

**Born in the USA: The Cigar Box Guitar, Object
Displacement and Performative DIY**

ATKINSON, Paul <<http://orcid.org/0000-0002-6633-7242>>

Available from Sheffield Hallam University Research Archive (SHURA) at:

<https://shura.shu.ac.uk/27845/>

This document is the Published Version [VoR]

Citation:

ATKINSON, Paul (2020). Born in the USA: The Cigar Box Guitar, Object Displacement and Performative DIY. *Journal of Design History*. [Article]

Copyright and re-use policy

See <http://shura.shu.ac.uk/information.html>

Born in the USA: The Cigar Box Guitar, Object Displacement and Performative DIY

Paul Atkinson

The cigar box guitar is a long-standing cultural artefact which, over the course of its history, has undergone a series of displacements. Initially an acoustic instrument made by impoverished people in the mid-nineteenth century to fulfil a social need to make music and help the singing of traditional folk songs, it soon became a simple do-it-yourself project associated largely with children, and later, in the 1990s, it was reimagined as a serious, electrified musical instrument employed in a particular, performative form of DIY. In this most recent incarnation, the Internet has enabled the cigar box guitar to break free of its American roots to become the focus of a global practice of Performative DIY and a vehicle through which physical and virtual communities of makers support each other, express themselves, explore their creativity and display their self-identities.

Keywords: cigar box guitars—craft making—object displacement—social media—Performative DIY—self-identity

Introduction

This article explores a particular object, the cigar box guitar, which has been the subject of both a significant geographical and cultural displacement. Although it seems a very specific definition of an object, the term ‘cigar box guitar’ (CBG) is commonly used now (by those who make them) to refer to a range of basic, home-made instruments. The term covers not only guitars made from cigar boxes, which usually have three, or sometimes four strings, occasionally even six strings as on a regular guitar, but also diddly bows (one string), cigar box banjos (four or five strings), cigar box ukuleles (four strings), cigar box mandolins (eight strings) or cigar box violins (four strings). The term is also used to describe instruments that are not made out of cigar boxes at all, as a number of makers enthusiastically exploit hand-made boxes, old wine cases, packaging crates, oil cans or empty tins of all kinds, old hubcaps from cars, or any kind of receptacle that can be used to create a soundbox or resonating chamber.

Defining ‘Displacement’

It is apposite to discuss here definitions of the term ‘displacement’ as it is used in this article. As stated, the CBG has been the subject of significant geographical and cultural and material displacements. Though there has not been any kind of forced displacement as the term might connote in relation to a group of displaced people, the instrument has moved or transitioned from being a USA phenomenon to being adopted by other countries around the world, becoming widely embraced across Europe and in particular, the UK. The perception of the CBG has also changed over time as it was initially seen as the product of necessity, made where no alternatives were available or affordable, later becoming seen largely as a product of leisure—an

© The Author(s) [2020]. Published by Oxford University Press on behalf of The Design History Society.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited.

instrument suitable for children to make as an entertaining do-it-yourself project, and later still as a DIY activity suitable for everyone (although an activity dominated by white, middle-class males).¹ This recontextualization of the instrument is also a form of displacement, although the different perceptions have been concurrent for significant periods, rather than occurring as seismic paradigmatic shifts. The object itself has also been the cause of other displacements: it has negated some traditional industrial supply chains in factory-produced instruments and yet has also created an industrial infrastructure of companies that supply materials, components and tools for building them (although many makers deliberately refuse to use these). There has also been a displacement of the boundaries between professional and amateur around the CBG, with some makers, especially those who rely solely on income from making them refusing to identify as amateur in any way.² All of these, though, might be seen as 'lesser displacements'.

As described below, the major displacement with respect to the CBG is one that happened rapidly, as a direct consequence of the 'cigar box guitar revolution'. Whether produced because of dire need where there were no means to obtain a professionally-built instrument, or as the conclusion of a DIY project undertaken purely for fun, the CBG has historically been regarded as, *de facto*, an inferior object. Built from scrap wood, and without the use of professional woodworking equipment, the CBG was never expected or even intended to be directly comparable to the work of skilled luthiers. Following the cigar box guitar revolution, the activity of making CBGs has been adopted by a large group of like-minded makers, freely fuelled by knowledge exchange through online communities on social media. This sharing of expertise, constructive criticism and emotional support and encouragement, coupled with the use of readily available, off-the-shelf electronics, has resulted in many makers being able to produce an instrument that is now entirely suitable for the live, public performance of music. This object displacement is based on a fundamental shift of status. The CBG is now seen as a serious instrument for making music rather than a case of making do.

