and his colleagues recognize that the real challenge for graphene may lie in displacing the materials that already exist in their established functions. "Benchmark materials will only be replaced if the properties of graphene, however appealing, can be translated into applications that are sufficiently competitive to justify the cost and disruption of changing."

The first significant commercial application of graphene that is in sight, they suggest, is that of flexible electronic screens, or 'e-paper'. According to their study, a working prototype of this technology can be expected as soon as 2015.

Professor Kaner and his team that developed the method to mass-produce graphene micro-supercapacitors - technology that could prove indispensable in the commercial production of flexible electronic devices - confirmed to me that they have recently begun working with a leading supercapacitor company, with the view that such products could be available within a few years.

"Electronic paper, roll-up displays, health monitoring and even wearable electronics hold great promise", he says. "Their ability to integrate energy storage units with electronic circuits may help bring about a new generation of microelectronic devices."

Ultimately, it may be that graphene is only commercially viable in instances such as e-paper, where there is no material currently established for that purpose. Brand new applications would need to be dreamt up for this 'miracle material' in order for it to find its place and make sense financially. But even if this is the case, the sheer amount of brainpower and money being thrown at it could mean we are indeed entering a new age in which the rules that previously limited us have been shattered. As Kostya says, "you might think it science fiction, but if we succeed, we would create a new class of materials with predetermined properties and multiple functionalities... it's amazing." ■

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Marrying a munter

By Charlotte Hogg, 27, from Croydon, London

‘Ugh!’ was my reaction when I first saw Tony Conaghan in the flesh. It wasn’t exactly a recipe for eternal bliss—more like yuck at first sight.

We’d met on the dating site Lovestruck a couple of weeks earlier and had got to know each other over the phone before meeting. After speaking together for nearly two hours the first time I called him, I remember putting down the phone and thinking ‘wow’. I called my mum that night and told her that I was sure I was going to marry him.

At the time Tony, 43, was working shifts at the airport so we had to wait nearly two weeks before we could finally meet. During that time we were never off the phone to each other— from the moment we woke up in the morning until last thing at night. Even though at 27, I’m 16 years his junior, we both thought we had found

‘the one.’ But when we finally arranged to meet for a coffee date, the fireworks we had been anticipating fizzled out as soon as we saw each other’s faces. There wasn’t even a spark.

It was just complete shock and disappointment. He looked nothing like he did in his online profile. He was short, his nose looked bigger, and he had a bald spot that didn’t show in snaps. I remember thinking ‘oh, you’re minging, when were your photos taken?’ And what’s worse it felt like he was thinking the same thing.”

He told me later that he’d been really

disappointed, saying that if he’d seen me in a bar, he would never have even looked at me, let alone approached me.

Conversation was flat and it felt like we were just going through the motions looking for any opportunity to get away. We left thinking we would never see each other again.

But I missed him. We’d built such a strong connection and relationship over the phone I couldn’t believe that was it. We had shared so much over the phone. No one had ever understood me like Tony did, or made me laugh like he does.

I sent him a text asking about his day and he replied. Soon we were talking on the phone again and

sure enough the sparks began to fly once more. After another couple of weeks we decided to test the chemistry once more and met up for a dinner date.

We were both a bit disappointed again but alcohol helped and relaxed us into the laughing and amazing conversation we had shared over the phone. However, back at his flat that night Tony told me very bluntly that although he’d never met anyone like me before, he didn’t find me attractive and wanted to be just friends. He told me that my eyes were all over the place, I was overweight, and that I was far from his usual type of a ‘girly girl size-8 dolly bird.’

Put off and hurt by his

‘YUCK!’ at first sight



Charlotte and Tony’s dating profile pics

shallowness, I gave him a huge lecture about how love was more than just the way you look. I told him what we had was a deep connection, an understanding and bond that comes along maybe only once in a lifetime. Laughing until

you ache and our ability to share and be a team and support one another was more important than being a size 8. The last thing I said was ‘you’ll regret this.’ He must have had a really good think as,

amazingly, a few days later he decided to leave his job and come and work for me on a new charitable project I had set up called the Rainmaker Foundation. Within a week of working with each other we both realised that we were indeed the perfect match. Within a month we had moved in together.

Maybe love is blind but I now look at him and think he is the best looking guy ever, and he thinks similarly of me. Surprisingly, despite our initial thoughts, we have a very romantic and sexual relationship. We now live, work and play together in Croydon, and we’ve never been happier or more certain of anything. I think we’ve both worked out the secret and are the luckiest couple in the world. We are due to be married this year.

Tony Says:

I wouldn’t describe Charlotte as my usual ‘type’; I normally go for slim, blue-eyed blonds. When I first saw her, I noticed that she was more overweight than she appears in her profile. Also, her eyes were all over the place — with her boss eye, I couldn’t tell where she was looking! I would’ve legged it but I didn’t want to be rude. Luckily Charlotte kept the contact going after that first date and the connection was rekindled.

It seems true, that you can find love in strange places. These days I couldn’t care less what she looks like, we’ve got a love that goes much deeper than all that. I’m so glad I didn’t follow that first reaction, Charlotte really is the love of my life.



Written by Anthony Cuthbertson. Photos: Anthony Cuthbertson, worldwidefeatures.com