# Sheffield Hallam University

# Amateur design: DIY as resistance

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#### DIY as Resistance

#### Paul Atkinson

#### Introduction

Do-It-Yourself is an activity carried out by huge numbers of people across an enormous range of interests and for a variety of reasons. For some people, though, the act of DIY design embodies an element of resistance: a rejection of mainstream product manufacture that emphasises unsustainable perpetual perfection through planned, stylistic or technical obsolescence, in favour of a more personal, individual and 'authentic' experience of objects imbued with feeling and emotion, personal investment or memory as a more intrinsic part of the constructed self.

The sudden freedom afforded by computer technologies, which has lowered barriers of entry to numerous creative areas that were previously the remit purely of professionals, has boosted an extant and burgeoning attitude that was in many respects, ironically a backlash against the dependence upon a small number of computer manufacturers and the systems they insisted people used, coupled with more general concerns around the dominance of digital technologies and the increasing distance of many in society from the physical aspects of daily life. This phenomenon is now widely referred to as 'The Maker Movement', and while often taking place in homes and garden sheds all over the world, also takes the physical form of 'makerspaces' and 'fab labs' (fabrication laboratories) in which people can access shared facilities such as high-end 3D CAD software and Computer Aided Manufacturing equipment, 3D printers, laser cutters and so on in order to create and fabricate their own designs. The growth of this movement can be evidenced through the emergence of countercultural Californian DIY magazines such as *Readymade*, first published in 2002, and the more radical Make magazine of 2005, the founders of which launched 'Maker Faire' in San Mateo, California in 2006, which they describe as:

"Part science fair, part county fair, and part something entirely new, Maker Faire is an all-ages gathering of tech enthusiasts, crafters, educators, tinkerers, hobbyists, engineers, science clubs, authors, artists, students, and commercial exhibitors. All of these "makers" come to Maker Faire to show what they have made and to share what they have learned." (Maker Faire 2017)

Maker Faires have since become an extremely popular global activity, with numerous annual Faires and mini-Faires now organised all around the world, each attracting many thousands of people.

Academic discourse in the area of DIY as activism has been growing steadily, and as many of you will know, was the theme of the 2011 DHS conference in Barcelona. The introduction to the conference stated:

"Design activism has emerged in recent years as a term to denote creative practices that invoke social, political and environmental agency. Typically, it distances itself from commercial or mainstream public policy-driven approaches. Instead, it embraces marginal, non-profit or politically engaged design theories, articulations and actions. Arguably, 'design activism' is a response to particular contemporary conditions of geo-political change, social conditions, economic practices and environmental challenges."

The conference had strands including, among others, Theorizing Design Activism, Craft as Activism, Anarchism and Punk, Anti- and Radical Design, **Dissident Design** and the interestingly titled strand 'Quiet Activism'. A paper in this strand by Fiona Hackney, 'Under the Pavement the Antimacassar': Quiet Activism and Radical Domestic Crafts, formed the basis of a 2013 article in Design and Culture: 'Quiet Activism and the New Amateur in which she highlights an interesting point: One traditional view of DIY and home crafts, propounded by Steven Gelber among others, is that of a causal relationship between the spaces of the home and the workplace, one where hobbies 'passively condemn the work environment by offering contrast to meaningless jobs.' (Gelber 1999). However, as Hackney states, where there is no paid employment to be had, this argument falls apart. She references Manuel Castells in saying "when the structures of capitalism are under severe strain, alternative and countercultural values and ways of living move into the mainstream." In doing so, hobbies and the skills developed through them, start to redefine what both leisure and work might mean.

In my research, this has proved true, and I've come across many examples where undertaking hobbies have replaced people's employment when they have been made redundant or their businesses have suffered through lack of work. I was taken with Hackney's focus on the 'quiet activism' of practitioners of homecrafts, where individual endeavours are shared through communities of interest, and where 'alternative values and ways of living can be imagined and shared'.