Defining 'Performative DIY'

A particular aspect of this latest incarnation of the CBG, and a key part of this study, is its role as an example of 'Performative DIY'. As a neologism, this term requires some explanation. Do-it-yourself can take a number of forms. As a hobby, its existence can be evidenced as far back as the eighteenth century and home handicrafts,³ although of course it was not named as DIY at that point. Home handicrafts became more commonplace at the end of the nineteenth century due to the rift between work and leisure resulting from increasing employment in industry.⁴ The 'golden age' of DIY, when the term itself was commonly in use, occurred around the mid-twentieth century, with popular press, radio and television all taking a hand in its wide dissemination, and a whole infrastructure to supply DIY materials and components emerged. I have previously identified different categories of current DIY activity based upon the motivations of those involved.⁵ These four categories were: 'Reactive DIY', which covers making that involves little or no design practice, i.e. through the use of mediated kits and templates as a pastime or hobby; 'Essential DIY', such as vital repairs and home maintenance; 'Lifestyle DIY', for example, home improvements as conspicuous consumption; and 'Proactive DIY', which involves self-directed design and production activity carried out for personal pleasure or financial gain. Clearly, the practice of making CBGs is a form of Proactive DIY, although it can be considered a particular standalone subcategory because of a distinct, additional characteristic. Performative

DIY includes an important element of public display and/or performance, not in the act of making itself (which is usually carried out in isolation), or purely a display of the object itself, but consequent to and employing the results of that making practice in an active sense. The combination of design and making activity with the added component of consequent public performance, leads me to propose the label for such practices as 'Performative DIY'. Other examples of making activities associated with elements of public performance or display that would fall under this banner of Performative DIY include the diverse groups of people who, for example, build their own motorcycles from scratch—highly individualised vehicles, which subsequently form an intrinsic part of their subcultural lifestyle as they meet other bikers and camp out at rallies where they showcase their hand-built bikes, and ride together in public in large numbers; or those who make period-correct items such as clothing, shoes, tools or weaponry, often making and then exchanging them with others in a primitive 'bartering' system before actively using those items in the re-enactment of historical battles where they take on particular societal roles from past periods. In a similar vein, the more recent but increasingly popular subcultures surrounding the genres of Cosplay and Steampunk⁶ involve people regularly spending significant amounts of time creating costumes, accessories and props which they then wear in communal gatherings where they display their alter egos. There will also be other examples of such activity that combine DIY with public performance or display that could come under this heading, assuming that the artefacts created are not just displayed for their own sake but actively used by the maker in a performance or display. Compared to the lack of academic study of CBGs, significant academic discourse has taken place around the subcultures of historical re-enactment,⁷ Cosplay⁸ and Steampunk⁹ (although in those studies, such activities have not previously been labelled or described as 'Performative DIY'). To address the lack of academic attention, this study aims to explore and describe the recent take-up of CBGs as a specific example of Performative DIY activity.

Personal Position

For reasons of clarity around the subject of objectivity, it would be useful at this point to discuss my personal position regarding CBGs. I regard myself now as something of an enthusiast. As Paul Hazell and Kjetil Fallan note, 'most design historians are enthusiasts themselves. What we choose to study, and how we go about that task, is—to varying degrees, of course—guided by our subjective preferences, responses, and experiences, at times amounting to full-blown enthusiasm for our subject matter and object of study'.¹⁰ My interest in the topic arose as a side issue of researching a book on the design history of the electric guitar. I have had a long-standing interest in the designed form of electric guitars, and although I am a guitar player myself, I only play acoustic guitars, not electrics, and so feel quite comfortable in approaching that topic objectively. Likewise, I was vaguely aware of the CBG as an object but I had no notion of the scale of activity involved or the culture of performance that had emerged around it until I researched the book. After deciding to explore the phenomenon in greater depth I became actively involved through joining some of the numerous Facebook groups dedicated to CBGs, and finally, started to build them myself. So, I didn't research CBGs because I was involved in the scene, I started to build them as a result of my research. While there may be some tensions encountered in this transition from historian to maker, and while the closeness of any author to their subject can be an issue of concern to some, I would, like Hazell and Fallan, agree that 'Direct experience of, or interaction with, an artefact leads to a different and often more profound understanding of the object'.¹¹

