

Food-Metal Alchemy

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N^Q6 SPRING 2018 SHEFFIELD

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A journal for chefs, brewers, artists, musicians and everyone who consumes the good stuff.

Issue 06



dust in association with ASAP

Mess

LEAD

Features / A Personal Transformation / Food-Metal Alchemy / Kæstur Hákarl – Fermented Shark / Pharma Food Lab CAST / Jack Charlton's Fridge Bingo

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Featuring Photography by India Hobson Laure Carnet N^O6 SPRING 2018 SHEFFIELD





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dust – is Alex, Alex, Alun, Andrew, Ash, Georgina, James, Jamie, Laura, Laure, Mick, Pam, Patrick & Steph – all part of a multi-disciplinary design collective working for, and in support of, art and culture.

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Alchemy: the word conjures up mystical practices - the unfathomable transformation of worthless materials into precious objects. Practised in ancient Egypt from 400BC as well as in China, India, Africa and (much later) Europe, alchemists aimed to purify, mature, and perfect certain objects, whether that be the best known of metal into gold or the more holistic and spiritual quest of purifying the human body to reach an immortal state. Taken on its most simple terms, alchemy is a transformation from one material state into another. Such a process of transformation has an echo throughout the more familiar practices of preparing cooking and consuming food. The 'magic' of the kitchen turns raw ingredients into flavourful dishes or the potentially poisonous into nutritious. Kitchen waste also has a particular alchemic magic - vegetable peelings, egg shells and coffee grains

compost down into a nutrient rich matter perfect for keeping garden soil fertile and fuelling fresh plant growth. Outside of food and drink, transformations take place within the body from physical 'make overs' to mental rejuvenation and wellbeing. Transformation is also at the heart of any creative process: shaping, morphing and moulding concepts, marks or materials into new objects and ideas.

This edition of *Mess* brings together a variety of different interpretations of the term 'alchemy', from *the symbolic history of the egg* to consideration of *future human bodies*, bespoke *cocktails* and *etching on metal with food waste*. Each article details a transformation and the creative and conceptual potential a shift in states can bring.

Dr Laura Mansfield Editor



To contribute to future issues contact mess@du.st

Read other issues at howfineamess.com

Design & Editorial **dust**

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THE ALCHEMY ISSUE COMPANION & EVENT & WEDNESDAY 16 MAY 6-7PM SHEFFIELD

AN OPENING

TURNING A

Servings of words, pictures and tastes from a quartered whole of alchemist protagonists to mouth stomach, wobble head and the heart pump organ.

INSTITUTE OF ARTS TURNING LEAD

inta GOLD THE HEAD POST

OFFICE, S1 2AY

Following a year of residency at the Peddler street market, Mess returns to life with a programme of companion events. Come join, come in empty, come thirsty and hungry.

A Personal Transformation

RUBY MUNSTON-HIRST

Community Fundraiser for Sage Greenfingers – Founded almost twenty years ago, Sage Greenfingers provide therapeutic horticulture, in the form or arts and gardening, for people in Sheffield who are experiencing a mental health condition. **Tran5formation i5 a big word:** it 5ugget5 po5itive change an improvement or 50mething better – o but I don't 5ee it life that o

 \bigcirc



More specifically, I don't experienc it like that. Whilst a transformation has all the burning potential of a good, big change, it has the same overwhelming ability to be somethi frightening, unnerving or dangerou I've seen people transform. Physica transformations can appear the most impressive. There's proof of that in all those daft reality programmes that see contestants undergo rigorous training or a new beauty regime or a swanky new wardrobe. Seeing someone change in that sense has our intrigue hooked. We stay watching through 4 ad breaks just to get to the big reveal where everyone congratulates the person for being more attractive or confident. Why is that addictive to watch and why do we love those before and after photos? They wreak havoc in our brains, get the dopamine raging and your narcissistic

elf screams "YOU COULD BE LIKE THAT TOO, CHANGE TOO AND BECOME A BETTER PERSON".

The closest I've come to one of those big reveal moments is when my physical body has required my brain

to shift from 1st to 5th gear in a matter of seconds. Thinking about it now, I've experienced my best changes or transformations when my mind has been the ringmaster. I didn't feel the physical reveal or witness the congratulation of an admiring audience. My experiences are of mental illness, the kind lived and overcome by millions of people daily, but to overcome periods of depression was for me, frankly, horrendous. Similarly, getting the words on the page has been one of those fear inducing exercises, where you can feel your heart shouting "stop!" and toes curling at the level of self-reflectiveness. But hey, sharing is caring, right?

When you get a manic depression diagnosis there are, in obvious terms, two ways to handle it: plunge (like you've been used to) into a selfdestructive silence where only your bed will do for a companion or, and

associated with the second self of depression, you can fly into defence mode and do everything you can to fight off this label which can be profoundly heartbreaking if you've never had contact with clinical services before. I chose to endure a mixture of the two. Whilst this story is about personal transformation, I must add a disclaimer here (spoiler alert). This story, for the purposes of a short article, makes my experience look like it improved overnight. It did not. It also appears that through self motivation, encouragement and persistence, I overcame my diagnosis alone.

I did not. In reality, and to give this story an ethical backbone, I took years to get better and it was only possible through the unwavering kindness, patience and support of two very different sets of people: my family (who my friends are a solid part of) and a team of health professionals. More specifically, my mum and a psychiatric purso who be ween them never left my side and kept me interested enough in life to kept me going. Anyway, enough of the supporting cast, this is my story of transformation so let's get back to the plot.

Lik TV programmes, performs the w ro l person, l too g the shit side Wa of apped. I was rmined not to an be s the recurring iss tal health issues etter if 1. they a problem and ac

2. they are ready to listen, get advice and improve their own life. I've studied Beowolf, I've given birth to a chunky sized baby and I've definitely been heartbroken but - without a doubt recovery from a mental health issue is hands down the hardest thing I've done. For me it wasn't the constant sadness fear about my future: it was the level lessness of e lulls you or of the ne New Years vith a glass depression on and on and free o bored about l got talki eling and ratin on a scale of 1 ting thing – the i ression is rean ibe symptoms, med that could . The lived impr used to feel expe my c st. My eyes

were constantly filled with tears and I developed a stutter and the shakes. I was told this was my medication. I believed it was depression killing me.

My tale is not one of independent bravery and self discovery; far from it. I was given all of the necessary guidance (eating and sleeping well, being active, seeing friends, being outdoors) and the tools (medication, regular doctor's appointments and support) all of which was undertaken by someone else. However, I will congratulate myself on one thing the most important thing to spark recovery and prevent relapse: I listened and I tried. And when I think about the potential to change or transform oneself - that's where it starts. Yes it's endless, exhausting and painful but until you make the tiny adjustment in your mind to ask for help and listen, your sparkling reveal is still a lifetime away.