The examples of DIY I have been examining are similarly based around communities of interest and similarly offer alternative values and ways of life, but perhaps in a more forthright, and certainly a much noisier way.

#### **Cigar Box Guitars**

The first of these 'noisy' types of DIY concerns the making and performance of cigar box guitars.

A cigar box guitar is a simple acoustic instrument that can easily be made from reclaimed materials. An old cigar box (or any wooden box or even an empty tin) forms a resonating chamber, and a neck is fashioned from either dowel or a wooden board which is built through the body of the cigar box, and then fitted with strings. It probably existed first of all in an even simpler form as a 'Diddly Bow'–a single cord stretched between two nails hammered into a plank of wood, which could be hit or plucked to vibrate the cord and produce a sound. Using a slide made of a piece of pipe or an empty bottle at various points along the cord would reduce its effective length and allow different notes to be produced.

As stated in opening chapters of a number of books on the subject of cigar box guitars, their exact history is not known, although reports on their use from American newspapers date as far back as the late 19<sup>th</sup> Century. David Sutton's

book, *An Obsession with Cigar Box Guitars*, cites the earliest reference to a cigar box instrument as being an 1876 etching of a Civil War soldier playing a cigar box violin, and discusses President Lincoln's taxation of goods, including cigars, in order to help fund the Civil War as leading to an 'industry standard' taxstamped cigar box of cedar wood-which is used as it keeps cigars fresh, but which also just happens to be a very good tone wood for guitars (Sutton 2013). The cigar box guitar has therefore been a part of American culture for a long time, and even though not a mainstream instrument it has regularly been a popular DIY project, especially for fathers to make with their children, and plans for them have appeared in numerous books and magazines since the very late 19<sup>th</sup> and throughout the 20<sup>th</sup> centuries. However, it did not take off in any real way in the UK until the appearance of Seasick Steve, who has popularised the use of home-made instruments.

In my research for an article (in press) on the makers of these instruments, I interviewed a number of people, ranging from those that made very few for their own use, to those who had made a successful business out of it. I'd like to share just a couple of these with you.

#### Cigar Box guitar makers

At the first end of that scale is Nig Richards, who, with his partner Margaret, makes cigar box guitars mainly for his own use as a performer. Having played guitar since he was a child (when he made toy guitars from cardboard and wool) Nig has been an amateur musician in numerous bands since the 1970s. He has owned a wide range of factory-made electric guitars over the years and still has a number of valued guitars he collects and with which he performs. It has become something of a trademark image for him, though, to perform live with his own, home-made instruments.

Around 2006, Nig read about old blues players using home-made guitars and decided to have a go by attaching a neck to his wife's jewel box. Having no formal training in design or making, he learned by word of mouth about such important things as scale lengths, and through trial and error, and built a number of different cigar box guitars and tin can guitars. He developed his knowledge slowly over a number of years, including a spell working on poverty relief in South Africa where music played on home-made instruments was an important part of the culture. He has made around 30-40 guitars and given many away rather than sell them, as he finds it difficult to make them for a reasonable price given the time it takes.

Nig states: "People have spent a fortune ... in studios, trying to recreate an authentic blues sound. And you know, really, the authentic blues sound is a cigar box and a cheap amp, because that's what those guys had! You know, the sound came out of poverty, so trying to recreate it with buying more and more sort of stuff for your Apple Mac isn't going to do it. You've got to recreate the tools of the trade they were using. And at best, they were using \$20 Sears and Roebuck guitars, and at worst they were using home-made – and every one of those is individual, and that's how you get that authentic blues sound. And I feel I'm kind of more in touch with it, you know." (Nig Richards)

At the other end of the scale is Chickenbone John. He uses the tagline 'The Godfather of the cigar box guitar' on his website. He has been making them since 2005 and has been instrumental in promoting the activity and the scene in the UK and across Northern Europe ever since. An experienced player and gigging musician, he made his first electric guitar at the age of fourteen, and played in various punk bands before training professionally as an architect. Later in life, he returned to playing and started buying, repairing and selling old guitars on the side. He had a particular interest in cheap American guitars of the 1940s and 50s, and then discovered cigar box guitars through the Internet, and decided to make one. He then offered to make a cigar box guitar for people who asked about them when he played his at music sessions, and went on to make and sell them through eBay. He treated it purely as an interesting hobby until an economic recession hit his architecture practice hard. By 2014 he started to make more money from making and selling cigar box guitars than he did in his professional practice, and gave architecture up altogether.