Previous work and value of the study to design history

Different aspects of do-it-yourself as a leisure activity have been previously addressed by a number of authors. Throughout the 1990s, Steven Gelber produced a series of academic articles and an oft-cited book on the social aspects of DIY in the USA.¹² Shove, Watson, Hand, and Ingram have examined do-it-yourself making as the consumption of craft.¹³ Andrew Jackson has explored the motivations and rewards gained by undertaking DIY.¹⁴ Fiona Hackney has critiqued the recent resurgence of home crafts as a form of design activism.¹⁵ Also germane to this study is David Gauntlett's work assessing the use of social media in the sharing of DIY knowledge.¹⁶ A number of authors have specifically addressed the status and value of amateur DIY making to society and to the discipline of design history. Philip Pacey argued that critical analysis of the work of non-professional designers was important so as to not limit the discipline's area of study.¹⁷ Judy Attfield saw the value of DIY in enabling 'the non-specialist to gain a greater sense of agency' in helping to construct the material world.¹⁸ Similarly, Stephen Knott sees amateur craft as having made 'a vital and important contribution to the material culture of the modern world'.¹⁹ And in *Material Cultures: Why Some Things Matter*, Daniel Miller argues that he, along with Arjun Appadurai and Pierre Bourdieu 'demonstrated that social worlds were as much constituted by materiality as the other way around'.²⁰ As Miller says, materiality is important as studies of material culture can provide insights into cultural processes that a more literal 'anthropology' might neglect.

In material culture terms, the CBG is an example of an instrument that for some reason holds a particular emotional resonance for its players, and forms the basis of a series of social interactions. The ability of some instruments to act in this way has been noted by numerous authors. Kevin and Moira Dawe note that the Spanish guitar plays a unique role in the formation of city, regional and even national identities in Spain, where the guitar is 'undeniably important in many areas of Spanish social, cultural and artistic life'.²¹ In an in-depth study of the Turkish Bağlama or 'Saz' (a type of long-necked lute), the ethnomusicologist Eliot Bates argues that the instrument itself is not 'incidental to, but constitutive of social interaction'.²² He is fascinated by the extent to which 'sazes are implicated in numerous facets of life in contemporary Turkish society,²³ from issues around national identity, through religious practices, to transformations of craft and industry. He ends by asking 'Why do some musical instruments (but not others) possess the performing musician and/or the audience?'²⁴ I am not saying that CBGs play a similarly important role in western society, or that they necessarily 'possess' their players, although many of the makers and players interviewed did confess to being totally absorbed when playing them in a way that they are not when playing a normal guitar. Others used the term 'magic' to describe aspects surrounding them: that all through the process of making them, the maker has no idea what it will sound like when it is finished until it is finally plugged in and played 'and then there's this sound, which is unlike any other guitar you've ever played, and it's quite magical really'.²⁵ The shed where another maker made his instruments was described as 'where the magic happens',²⁶ and one maker thought that it was 'quite magical'²⁷ that his CBGs worked at all.

I would argue that a study which explores the design history and material culture of the CBG, placing it within a newly defined, useful notion of 'Performative DIY' contributes by expanding the body of work and increasing the nuanced granularity of definitions of an already diverse and multifaceted area of activity.

Born in the USA

The CBG is undeniably North American in origin. Made from whatever materials came to hand, CBGs were a manifestation of a can-do mentality in the face of adversity; an authentic object that fulfilled a basic human social desire to create music. It is not the intention here to provide an in-depth history of the CBG, as this has been written about previously by enthusiasts and published in the form of trade books encouraging people to build such instruments.²⁸ The focus here is of the recent transformation of the CBG into a serious musical instrument and its movement out of the USA into other countries (particularly the UK) along with the cultural displacement that this has entailed. However, a short overview of the instrument's history is useful, providing a contextual comparison.

CBGs are often stated to have originated with African American plantation slaves and be most strongly associated with blues music, but evidence suggests the situation was far more egalitarian, with home-made instruments being produced by a wide range of people from very different backgrounds, and used to produce songs from a number of different musical genres. For example, in the permanent display at the Country Music Hall of Fame and Museum in Nashville,²⁹ an interpretation board describing the American frontier around the mid- to late eighteenth century explains that it was resourceful British settlers moving across the American continent that brought with them a wealth of fiddle tunes and folk songs, and that having no access to repair or buy new instruments resorted to making homemade violins, guitars and banjos using found materials in order to fulfil a real social need.

The English Folk Dance and Song Society notes that between 1915 and 1918, renowned folk song collector Cecil Sharp and his assistant Maud Karpeles searched the Appalachian Mountains of North America for songs and tunes of English origins. [1]. They found 1,600 of them.³⁰ Over the centuries, through the ingenuity of settlers, that music had been kept alive on the most basic of home-made instruments.