Food-Metal Alchemy

RACHAEL COLLEY

Rachael Colley is an interdisciplinary artist and lecturer in Jewellery and Metalwork at Sheffield Institute of Arts, Sheffield Hallam University. Her M(eat) *et al jewellery* collection is designed to sit alongside a complementary set of *Ambiguous Implements* for eating, grooming and cleaning, that jointly serve to highlight aspects of contemporary consumer culture.



Two fingered bottom





Exposure to the elements and aspects of daily use (oxygen, water, acids and salts found in food and other organic materials) will affect the surfaces of various metals over time. Due to modern-day restrictions surrounding health and safety in relation to certain chemicals, as well as how to access them, some modern-day metalsmiths have become interested in 'transmutating' metal matter using somewhat more domestic means. The metalsmithing term commonly used for cleaning oxides and flux from metal surfaces is 'pickling', and although nowadays a gently heated sulphuric acid base is generally used to clean non-ferrous metals (nitric acid may also be used in some cases), the name suggests the basic beginnings of this process.¹ Food stuffs, particularly acidic and fermented fruits, have been used historically to clean, patinate and in some cases etch the surfaces of metals. The company Cookson Gold suggests

a mixture of alum, white vinegar and salt as a possible non-toxic 'household' alternative to their pickle salts product.² The Romans were said to have used rhubarb (rich in oxalic acid and salts) to clean metal artefacts and this material, along with half a lemon rubbed in salt, is still recommended to clean blackened metal pots and pans today. A study of archaeological artefacts has concluded that the Romans also used rhubarb to create a purple patina (a colourful surface finish on metal) and that the Japanese use similar acids from the bitter plum to achieve the same effect on some alloys. Susan La-Niece and Paul Craddock's book on metal plating and patination ³ describes a process called nikomichakushoku, "a form of pickling by immersion in fruit juice".

Dr Zoe Laughlin – Co-founder and director of the Institute of Making and materials library project – conducted 'A taste of materials' in 2012.⁴ The research project explored the sensoaesthetic properties of metals, considering how a series of spoons of the same design and scale can transform eating experiences through taste due to their metallic make up. Each spoon in the series of seven was plated in a different metal - copper, gold, silver, tin, zinc, chrome and stainless steel. Laughlin went on to host an event at the Michelin-starred restaurant Quilon, where the series of tasting spoons were tested by members of the public and academics involved in the research project. Laughlin commented on their findings, that "gold allowed for the taste to shine through", however "the zinc and copper spoons had a highly metallic, acquired taste". The non-reactive nature of gold (it doesn't rust or become tarnished by oxides) would explain why the taste of the food remained relatively un-interfered with and, likewise, the reactivity of copper would explain why



(1) (1) some of the more corrosive, acidic food stuffs may have a tainted metallic taste when consumed from these spoons.

The range of transformative possibilities of organic matter on metal surfaces uncovered in these findings encouraged me to conduct some basic tests with a range of food stuffs on copper, using nail varnish as a resist. Tomato, blackberry, raspberry, orange, lemon, beetroot and red wine were selected due to their acidity and/or colourful dyeing properties. The test pieces were kept immersed and un-agitated in the solution for seven days, after which the samples were removed and cleaned to reveal whether there was any change to the surface. The beetroot produced no noticeable changes; however, the other samples presented varying degrees of oxidisation and etching to their unmasked surfaces. The most effective appeared to be the blackberry and tomato, with the tomato also giving

an interesting pattern on the underside of the sample. The lemon and orange also gave fairly positive and similarly coloured results, whereas the raspberry created a pinkish hue on the surface of the copper rather than the darker oxidisations of the other five samples.

I am continuing to explore copper by repeating these tests again, this

time heating, moving and aerating the solutions over a shorter timeframe to see if the results differ or if the reactions speed up. The ultimate aim of this alchemic material investigation is to use the results to inform the selection of an appropriate surface finish to apply to a new series of two-fingered, doublelobed spoons I'm developing as part of my *Ambiguous Implements* collection of tools for eating.

www.rachaelcolleyartist.wordpress.com www.ambiguous-show.tumblr.com

Kæstur Hákarl – Fermented Shark

JÓN REYNIR ANDRÉSSON

Chief of Technical Operations / CTO, StofnFiskur Iceland, Jón Reynir Andrésson has over thirty years of experience in aquaculture, producing smolts for Norway and sea-ranching.

Brennivin can be directly tran5lated a5 burning wine, although it'5 mo5tly • marketed a5 Black Death •

You've most likely read that the traditional way of fermenting shark is to bury it in the ground and then urinate on it before letting it rot for some months. This is not true... entirely. The urinating bit is true, but the shark doesn't rot: it ferments. And urine is no longer used in this process, but it was used before modern culinary techniques came into being.

The shark does smell of ammonia though, which is where the urban myth comes from. It has been cured with a particular fermentation process, consisting of burying it underground and hanging it to dry for four to five months. This process is done to get rid of acid in the flesh which makes it impossible to eat fresh. So the shark is not rotten (which some people believe) but fermented. There's a bit of a difference.

The result is, uhm, a rather acquired taste. Connoisseurs of very strong cheese may take a liking to it at the first bite. For others, well, let's just say it's not a common dish anymore; it is mostly the older generation in Iceland who still eat and enjoy it.

The large amount of ammonia in Kæstur hákarl results in the dish having a strong smell, similar to many cleaning products. It is often served in cubes on toothpicks. Those new to it may gag involuntarily on the first attempt to eat it because of the high ammonia content. First-timers are sometimes advised to pinch their nose while taking the first bite, as the smell is much stronger than the taste. Those who are extra hardcore will rinse it down with a shot of Brennivín, a schnapps made from fermented potatoes and caraway. Brennivín can be directly translated as '*burning wine*', although it's mostly marketed as '*Black Death*'. And yes, it tastes strongly of caraway but it is mainly a rapid delivery system to oblivion which, if you are eating fermented shark and sour ram's testicles, is probably not such a bad thing. What more can you expect from a nation who weren't blessed with legal beer until 1989?

Þorramatur, which includes fermented shark among other delicious dishes, is consumed during the Nordic month of Þorri (Thorri) in January and February, particularly at the mid-winter feast of Þorrablót (Thorrablot) as a tribute to old culture. Being connected with the tradition of Þorrablót festivals, Þorramatur is most often served as a buffet. It includes a selection of traditionally cured meat and fish products served with rúgbrauð (dense dark and sweet rye bread) and Brennivín. The flavours of this traditional country food originate in its preservation methods pickling in fermented whey or brine, drying, and smoking.

How to prepare; The meat of the Greenland shark is poisonous when fresh, due to a high content of urea and trimethylamine oxide, but it may be consumed after being processed.