John set up an annual cigar box guitar festival now known as 'Boxstock' in 2009, which was the first UK event to bring cigar box guitar players together. He has received a lot of international publicity over the years, and as a cigar box guitar player, has toured with Seasick Steve. He also runs workshops to teach people to make and to play cigar box guitars to boost his income from making them, and has delivered these to over 1300 people. He makes between 200 and 250 cigar box guitars a year which usually sell for between £200-£300, and at the time of writing, was coming up to making his 1000th cigar box guitar.

Chickenbone John says: "I was about to buy a good guitar, thinking I can actually afford to buy myself a Martin or a Lowden or a Gibson or something. I thought, all the guys - the music I'm listening to, the old-time blues stuff – they didn't have fancy guitars. They were just street singer performers. All those players would have had cheap guitars really - the classic one is the Sears Roebuck catalogue where you'd put 50 cents down. [I thought] I don't need a fancy guitar. Then I think I was online or something and I heard about the idea of the cigar box guitar. I think it's the ultimate cheap guitar. A stick in a box. A box that had been thrown away and a broom handle or something like that. Made myself one. Then I played it at a jam session or whatever, and people would say 'that's really cool'" (Chickenbone John)

#### **Rat Bikes**

In complete contrast to cigar box guitars, the second 'noisy' DIY area I've looked at is the 'Rat Bike'.

I have spoken previously about different communities of bikers, highlighting how heterogeneous they are. The signifiers of different groupings can be subtly nuanced, yet also blatant. Rat bikes tend towards the blatant end of the spectrum.

Rat bikes are motorcycles that have either fallen into disrepair over time but been kept on the road and maintained for as little cost as possible, or else been assembled specifically to create a form of low-cost, low-maintenance transport, There is little or no concern with appearance to rat bikes, and the different parts (which may come from many different bikes and are therefore often hacked or altered to fit together) are usually given some conformity by being sprayed in matt black paint.

Survival bikes are a sub-group of rat bikes. They are essentially the same, but are deliberately built or modified for stylistic reasons, and are largely influenced by the 'Mad Max' films. They imagine a post-apocalyptic future where survival depends on the ability to appropriate and adapt anything available to hand.

#### DIY Bike builders

John grew up in the 1960s and 70s in West Yorkshire where he and his friends would ride old British bikes across fields as they were too young to drive on the road. As practically scrap bikes they needed a lot of maintenance and he learned to repair them by trial and error, with occasional input from adults. He had no formal training as an engineer other than in welding, which he fell into after a planned career as an apple picker came to an abrupt end when his van broke down on the way to Kent. He has worked previously as a mechanical engineer/fabricator, although all the skills he has in machining parts has been picked up on the job. That employer let him use the equipment to build motorbikes in his spare time, though his current job as a boiler welder provides no such opportunity, and he has resorted to using his kitchen as a workshop which makes working on his bike 'difficult'.

John has a number of bikes used for day to day purposes, but his pride and joy is his Harley Shovelhead which he has had for over 30 years. It is unique, and highly important to him, as he sees it as a reflection of himself. Over the years he has invested over £30,000 in it in terms of materials and components, and uncountable hours of personal time. It has a stock engine but he has fitted it with a non-standard belt drive clutch, and adapted the frame to take forks off a Kawasaki ZXR, different wheels and uprated brakes. He fabricated his own oil tank, swinging arm, handlebars and exhaust pipes, gaining knowledge from other people as and when required.