The exact date and route through which cigar boxes became recognised as a suitable base for musical instruments is not known, although evidence suggests that date would have been around the 1840s, when cigar boxes in the form they take today first appeared. The Federal Reserve Act of 1865 required that cigars be packed in boxes before leaving the factory, meaning many cigar factories started manufacturing their own boxes. As cigar boxes could not be re-used after the tax seal was broken, they were commonly burnt as firewood, used to hold other household items, or repurposed to make children's toys.³¹ As the interpretation board mentioned shows, it is well documented that people made their own violins from tea-chests or other materials from the early nineteenth century, so it is likely that cigar boxes were first used to make cigar box violins, banjos and guitars from the 1840s onwards.

Cigar box instruments originated in hard times, when many people had very little in the way of material wealth, or where they faced significant hardships. It is not surprising then, that the first known image of such an instrument appeared in 1876 in Edwin Forbes' collection of drawings "Life studies of

Fig 1. Cecil Sharp in Appalachia, ca. 1916. Image courtesy of The English Folk Dance and Song Society.



the great army". The image [2], *Home, sweet home. A scene in winter camp*, depicts two Civil War soldiers, one playing a cigar box violin³² (although earlier sketch studies showing the same instrument are dated at 1865). Such instruments became fairly common in times of war. Nicholas Saunders notes that during the Great War, instruments of all kinds were made from scrap wood and metal (often the debris of war itself) by soldiers.³³ As with the early American settlers, the practice was a way of combating homesickness and raising morale by playing traditional folk songs, and images of defiant men forming small orchestras in the face of adversity were widely published in magazines and on postcards of the period [3].

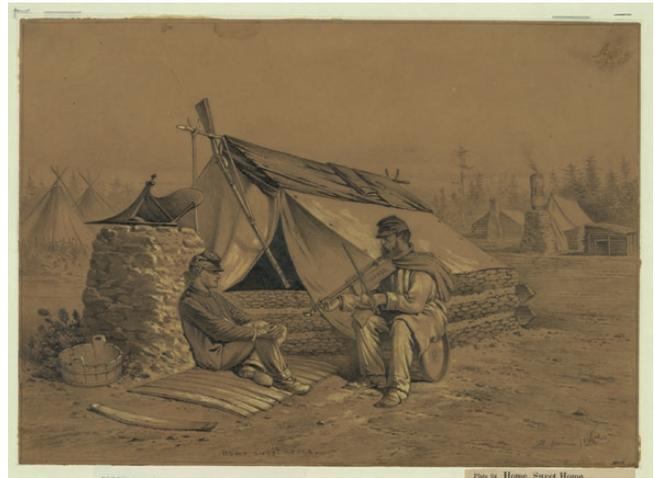


Fig 2. *Home, sweet home. A scene in winter camp*, Edwin Forbes, 1876. Image courtesy of The Library of Congress.

In a similar vein, many early American blues players, coming from extremely impoverished backgrounds, described how they first learnt to play on home-made instruments. Examples include Furry Lewis who in 1901/2, at eight or nine years old, made a CBG from some two-by-four wood for the neck and screen wire for a string attached to a bent nail,³⁴ and the son of an itinerant sharecropper, Big Bill Broonzy, kickstarted his highly influential musical career in 1905 when at the age of twelve he made a cigar box fiddle.³⁵ The Texan blues guitarist Lightnin' Hopkins hand-made a CBG that used chicken wire for strings in the early 1920s,³⁶ and years later, Chicago blues guitarist Buddy Guy recalls his poor childhood in Louisiana as a sharecropper's son in the early 1940s, when he made guitars out of old kerosene cans, fixing sticks into the cans with nails and using insect screen wire from the kitchen door for strings.³⁷

Occasional reports on the use of these early CBGs appeared in American newspapers as far back as the late nineteenth century, and became more commonplace in the early twentieth century. Following World War Two, for most Americans the poverty driven need to hand-make one's own instruments fell away, although the practice still continues today in some parts of the world. As videos on YouTube and the testament of people who have been involved in charitable works in African countries testify,³⁸ the building of oil can guitars, cardboard and plastic can drum kits, and wind instruments made out of old plastic tubing are still common activities there, enabling music to be played and enjoyed with very little resource.