The traditional method of preparing the shark involves gutting and beheading a Greenland or sleeper shark and placing it in a shallow hole dug in gravelly sand, with the cleaned carcass resting on a small mound of sand. The shark is then covered with sand and gravel, and stones are placed on top of the sand in order to press the flesh and squeeze fluid out of the body. The shark ferments in this fashion for 6-12 weeks depending on the season. After digging the fermented carcass up, the shark is then cut into strips and hung to dry for several months. During the drying period a brown crust will develop, which is removed prior to cutting the shark into small pieces and serving. It is possible to witness the traditional preparation process at Bjarnarhöfn Shark Museum on Snæfellsnes. The modern method of making the dish simply involves pressing the shark's meat in a large drained plastic container.

The consumption of shark meat has a long history in Iceland. In the 13th century, large and regular hunting of sharks in Icelandic waters took place, until around 1860 when kerosene took over from shark oil for use in lights. The sharks were hunted from open small boats and each fishing trip could take two days to two weeks depending on shark populations and weather conditions. You can imagine these sailings were very wet and incredibly cold. Shark is still fished in Iceland and for the last four years the annual catch has been between 17 and 27 tons.

If you are taking a trip to Iceland and want to try the traditional dishes and drinks, I'd recommend the Icelandic Bar on Austurvöllur Square by the parliament, Café Loki near the Hallgrímskirkja church, Múlakaffi Restaurant and the restaurant in the BSÍ Bus Terminal. You can also get a sample of Kæstur hákarl at the Kolaportid flea market at weekends in the food section for a small fee. They just love selling samples to tourists to watch their faces turn sour!

Material Explorations: Pharma Food Labs

MAKERVERSITY: TOM TOBIA, CANDYCE DRYBURGH, LIZA MACKENZIE







At the core of any making process, materials define the limitations of design, raise questions around social and ethical manufacturing processes and create the primary interface between us and our experienced world.

Synthetic biology has become increasingly sophisticated in recent years. Where once a burger grown in a petri dish was a new and controversial speculation, we're now seeing this become a more plausible future in both kitchens and laboratories. How will society respond to these new types of food? Should we readily accept and start consuming it without considering the moral, ethical and cultural implications of such a potentially seismic shift in eating and growing?

Over two evenings this February, Makerversity hosted an exhibition of interactive and edible provocations at our Somerset House HQ. Partnering with final year Graphic Design and Illustration students at Sheffield Institute of Arts, Makerversity created a visitor experience designed to push participants into engaging with the ethical questions that hacking our food systems *ahem* throws up.

Visitors were encouraged to feast on *Leg of Kanye* and ask themselves if eating a celebrity was desirable given that it is now possible. A 'petri-dish grown' burger that moos when touched

challenges us to consider the sentience of in-vitro meat. Is a lab grown burger vegan? How different would the world look if we were able or even required to gain all our sustenance from a 'meal pill' three times a day? Would our booming population be food-secure for generations? Could we re-wild the agrarian landscape that is so dominant and so often destructive across the globe? How would all of this affect the diverse, glorious and abundant culture of food that differentiates nations, regions and even individuals?

Although most of the provocations in the exhibition are still near-future possibilities i.e. not quite technologically possible at scale, we feel it is essential we ask these questions in a public forum so as not to collectively sleepwalk into compromising cultural and ethical systems that, once established, are very difficult to change or reverse – as our current food systems demonstrate. Indeed, our current food system has a double bottleneck. Despite approximately 570 million agricultural producers worldwide, 75% of the world's agricultural commodities are traded by just four companies. Food distribution is also controlled by a similarly small number of huge businesses. This means the power to change systems is held by very few people who clearly are quite happy with the status quo. Additionally, so much of our current food production happens out of sight. It is difficult for society to engage in moral or ethical dilemmas about food production when the forest clearing, hormone injecting, pesticide spreading and slaughter are not visible to 99% of consumers.

By working with creative students and under the stewardship of two leading creative practitioners in the our Somerset House space, Candyce Dryburgh and Liza MacKenzie, Makerversity were able to bring new intangible concepts to life. We hope this process continues on a larger scale and genuinely offers consumers agency in shaping the inevitable change in global diets, culture and landscape.

For more information on the project please visit www.makerversity.org/ cultural-programme



Makerversity build and run campuses for creative startups. Currently over 350 engineers, designers, farmers, scientists and creative technologists call our hubs in London and Amsterdam home. Alongside providing co-working open access workshops, Makerversity runs learning and cultural programmes introducing emerging concepts, industries and people at the cutting edge of their practice to the wider public. A lynchpin of this programming is an ongoing series of events: Material Explorations. Most recently this manifested as an exploration of the future of food — Pharma Food Labs.







Provocations: Sheffield Institute of the Arts Students: Georgina Smith, Lydia Fay, Kirsty Haynes, Emily Holden, Becca Johnstone, Annie Neilson, Cat Walker.

What if we no longer needed food to survive but instead could gain sustenance from 3 tablets a day? Becca Johnstone: Scarcity: We are in the middle of a food crisis. Current production methods are inefficient and unsustainable. 800 million people struggle to feed themselves every day. With an estimated population projection of 9.8 billion by 2050, could a tablet containing lab-grown proteins be the solution to agricultural demands?

All the necessary nutrients are provided within these tablets. Would one truck load be able to feed an entire country affected by war or famine? Health: We as a society are living unhealthy lifestyles and getting fatter. Current estimates show that by 2050 more than half the population could be obese, could this tablet provide the solution?

Context: In Silicon Valley, meal replacement products are well underway; is this tablet the future of food? What would happen to our fine dining and fast food industry? Would this be the end of our social dining culture?

Object: The red tablets are recommended for female consumption providing 700 calories each. The blue tablets are recommended for male consumption provided 800 calories each. Each tablet is packed with the necessary nutrients, vitamins, fats, protein and carbohydrates. The tablets will provide enough sustenance for approximately 4-6 hours depending on the range of activities conducted within that time period.

How can we produce meat for a population of 10 billion by 2050? Lydia Fay: What does the future of meat production look like? Is there a future for traditional agricultural farming? It is estimated that the population will grow to 10 billion people by 2050 Current agricultural farming methods already have an environmental impact, particularly on issues such as deforestation and global warming. In order to produce encugh food, we need to develop sustainable methods that stop the destruction of forests and have less of an impact on the environment.

In-vitro meat may be the answer, or at least a key contributor, to the mass

production of food needed to sustain 10 billion individuals. By taking a single cell from a common domesticated animal, such as a cow, we can grow meat in petri dishes. This mitigates the need to breed, nurture and slaughter animals for their meat, which currently is a process that uses a great deal of resources.

But what would the consequences of popular uptake of in-vitro meat be on the agricultural economy and the livelihood of millions of people? And is using animal cells any more ethical than eating a creature that is already consumable? If a cow is sentient, can a product grown from the cell of a cow be sentient too?