John is heavily involved in the lifestyle associated with this type of motorbike. He is part of a close-knit community of bikers where 'everybody knows everybody else', spends many weekends at motorbike rallies, and rides regularly with friends. To him, the look of a motorcycle should bear the owners mark and reflect the owner. He likens it to someone buying a house and changing a perfectly good kitchen for a different one to their own tastes. Most people in his community do the same – never buying new bikes, but altering older bikes and keeping them. He has built a number of bikes over the years, including one for his brother which used around £20,000 in parts and took him 2 years to build. The frame alone cost £7,000, but when his brother sold it, it went for £4,000. As a custom bike, it is built for one person and has much less value to others – and in any case, he says, 'the person who bought it then proceed to alter it anyway, so why didn't he just build one from scratch?'

John's community of bikers hold the building of bikes in high regard, and value the ability and dedication embodied in the resulting machine. They hold sports

bike riders in disdain, calling them 'power rangers' because that's what they think the full leather racing suits make them resemble, and find their riding habits – the weaving from side to side warming the tyres up 'as if they were about to ride a Grand Prix' "corny". They can't understand why they spend a fortune on finance for a new bike and insurance, only to replace the bike when a newer model comes out. To him, these are not 'real' bikers – 'authentic' bikers do not sell a bike easily.

Tony is at the more professional end of the DIY scale and has been involved in building motorcycles since 1981 though he did not set out to do so. He served a 3yr apprenticeship as an aircraft engineer at RAF Halton and later inherited an engineering business that supported the local textile by trade repairing textile looms, dying equipment and boilers. As motorcycle enthusiasts, he and his colleagues used the company's workshop facilities to build motorcycles for themselves and others as a sideline. As the textile industry went into decline, the motorcycle manufacturing took its place and slowly became their main source of income.

Tony now runs the business alone, building motorbikes from scratch or modifying existing bikes to order. The example shown here is an example of the extreme lengths he goes to in creating a custom bike, which only a dedicated expert might notice. It has a replica 1957 Harley Sportster engine built from scratch with all castings produced locally from his patterns, housed in a replica Norton Featherbed frame built by hand to fit the engine, with all other parts apart from the forks and wheels made by hand.

However, his main source of income is in building VW engine-based trikes. Although he refers to this as a 'standard' product, it is only standard to him in that it is his own design which he builds to order, with most orders coming through his website. He buys new engines in from Mexico (which are largely made in China!) or else makes engine parts in house. He bends the steel tube frames and welds them himself, and the fibre-glass bodies are made for him by a local firm, using moulds that he designed and made, with all other parts from the chassis up made by hand. He then applies the matt-black paint finish. The whole process to build a trike from scratch takes him 6 weeks, and he builds 8-10 of them a year, selling them at £9K + VAT. He is well aware that the trikes he makes form a central part of their owners' lifestyle in a way that a factory produced vehicle could never do. Over the years he has built 115 of them (to date) and regularly sees them at events across the country, about which he feels 'quite proud'.

#### Conclusions

- The above findings describe very particular forms of Do-It-Yourself activity; ones where the objects produced form the very core of strongly delineated subcultural communities.
- For both of these groups, elements of resistance to the mainstream and issues of authenticity are central.
- On the one hand, communities of interest based around musical performance that deliberately rejects expensive mainstream musical

instrument production and the status associated with high-end equipment, and instead celebrates the immediacy and personality of the one-off, hand-made instrument.

- On the other hand, communities of 'real' bikers that share a common lifestyle –a deliberately subversive group opposed to the mainstream consumption of expensive, off-the shelf mass-produced vehicles that, to them, are commodities that have no character or bear no traces of the owner's input.
- These two communities quite clearly and openly display alternatives to existing modes of production and consumption, and although they are strongly anti-establishment, each demonstrates a potentially more sustainable and more viable model for the future consumption of designed goods.