The Cigar Box Guitar as a simple DIY project

Some decades after the appearance of CBGs, their inherent simplicity saw the instrument portrayed as a suitable DIY project for children. The first known plans to build a cigar box instrument were published in 1884 to accompany a story by the founder of the Boy Scouts of America, Daniel Carter Beard. The story, 'Christmas Eve with Uncle Enos' was printed in the December issue of *The Book Buyer*,³⁹ and told the story of three boys (Tom, Dick and Harry) listening to the playing of 'Uncle Enos', a freed African American slave, who had made a banjo from a cigar box and a broom stick. The plans were later reprinted in 1890 in *The American Boy's Handy Book: What to do and how to do it*.⁴⁰ This early account quite possibly contributed to the strong association in the public consciousness of CBGs with Black Americans. Certainly some of the earliest makers of these instruments were black, and the CBG continued to represent an important aspect of black culture in the USA with respect to blues music for



Musik deutscher Gefangener im Lager von Tizi-Ouzou (Algerien).

Fig 3. Musical German prisoners in the camp of Tizi-Ouzo (Algeria). First World War postcard from the collection of Kurt Termote.

many years, as described above. But Beard's narrative also endorsed the 'handing down' of the instrument from an impoverished elderly black maker to a privileged, young white audience. This was a move that proved popular. By the mid-twentieth century, the CBG had become firmly established as a child's toy and was shown being played by cartoon characters, including Walt Disney's Mickey Mouse in the 1930s, Charles Schulz's Charlie Brown in the 1950s [4], and in Richard Scarry's illustrations of Ducky Lucky in *Chicken Little* books of the 1960s.

CBG-building projects continued to appear in DIY magazines throughout the popular DIY boom of the late 1940s and 1950s, when dabbling in electronics became more commonplace. A significant development in CBGs, as with guitars in general, was the addition of pickups so that the instrument could be played through an amplifier. This had long been an aim for many makers and players of the six-string acoustic guitar, so that they could be heard in ensembles alongside louder instruments. It was a strong driving force, leading many amateur tinkers to submit patents claiming to solve the problem. These ranged from a dangerous 1890 prototype by George Breed, with electrically live strings, to Augustus Stroh's 1900 method of adding large external horns to instrument soundboards, to George Beauchamp and John Dopyera's approach in the mid 1920s of fitting metal resonating cones inside the guitar's body (a method still employed today in 'resonator guitars').⁴¹

There are two basic different methods used to electrically amplify a guitar—a transducer pickup can detect the vibrations of the guitar's soundboard, or an electromagnetic pickup can detect the vibrations of the strings, both methods providing a low-level signal that can then be amplified. Before electromagnetic guitar pickups became readily available in the 1950s (following the success of the Fender Telecaster), popular science magazines such as *The Electrical Experimenter* ran adverts in the 1920s for companies that could supply the microphone transducers used in telephone mouthpieces,⁴² and reported on tinkerers using these, or transducer pickups from phonograph tonearms, attaching them to the body of a guitar and connecting it to a wireless to use as an amplifier. It is not known when such a pickup was first attached to a CBG, but in 1938, the magazine *Mechanix Illustrated* ran an article about an engineering student who had built an electric CBG,⁴³ and when electromagnetic pickups were obtainable, it would have been straightforward enough for anyone inclined to create their own electric CBG. By the mid 1950s, then, all the pieces were in place for the CBG to become a serious musical instrument. Why this did not happen at this point is perhaps down to the strong association at that point in time of the instrument with children. While a CBG would have been of great value to young players as an introduction to playing music and might have provided the grounding for later, more serious performance (as they did for the early blues players mentioned above), the common representation and



Fig 4. Peanuts Cartoon strip by Charles Schulz, 1951. Courtesy of the Charles Schulz Foundation.

perception of the instrument at that point in time was, as shown, one of it being too simple, or 'child-like' to be taken seriously.

The Cigar Box Guitar Revolution

The major displacement the CBG has undergone has seen its status being forcibly changed from that of an inferior form of rudimentary instrument used either out of financial necessity or purely as a light-hearted exercise for children's DIY, to a fully-fledged 'proper' instrument that provides a viable and, for many, a desirable alternative to mainstream, factory-produced instruments used for public performance. At the root of this displacement, although he clearly had no idea of the impact it would have at the time, was the rock music journalist Michael Lydon [5]. In 1976 Lydon wrote a short article for *Guitar Player* magazine titled 'A Great American Tradition: The Cigar Box Guitar'.⁴⁴ He started the article by quoting the rockabilly star Carl Perkins, who had said that before he started school, his father, an American sharecropper, had made him a guitar from a cigar box, a broomstick and two strands of baling wire. 'When I wrote the piece,' he states, 'I had only been playing guitar for a few years, and my goal was to prove to myself that I (and therefore anyone) could build an instrument music could be played on'.⁴⁵