What if we could implant preventative medication into our bodies to edit out potential risk of preventable disease?

Kirsty Haynes: Over recent decades we have seen the widespread use of medicinal implants such as the insulin pump, which provides a stream of insulin to the body to treat diabetes from within. But what if we could provide patients at risk of preventable diseases or conditions such as a stroke with a preventative implant designed

Material Explorations: Pharma Food Labs



We have got u5ed to the idea of implanting foreign object5 into our bodie5, but what about creature5?

A

to pre-emptively regulate the body and minimise risk? Could a patient with high cholesterol due to an unhealthy lifestyle have a cholesterol-reducing implant embedded to counteract that lifestyle? Would this encourage people to take more or less responsibility for their health? Should we be second-guessing the human body? Would we end up with most people having preventative implants for most illnesses, with no incentive to adapt their lifestyles to improve health more naturally?

What if we could hack the human body with other living things?

Cat Walker: What if we could stop sperm at source? How would men and women feel about parasitic contraceptives? Currently, of the 12 contraceptive options available on the open market, only 2 are aimed at men - the condom and the 'snip'. In the near future humans will be able to use parasites to perform a range of health-enhancing functions in a symbiotic relationship similar to the 'remora' fish that attaches itself to a host whale and feeds on excess whale skin. These advancements throw up lots of questions about how we feel ethically and more generally about hosting animals and organisms for

our own benefit. Equally, do men and women feel differently about their roles in contraception? Would hacking the body change this dynamic?

We have got used to the idea of implanting foreign objects into our bodies, but what about creatures? We know parasites can perform useful functions in symbiosis with their hosts but could we live with it?

Spermworm is an ingestible organism that lives inside the testes and consumes sperm at source, thus rendering its host infertile over the lifecycle of the worm. It is completely benign and lives for six months. Simply swallow a worm after a full meal and within 72 hours you will be infertile for the lifetime of the worm.

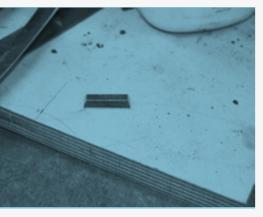
Look at the Spermworm through the microscope. Could you imagine swallowing one to live in your testes or fallopian tube?

What if we had the ability to repair damage caused by ageing? Would this have an effect on the beauty industry? What would this mean for our ageing population? Annie Neilson, Georgina Smith, Emily Holden: What if we had the ability to repair damage caused by ageing? Would this have an effect on the beauty industry?

Our bodies are made up of DNA cells. As we age our DNA is damaged and dies. While our cells have an innate capability to reproduce, their ability to do so declines by up to 60% as we get older. These levels decline in everybody regardless of health, diet or physical fitness. NAD+, which is described as the molecule of youth, has a key role in the DNA repair, and B6 have found a way to supercharge these molecules to trick the body into thinking it's younger.

B6 offers you the opportunity to immortalise your beauty, offering pleasure only youth brings. You can see the results for yourself immediately with just one misting spray from our sampler. If you like the results and need that uplift permanently you will receive your discreetly wrapped, elegantly crafted daily-take cure tailored to your busy lifestyle posted to you each month. Workshop Visit

CAST







Photos: Laure Carnet

CAST

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CAST event at Public

CAST is a jewellery making experience, sharing the process of transforming the raw materials of wax and silver into bespoke pieces of jewellery.

Founded by 3 friends who had a background in silver smithing, James, Luke and Joe, CAST aims to bring the creative experience and skill of jewellery making to anyone who is keen to make something unique, learn a new skill and have an object that's distinctly their own.

At a CAST experience, guests are shown how to carve a specialist jewellers wax into rings and other jewellery items. CAST guide guests through the making process. At the end of the night, the wax creations are taken back to their workshop and cast, using a process called lost wax casting, in 925 silver. The resulting castings are then filed, buffed and polished before being sent back to the evening's guests in the post. Typically this all takes place over good food and drinks with each item of jewellery invested with memories of the conversations that took place over the making process.

CAST is both apersonal experience and a communal learning activity. What better alchemy than creating something precious with a group of friends over an evening of good food and drink?

www.experiencecast.com

SOME THINGS ARE GREATER THAN THE sum of their parts.

Republic of Ireland football teams, for example. Never more so than in the '94 World Cup I remember, because John Motson¹ kept saying it.

"Ireland ARE GREATER THAN THE sum of their parts "

"Ireland ARE GREATER THAN THE sum of their parts" "Ireland ARE GREATER

THAN THE

sum of their

parts"

I was **8** when he kept saying that. It blew my mind a bit, like when I first heard '**8** Days a Week'

Synergy is defined as

THE

INTERACTION or COOPERATION of two or more ORGANISATIONS, SUBSTANCES, or other AGENTS to produce a COMBINED EFFECT GREATER THAN the sum of their

separate effect<mark>s."₅</mark>

HOW is that EVEN possible?

Or everyday alchemy, if you will.

Alchemy MAKES BASE PRECIOUS,

SYNERGY MAKES ordinary extraordinary.

It takes the overlooked, the unconsidered, and makes them unfathomable, together.

FOR Ireland, journeymen INTO WORLD BEATERS.

For kitchens, bin fodder into gourmet fare.

WHEN you're next in THE kitchen, OR THE SHOPS, THINK LIKE Jack Charlton.²

Find ingredients lurking in bargain basements or the bottom of the fridge.³ Throw them together in a pressurised environment.

THEN TAKE THE off: YOU'VE nothing

pressure

nothing to lose.

See how they work together. React, adapt, be positive.



It might not work every time but, in a World Cup year ,⁴ Jack Charlton's Fridge Bingo might just throw up some gold.

Jack Charlton's Fridge Bingo³

¹ John Motson commentated on over 2000 games of football, including 10 World Cups, before retiring in March 2018. He advised a nation: "Hold the cups and the glasses back home...you can smash them now" as David Beckham scored a World Cup penalty against Argentina (2002).

² Jack Charlton managed the Republic of Ireland team for a decade, taking them to two World Cups, a competition he won as a player in 1966

³ "Fridge bingo" was coined by Meera Sodha in her 'New Vegan' column for The Guardian. – theguardian.com/ lifeandstyle/2018/mar/03/leekmushroom-kale-pea-stir-fry-thenew-vegan-meera-sodha

⁴ The 21st World Cup kicks off when Russia host Saudi Arabia at the Luzhniki Stadium, Moscow on Thursday 14 June.

⁵ en.oxforddictionaries.com/ definition/synergy

The Alchemy of Compost

JOANNE LEE



Joanne Lee is a Sheffield artist, writer and publisher with a keen interest in urban growing. She lectures in Visual Communication at Sheffield Institute of Arts. Cosmic spirit WHICH BRINGS everything to kills

J D C @ M

Vegetable peelings, apple cores, orange rind, a mouldy tomato, banana skins, eggshells, teabags, coffee grounds, screwed up tissue, torn paper, toilet roll tubes, shredded envelopes, fluff from the floor: everyday remnants and leavings accrue in the green plastic caddy that sits next to my sink. It takes a day or two to fill, then I push down the contents with my hand, shielded from the sometimes moist squish by a convenient cabbage leaf or a bit of cardboard. It lets me fit in a little more before having to trot down the garden and transfer the whole lot to the compost bin.

The bin isn't all that far and I could probably just take it a colander of daily waste, but I grew used to the weekly gathering during the many years in which I lived in a tower block and could only compost at my allotment. I'd pack my caddy into a rucksack and take the bus for a couple of miles to the plot on the edge of town. I made very sure to keep it carefully upright after the time it slipped sideways and its lid came loose so that odoriferous ooze leaked through the bag onto my trousers beneath. Breathing in the ripe draught of it, I sat as still as possible in order to keep the stink away from my fellow passengers.

This scenario probably confirms many people's negative ideas of composting and for that I'm sorry as my intention isn't to put anyone off taking up the practice. The reality is that I actually enjoy the close encounter with this disintegrating matter. The ripeness of rot has a kind of visceral effect that reminds me of my own bodily perishability and the elemental breakdown that will send all our atoms and molecules back into fecund circulation once more. I'm not one for theories of reincarnation but I'm always reassured when I compost by thinking of the cyclical passage of matter's constituent parts from one state to another.

In the beginning composting requires a quantity of base matter. There's rough or sappy stuff I've weeded, pulled or pruned and have then chopped up and bashed in its transit from garden to heap in buckets and barrows, which is combined with the richer brew of household and kitchen waste along with occasional cotton or woollen rags whose useful life is at an end. Lavered, fluffed up and turned, it mixes and mingles, heats up with microbial action, is digested by fungus, nematodes and a mass of red brandling worms, is prowled too by woodlice, beetles and other small critters and finally becomes sweet smelling crumbly compost. That this bears little or no visible reference to its origins, excepting the remains of a little fibrous material, is a kind of miracle: utterly transformed into horticultural gold it will build the soil and nourish the next season's growth.

I find this transformation alchemical enough, but when those who pursue Rudolf Steiner's biodynamic methods of making compost, they take such an analogy much further. Their heaps are inoculated with six preparations made through time-consuming processes according to schedules informed by the sun and zodiac. Yarrow, chamomile, nettle, oak bark and dandelion are

everything AND TAKES ALL THE

HE IS

sheathed in animal organs and buried a while, and valerian flower juice is fermented. Small amounts of this material are then added to spring or rainwater and stirred for several minutes to create vortices first in one direction and then the other. I've not practised such earthly magic myself so can't comment on its efficacy but there's a powerful beauty in lavishing the results of such attention on what is at face value simply a pile of waste.

I have discovered there are numerous intriguing ways to compost. There are, for example, the techniques of vermiculture using worms, hugelkultur - where logs are buried and topped with manure to create permanent raised beds, as well as bokashi, a fermenting process which uses a microbial starter culture. Much as I accrue material for my compost heaps, I collect reference works on the subject. I've a copy of Maye E. Bruce's 1946 Common-Sense Compost Making by the Quick Return Method which, with its fascinating adaptation of Steiner's methods, doesn't immediately strike

me as being especially 'common-sense', as well as the German Alwin Seifert's Compost, published in English in 1962, which considers the compost heap as a giant artificial worm designed to be fed with a diet that will thus translate into the perfect formation of humus. More recent material only multiplies the wonderful strangeness: I learn that a teaspoon of compost might contain a billion bacteria, up to two hundred and seventy five metres of fungal hyphae, and ten to fifty thousand protozoa and that the actinomycetes, important in producing humus and its delicious earthy smell, are in fact part bacteria and part fungi.

Every time I'm up close with compost I marvel at the sheer multiplicity of the life that produced it – and that it contains – and of all that it will go on to sustain and nourish once returned to the earth. It makes me reflect with concern too on the grievous state of our soils thanks to current industrial farming techniques. In 2014 University of Sheffield researchers argued that UK farm soils only had one hundred

harvests left, and a year later Maria-Helena Semedo of the Food and Agriculture Organization warned that if current rates of degradation continue all of the world's topsoil could be gone within sixty years. David R. Montgomery's book Dirt: The Erosion of Civilizations tells how most human cultures have failed to learn this lesson and how entire civilizations have collapsed as a result. We may scoff at the alchemists who once sought the transmutation of base matter into gold but, since generating three centimetres of topsoil takes around one thousand years, our own challenge seems no less impossible than theirs. Treating green and brown waste as valuable stuff and composting whatever we're able so that it can be used to build soil is an essential part of preventing the impending catastrophe. Without soil there is no food and, as Montgomery writes: "Everything else – culture, art, and science - depends upon adequate agricultural production". This is, very literally, food for thought.



Featured Artist NICK DEAKIN

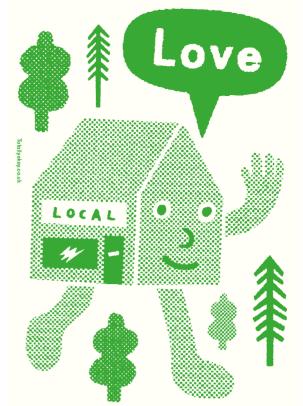


Nick Deakin has been working commercially as an independent illustrator and designer in Sheffield for over ten years, in that time producing work for clients such as Coca-Cola, Shell, Nike, The New York Times, The Guardian, and exhibiting worldwide. He is a lecturer at Huddersfield University, and continues his commercial and personal practice at www.totallyokay.co.uk



alchemy can you turn lead into gold? Show workings out.





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it. Their payment system messed up too and they paid me twice. The art director sickly like 'every commission is the idea most incredible work, and initially 'ideal commission? I should say something time, challenging jobs can turn into the didn't have to think. It felt like I'd made already made. A job for the NYT, and I is still there and doing very well, hope lettering very similar to some work I'd draw quite small with a thick pen, so commission'. I find it's different every ooking commissions can become a struggle. Here's one that was close. was starting out and The New York the work of a paragraph. I will often nfluence? Let's do the letter E for she doesn't read this, that wouldn't **Fimes asked me to illustrate some** complexity isn't possible. Alchemy now – Ed Fella, Elliot Peter Earls, Which artists have been an What would be your ideal in restriction. Ed Ruscha. be ideal.

'm Nick Deakin. I'm a practising creative Who are you and what do you do?

about making things.