Lydon's article did not provide complete plans, but it described in some detail the trial and error process he went through in order to make the guitar, accompanied by just two photographs: one of the assembled finished instrument and one with the cigar box lid removed. Published in a special-interest, low-volume print magazine that is not indexed, well before the accessibility of the World Wide Web and easily copied digital files, the article could easily have become 'lost' without having had much or any effect. Instead, by a chance occurrence some seventeen years later, it went on to have a significant impact. In Pennsylvania, Shane Speal, the son of tavern owners, had long harboured ambitions to play the guitar like his heavy metal heroes, but had been struggling to make headway. A friend gave him some of his father's old guitar magazines, including the December 1976 issue of *Guitar Player* which contained Lydon's article. When Speal read this at the age of twenty-three in 1993, he was inspired to build his own, three-string version and discovered that as soon as he had built it, he could play it—and found it suited his playing much better than his regular six-string guitar.

Wanting to show people how easy it was to make a CBG, Speal set up a single-page website. That site gathered so much interest that he had to set up a chatroom to answer everyone's questions and before long it had 3,000 members.⁴⁶ That website has now evolved into *Cigar Box Nation: The home of the Cigar Box Guitar Revolution*, a site which at the time of writing has over 20,000 members and is the first port of call for people wanting to find out about CBGs and how to make them. Labelling it a 'revolution' was based on the idea of breaking 'rules': that one didn't have to be an excellent player, and most of all, didn't have to sound like anyone else. Instead of playing hidden



Fig 5. Michael Lydon with his cigar box guitar, in a photograph taken at the time of writing his article. Courtesy of Michael Lydon and Ellen Mandel. ©Ellen Mandel.



Fig 6. Shane Speal, founder of the *Cigar Box Nation* website. Courtesy of Shane Speal. Photo by Jennifer Diehl.

away in a bedroom, Speal, the self-proclaimed 'King of the Cigar Box Guitar',⁴⁷ encouraged people not to be afraid, to get out there and play, and not to listen to people who said they couldn't do it [6].⁴⁸

There is now a popular and growing community of CBG makers right across the USA, with groups hosting meetings and workshops, and with dedicated festivals being held as far apart as Pennsylvania and Pacific Northwest in the north, New Orleans and Texas in the south, North Carolina in the east and Washington and Arizona in the west. The movement has also now spread well beyond the USA, with events held across the world as far apart as New Zealand and Europe including the Netherlands, France, Germany, Belgium, and the UK.

Cigar Box Guitars in the UK

The high level of interest in the CBG in its current form in the UK can be directly traced back to the American blues player Seasick Steve and his first appearance on UK television. On 31st Dec 2006, the 14th annual *Jools Holland's Hootenanny* was broadcast on BBC 2 television.⁴⁹ Here Seasick Steve played a dilapidated six-string electric guitar with three of the strings missing, and kept time by stamping his foot on a home-made stomp box he called the 'Mississippi Drum Machine'. His performance proved that expensive, hand-finished, factory-made musical instruments were not a prerequisite for high-quality music. This appearance turned out to be a turning point in his career. He quickly released several successful CDs, headlined music festivals and appeared widely on national television, demonstrating one-string 'diddly bows', CBGs and hub-cap banjos. This exposure led to a huge increase in the popularity of CBGs in the UK, and inspired a large number of people to take part in this type of Performative DIY.

The construction of CBGs today varies greatly from instrument to instrument (which appears to be part of the attraction) usually beginning by identifying and selecting a range of components. The main component is a suitable receptacle that could form a resonating chamber or sound box. This could in fact be any hollow wooden box, a tin box or empty can, or a chamber made from domed metal items such as old car hub caps or even bedpans. The receptacle is then cut where required in order to allow a wooden neck to be fitted through it. This could be formed from any suitably strong piece of wood sawn and shaped to size, often prompting the use of reclaimed floorboards, doorframes, old staircase spindles, broom handles or other offcuts of wood. The strings used are standard guitar strings, commonly, the 3rd, 4th and 5th thickest strings from a standard 6-string set.

The remaining components can be bought or made from a variety of found objects (usually a mix of the two), and the creativity involved in finding alternatives is celebrated among makers. This level of artistic freedom accounts for the enormous diversity of styles of guitar that are proudly displayed on social media by makers. Through the imaginative repurposing of different objects for sound boxes and the various component parts, CBG building has become a hotbed of creativity, sometimes seeming like a friendly competition to see who can produce the most outlandish and original designs. Tailpieces for the strings can either use the bodies off pop rivets, hinges off

old door frames, old handles from sets of drawers or other similar items. Sound hole covers can be made from old curtain eyelets, sink strainers, or the fan covers off old computers. The bridge and nut to support the strings can be whittled from bone or plastic, or made from old door keys, threaded nuts and bolts, or wood with a piece of fret wire inserted. While many makers use off-the-shelf tuners to tension the strings, some use old wing nuts, hooks or eyebolts to tension the strings and tune them to the correct note.