How difficult is simplicity? Simplicity in the creative process is challenging, to communicate the same with less. and lecturer. I make things and talk

As this issue is based around

to write a sentence of copy that does

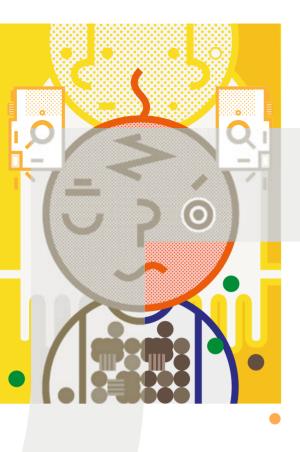


Illustration for Independent Sheffield, a company supporting local independent businesses. 'Breaking away from the common chains, Independent Sheffield is on a mission to link up with all those special places that fill life's little spaces.'

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Editorial illustration for an article in Kin magazine negotiating the early eating habits and psychology around feeding babies.

Public is a table service bar in what was once a public bathroom built in 1896 alongside Sheffield Town Hall. The Public logotype was lifted – as an archaeological artefact – from the logbook scribblings of a semi-literate bathroom attendant. The letterforms were disassembled to create a playful visual language that could work without the persistence of a singular logo. This was paired with the typeface Maison, its utilitarian nature a contrast to the more gregarious lyric of the lead branding.

Oublick AUC

The original handwriting pulled from the logbook. The lazy kink and rhythm of the lettering apparent

Interview

PUBLIC



Step down, underground, beneath Sheffield Town Hall — to find the petit bar, Public. Visitors to this carnation pink space can expect to sample carefully crafted bespoke cocktails and tasty bites served on hand thrown ceramic tableware.



Menus: produced by asap-print





Public is a Sheffield bar that has brought together designers and makers for a unique interior and drinks experience. Can you tell us a bit about how and why you decided to develop Public? It was

a long process! It feels like we've been creeping towards realising something like Public for a while, we just needed to feel confident enough to go for it. From our early days at Gatsby, followed by Picture House Social and then Daisy's we continuously tried to push our cocktail menus into braver places and then when the opportunity to take on the building (the old gents toilets of the town hall) came up it felt like just the space we were waiting for. As soon as we'd decided we wanted to do it the next step was engaging with our team of creatives as well as collaborating with some of our favourite makers in the city - from our regular team of Rocket Design (interiors and bar fitters), India Hobson (photography) and Nick Deakin

(design and branding) to people we were working with for the first time like Grey Suit Clay (crockery), Syd & Mallory (uniforms) and Bear Tree Records (vinyl suppliers).

The renovation of a public toilet to a bar seems like a pretty big transformation - a changing of states. What do you feel has been the most visible transformation in the space? It's almost totally unrecognisable. When we first visited the site it was daunting - a moth balled public toilet that'd been closed for 7 years. The only remaining feature is the tiles on the town hall side but we didn't even know they existed until we ripped out two walls and got back to the bare bones. It would have been tempting to keep more of the references to its previous life but we knew that we wanted to make the interior really beautiful so every single area of the building was treated in a way that

enhanced our overall vision and tied in with the colourway that runs through the project, namely pink, green and gold. We also wanted the texture and feel of the interior to be really warming so the use of walnut and brass as well as the velvet seating was really important. Essentially it was all an effort to transform what was a freezing cold toilet into an inviting space that people would want to sink into.

We know that a number of Sheffield based designers and makers have been involved in the process of creating Public from your logo to your plates and cocktail recipes. Can you tell us a bit more about this process and who has been involved? Some of it happens very naturally as we have been lucky to work with Nick (design), India (photos) and Ben from Rocket Design (interiors and bar fitting) on all of our previous projects. The process of getting people



like Grey Suit Clay (crockery), Syd & Mallory (uniforms), Bear Tree Records (vinyl suppliers) and Charlie Jepson (Ogle Films) was also a very natural process as they are all friends of ours – ultimately we're just very lucky to live in a city with such a vibrant creative community. Were there any unexpected outcomes / results from the process of bringing different people together? Not so much unexpected as you have a real confidence when you're working with such competent people that the final vision you are all working towards is going to be exactly what you were searching for. One great relationship that's developed is the symbiotic nature of Jack Wakelin (drinks wizard) and Tom Aronica (head chef). They're beginning to blur the boundaries of where the drinks program ends and the food

menu begins and I think that is going to have an increased influence on our menus over the next year and the future of Public.

cocktails - How did you devise your genesis of the menu all comes from the the alchemic transformation of the cocktail menu, are there particular how has the response been? This the reaction. It's been really humbling. reflect the identity of the bar and edition of mess explores alchemy ingredients, titles and tastes that word Public, we wanted the menu to Once we'd decided on the bar being space? We've been bowled over by worked on it tirelessly for a year. The called Public the different sections of reflect the overall ethos of the brand. the cocktail menu were derived from In terms of the cocktail menu Jack so we have to ask about your Since opening in the autumn

Public Awareness section, is influencing section is clearly defined and expresses thought of as waste materials and make sure sustainability is right at the heart of the bar. One of the great consequences Public Liability and Public Health. Each straws and the better use of waste fruit being just two areas we are continuing that point forward, so Public Holiday, or example the eradication of plastic a particular area of cocktails that we Awareness is where we explore how to better use ingredients traditionally of this has been that the work we've want to explore. Public Footpath for example is where we can utilise and to explore. www.publicpublic.co.uk Public Footpath, Public Awareness, showcase local ingredients, Public done at Public, particularly on the our menus at all our other venues,

Ultimately we're ju5t very lucky to live in a city with 5uch a vibrant =>+ creative community +>=

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Ceramics: Grey Suit Clay

Commission: Grav Suit

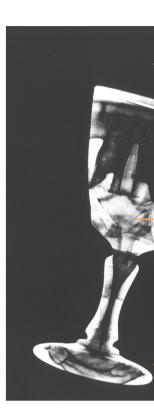
The Chemistry of Cocktails

CAITRIONA DEVERY





[>]hotos: India Hobson



Caitriona is based in Dublin but originally from the Irish Midlands. She currently works at University College Dublin. Caitriona writes mainly about food and the arts, and has written for a number of publications including *District, Corridor8*, and *Rabble*. She also contributes to and is associate editor for Feast Journal.

Cocktails, like much in life, can be functional or frivolous. Sometimes serious, potent and direct, like the whiskey based Old Fashioned which belies a nostalgia for simpler times, or all glitz and spectacle, like a flaming Zombie or a flirty Sex on the Beach. While the canon of classic cocktails has its disciples, less serious and more spectacular cocktails are full of fun and tricks to seduce your senses. Yet in spite of their whimsical appearance, even the more showy cocktails require serious science. Techniques like colour changes, fizzing and smoking all need to be done with precision to work to full effect, and what's more, to work safely.