Interestingly from a design point of view, the design and cutting of the body and neck and the assembly of the other components is rarely planned out beforehand in any great detail. In fact, only one person interviewed in that study (who considers himself to be a professional maker) does any kind of in-depth planning, using an advanced CAD package to draw and position all of the components. For the rest, the construction is done 'under the saw' as the instrument is being made, in a process of trial and error. The starting point for most makers seems to be a finished design held in the mind's eye, usually inspired by a particular box or tin, or particularly outstanding component they want to repurpose. Certain boxes or tins might be more suited to a particular type of instrument (i.e. a guitar, banjo or ukulele), but many could be used for a range of instruments. One maker, while holding a certain tin he had acquired stated that 'this tin hasn't told me what it wants to be yet'.⁵⁰

The exact location of the components of a CBG in relation to each other is, in fact, of little importance as long as the very few unbreakable 'rules' are followed. The fingerboard (the surface of the neck that the strings will be pushed against while playing the instrument) has to be above the surface of the sounding box or body, and if an electromagnetic pickup is being fitted, above the level of the top of the pickup. The strings need to be held in place a few millimetres above the level of the fingerboard by the use of a 'nut' at one end and a 'bridge' at the other, the exact distance depending on personal preference and whether the guitar will be mainly played by fingers or with a 'slide' made of some kind of tubing. If frets are to be fitted to the neck, (and they don't have to have frets at all), then these have to be very carefully placed in the right position so that the correct notes sound along the length of the neck when the guitar is tuned.

Other than that, variety is key. The boxes can be any size, within reason, and even though many makers stick to one of the 'standard' scale lengths (essentially the length of the string between bridge and nut) established by Fender (25 ½") or Gibson (24 ¾"), there is no real requirement to do so. Some makers go with whatever scale either looks right or feels right for the box. Basically, longer scale lengths produce a deeper sound, while smaller scale lengths produce a higher sound. The corresponding position of the frets on the fingerboard (if they are to be fitted) or the fret markers (if no frets are fitted) can then be ascertained using a 'fret calculator', freely available online, or by the use of an electronic tuner to show where the correct notes physically occur. Even the number of strings varies. The most common number of strings is three so that three notes can be played together (three being the minimum number of notes to make a chord), but many players prefer to use four strings. However, any number of strings can be used, and one string 'diddly bows' or eight string cigar box mandolins are all possibilities. Sometimes the instruments are purely acoustic, in which case sound holes are usually cut into the box to increase the volume. Or the guitars can be amplified using a piezo-type flat disc transducer pickup glued to the inside of the box, or an electromagnetic pickup (bought, reused, or sometimes wound by hand by the builder) fitted to the top of the box or tin underneath where the strings will be fitted. Although the

use of an electromagnetic pickup potentially removes the need for a hollow body, solid-bodied 'cigar box' guitars are relatively rare.

In terms of the numbers of guitars made by each maker, this too varies widely. The majority of makers make a single guitar at a time, and each one looks and sounds completely unique depending on the components used in its construction. If these are to be sold, the amount of time involved potentially makes the guitars quite expensive. Some make guitars to order, using a variety of components, but do so regularly and are set up in a way that reduces the costs from repeatedly carrying out the same tasks. At the other end of the scale, those who make CBGs for a living take a more professional approach and buy components in bulk, use bigger power tools and numerous jigs to produce guitars of a high enough quality at low enough cost to make a profit. This brings into play a number of tensions around amateur versus professional status, and, for some, raises questions of authenticity and being true to the ethos of the movement.