I spoke to Stephen Barrett, who is both a chemist and a cocktail expert and bartender, about the alchemy of aesthetic intoxication. Optics are key; playing with colour is one approach to creating eye-appealing drinks. As in painting, primary colour changes are achieved by mixing primary colours but, he says, "never at the expense of taste". If the right primary bases are not available sometimes colour additives are used, like activated charcoal or squid ink. While you might recoil from the idea of squid ink in your beverage, Stephen says it's actually very neutral in taste.

Another visual alchemical trick is the use of smoke and fire. Bartenders often use smoke guns, where the smoke is drawn out into the drink, and herbs and teas can be used to infuse smoke with flavours and aromas. Dry ice (Carbon dioxide or CO₂) can produce dramatic effects; the smoke is a result of sublimation, when a substance turns from a solid state to a gas, bypassing liquid entirely. CO₂ begins to transform into gas at -78.5 degrees, so if popped







produce a bounty of smoke and fizz. Fire is a potent visual draw, used in making Tiki drinks like a Zombie: a high proof spirit is lit with a blow torch and then drowned in cinnamon. The spice sparkles as it drops onto the drink

the counter.

creating a rainfall of fire onto

into a drink at room temperature it will

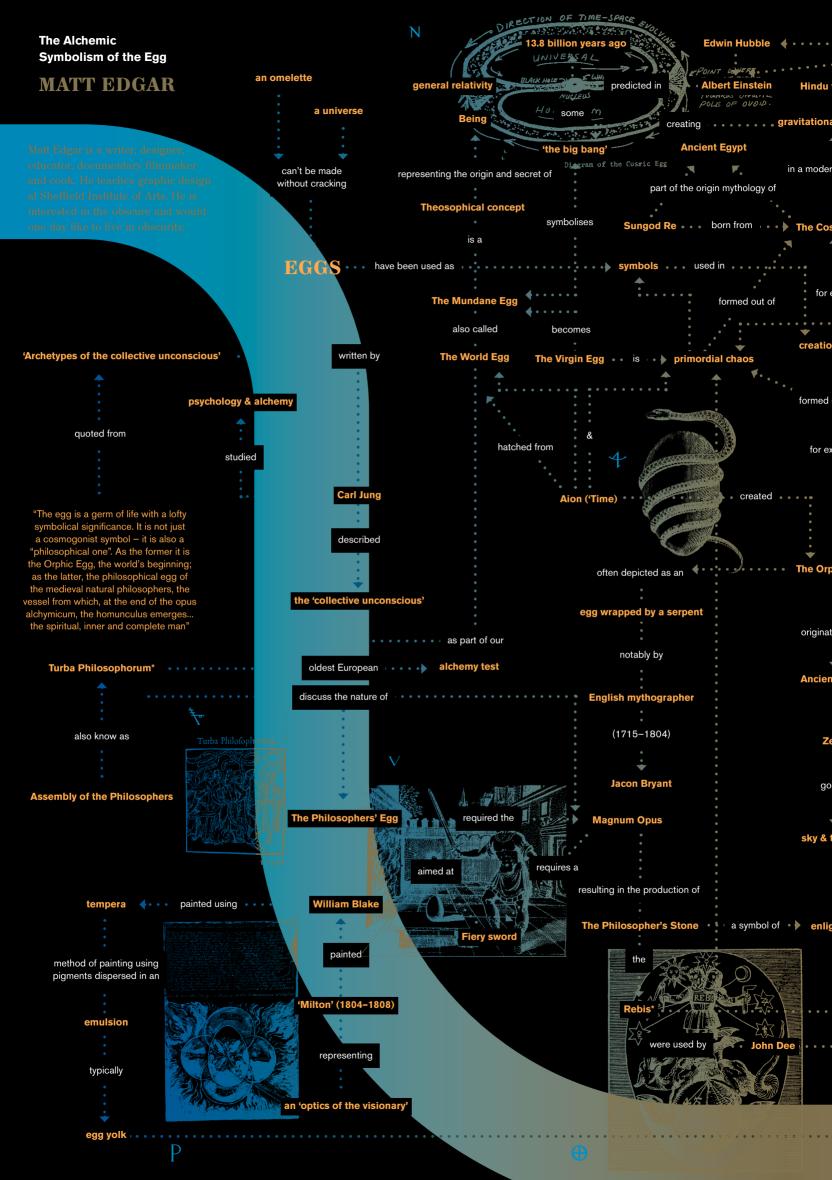
But there's more than just colour and smoke; bartenders explore shapes and structures too. For instance, the Cointreau spheres or pearls which were originally made for a Bellini, are made by mixing sodium alginate (alginic acid) to a quantity of water, plus Cointreau and colouring or glitter (if you're going all out). Stir for 30 minutes or so, then prepare a calcium chloride solution. Transfer the alginate solution using a dropper one drop at a time into the calcium solution, essentially 'cooking' the alginate into little spheres. The end result is tiny beads of Cointreau caviar. Ice 'spheres' and shapes can be made more simply using moulds or, for more elaborate effects, hand carved.

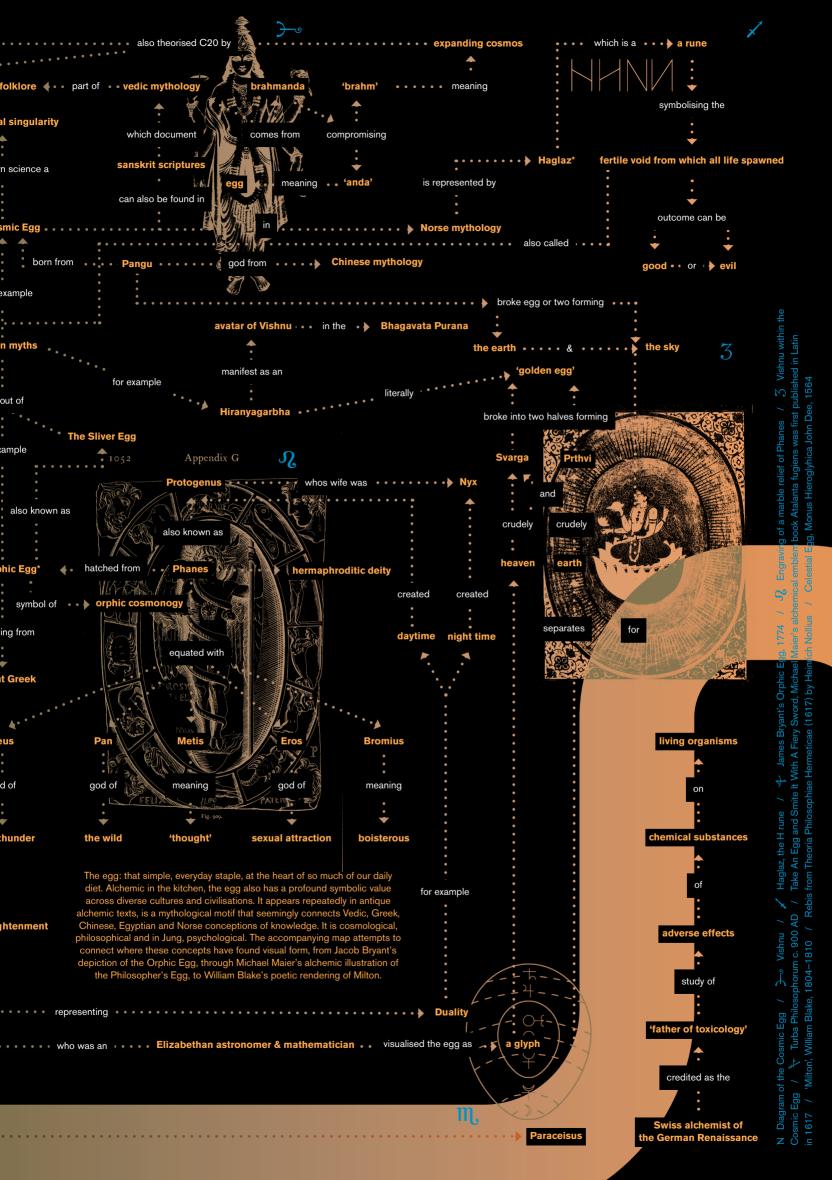
As someone who crosses the worlds of science and drinks-making, Stephen understands particularly well the potential dangers of bringing laboratory materials or techniques into the bar. He says, "you always need to be aware of the customer and what's safe. Not too long ago a bar in Lancashire served a drink containing Liquid Nitrogen. This is so wrong it borderlines on insanity. Liquid N2 can be used to cool glassware but never ever in a drink". The substance is not meant to be ingested while still in its frozen, liquid state, as it can be highly damaging to the body. The woman in question in this case had to have her stomach removed.

The main attribute to make a great bartender and cocktail maker, Stephen reckons, is a well-tuned palate. And, regardless of all the alchemic bells and whistles, fizzes and pearls, smoke and fire: taste is king. While preferences are certainly subjective, Stephen mentions some flavour partnerships made in heaven. Happy marriages include smoke and whiskey, bacon and whiskey and pineapple and rum. Winning flavours like strawberries can be even more enlivened by lemon zest or balsamic vinegar. Vinegars can be made highly palatable as tangy shrubs by infusion with sugar and fruits. Stephen, however, gives the thumbs down to the use of cream and milk in cold cocktail drinks. No White Russians? The Dude would not approve.

www.corridor8.co.uk / www.feastjournal.co.uk

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FORGE BAKEHOUSE

The Forge has been baking bread and pastries for the people of Sheffield for over six years. Inspired by the seasons and with a focus on waste reduction, Martha and her team have expanded a cooking school, a supper club and now Mesters' Social for all day brunch and Sunday lunch.





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Can you tell us a bit about yourself and why you decided to set up

Forge Bakehouse? I grew up in Sheffield and although I had never actually worked in a food business before starting my own, food had always been a big part of my life and upbringing. It wasn't until I actually started studying baking that I totally fell in love with bread. I spent a year at the School of Artisan Food learning all things bread, we did some pastry but that was definitely something I learned along the way once we had opened. Opening Forge Bakehouse came to fruition way faster than I thought. I had initially planned to move somewhere to work as a baker and play roller derby for a top team: bit of a change in direction now that I am so tied to Sheffield!

A big part of Forge Bakehouse is your offer of baking courses – Introduction to Bread Making, Introduction to Sourdough, and French Baking. Can you tell us a bit about why you decided to offer classes? Our original bakery was super tiny, so for the first 2 years of our existence classes just weren't on the cards. When we moved to bigger premises in 2014 it was great to start thinking about teaching. It felt so magical to me when I was learning, it's awesome to pass on some of that knowledge and get others excited about bread, especially real bread, made over longer periods of time with a focus on flavour and texture rather than speed and convenience.

Are there particular flours and ingredients you use to maintain the quality/texture of your bread?

Although good quality ingredients are important (we use Yorkshire Organic Millers and Shipton Mill), what's missing from most bread made today is time. Time is more important than anything else to me. The more time, the more flavour, the more interesting the texture, the easier it is to digest.

What do you recommend the people who attend your courses use for bread baking at home? I feel like I couldn't live without a scraper, it doesn't have to be fancy.



We use £1 plastic scrapers but it means you can handle your dough more easily, scrape your bowl and keep things tidy while you are working. It's also great to use when you are working with wetter doughs. For baking at home, I've seen amazing results when people bake in big cast iron pans with a lid on (for the first part of the bake). You prove your loaf in a basket, then turn it out into a pan that is as hot as your oven. It creates a super hot sealed environment and is the best way to get a great crust and good burst.

You recently expanded the Bakehouse to include the new Mesters' social, a café space serving up all day breakfast and brunch, Sunday Roasts and Supper Clubs: can you tell us a bit about the new venture? Mesters' has been a giant learning curve, a far bigger project than I ever thought. We needed to switch things up as we had run out of room in the bakery. Our chefs and bakers shared the space which meant it was a super tight squeeze when we were busy, trying to bake bread and serve up tonnes of baked eggs and French toast in the bakery café. We only had 12 seats inside which meant on rainy days people were turned away and there are only so many breakfasts people will eat balanced on their knees on the wall outside in the summer. The chefs now have their own space on the second floor, which serves Mesters' each day and prepares sandwich fillings for the bakery café. We wanted Mesters' to have it's own identity so offer different menus in different parts of the building. Mesters' is a little more grown up: table service, fully licensed with the ability to run more evening events as well as all the breakfasts and brunches that people came to love in the bakery café.

What other suppliers do you work with / Where do you source your ingredients from and how do you decide which suppliers you use? We mostly work with local suppliers, it's always a hard balance ensuring the quality of every ingredients is the best it can be while battling constantly rising costs. If you have a particular ethos around suppliers do you also have a plan for how to manage your waste? Waste is a massive issue for all businesses. We are very lucky in that because we have different sections working within the same building we've become good at ensuring minimal food is wasted. An ingredient that Mesters' doesn't need can be used in bread, or a savoury tart in the bakery. Any bread that is not sold goes to feed local pigs at Heeley Farm. We recycle the majority of our waste. It's something that



www.forgebakehouse.co.uk

can always be improved though.

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Mess

GOLD

Features / The Alchemy of Compost / The Chemistry of Cocktails / The Alchemic Symbolism of the Egg / Interview / Public / Forge Bakehouse Featured Artist / Nick Deakin

Featuring Photography by India Hobson Laure Carnet





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Mess

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Features / The Alchemy of Compost / The Chemistry of Cocktails / The Alchemic Symbolism of ' Interview / Public / F Featured Artist

A journal for chefs, brewers, artists, musicians and everyone who consumes the good stuff.

Issue 06

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