Where the main driving force in the USA is to encourage people to get out there and play, the most prominent aspect of the UK scene is a rejection of overpriced factory-produced instruments and a resistance to the continual consumption of mainstream manufacturing. Proponents of CBGs realise there is no reason one should have to pay large sums of money for a factory-made guitar bearing a famous American or Japanese maker's name. They believe that perfectly good music can be produced on far from perfect musical instruments very cheaply, and many believe that the real essence of CBGs lies in using recycled, reused, repurposed or upcycled materials wherever possible, rather than using virgin material or specially purchased components. This is in spite of a whole infrastructure of online suppliers appearing in recent years to supply the demand for cheap parts for making such instruments. With this approach, the CBG can be seen as the product of a concerted drive toward a more sustainable existence, driven by three aspects of CBG maker's behaviour: the practice of repurposing for its own sake, the development of stronger and longer-lasting emotional bonds with the home-made instruments they make, and being part of a virtual community of like-minded sustainable makers through engaging with social media groups.⁵¹

Performance

Clearly, the most relevant aspect of 'Performative DIY' that distinguishes it from other forms of DIY relates to the element of performance. As with historical re-enactment, steampunk and cosplay, the communal aspects of the activity where groups of like-minded people gather to perform and display the results of their efforts are a fundamental part of their engagement with the subcultural scene. From the comments of those interviewed, this is particularly true for the makers of CBGs. The majority of makers usually build their guitars in workshops or sheds outside of the main part of the home, and consequently tend to spend many hours alone. Many of these reported regularly experiencing a 'flow' state—the point at which people are so fully engaged concentrating on an activity that nothing else matters.⁵² This flow state sees makers enter their workshops early in the morning and re-emerge to find that somehow, the whole day has slipped by. This repeated experiencing of a flow state that cuts them off from everyday life may explain the makers' extensive use of social media in order to benefit from the emotional support of a virtual community of makers and to counteract feelings of isolation. However, despite the virtual connectivity, makers stated how important it was to them to also meet face to face other people involved in the activity. Irrespective of this contact being through attending festivals to sell their instruments, or

through public performances where they show and play them, the fact is that through performance and display, the CBG often becomes an intrinsic part of makers' lifestyles.

Evidence to support this can be seen in the adoption of alter egos relevant to the activity itself, an element that is fundamental to both steampunk and cosplay:

Steampunk [as with cosplay] performances, whether they take place at conventions, in films or in fiction, are ultimately fantasies.... For those attending a steampunk convention their costume, as well as being a way of performing identity and sexuality, is a way to create intimate bonds with others in their subculture and to perform their distance from mainstream images of the body and clothing from which they dissent.⁵³

In the same way that those involved in steampunk and cosplay develop fully-formed alter egos which form the basis of their involvement and become a part of their self-identities to varying degrees, CBG makers often adopt pseudonymous performance names (such as 'Woofie', 'Chickenbone John', 'Hollowbelly', and 'Bad Mood Hudson') when playing in front of an audience or in their online interactions with virtual communities. For CBG players this might be seen as following the example of earlier American blues artists that took names such as 'Howlin' Wolf', 'Leadbelly', 'Blind Lemon Jefferson' or 'Mississippi John Hurt' to differentiate themselves from others or to ensure their names were more memorable, but it might also be because of the element of resistance to mainstream consumption that surrounds the movement and the 'alternative' image that surrounds the instrument following the cigar box guitar revolution. Perhaps because the nature of CBGs being strung and tuned differently to standard six-string guitars means that they have to be played differently, using different chord structures and sequences, and because players stated that this difference had enabled them to discover new aspects of their musical creativity that they had not previously explored, performing under a different name allows players to step outside of their everyday existence and to experiment with developing an alternative persona.

For a significant number of the makers, the move into the world of the CBG had not only allowed them to explore an alternative persona, but had actually come about at a turning point in their lives when they had gone through an unchosen change of direction or made a conscious decision to change their lives. More than one maker had lost a job through redundancy and made CBGs to sell to tide them over, being surprised to realise that it had later become a full-time occupation. For one maker, a life down the pit gave way to finally realising a teenage dream of making money through wood-working after the local coal mine closed. Others described how they had been making them purely as a pastime before realising they were making more money doing it than through their day job and so took the plunge to go self-employed; while others had reached a point in their lives where their job satisfaction had dropped so low that they actively looked around for an alternative and came upon CBGs by accident. For yet others, CBGs were credited with saving the makers from going mad with boredom after retirement. In a variety of ways, the CBG had been at the core of a reinvention of the self, with all involved stating how much happier the move had made them. Born again buskers.

Conclusions

Cigar box guitars usefully evidence the potentially positive benefits of object displacement in a design context. They demonstrate that the long-standing perception and received status of an object can be dramatically changed, sometimes over only a short

period of time. They establish the fact that rather than being discarded, objects can be repurposed to have not only new uses, but also sometimes totally unexpected after-lives. They also expose that as well as those objects being reinvented, their makers and their users can themselves be similarly reimaged.

The making of CBGs today points to a series of continuities as well as contrasts to previous practices. On the one hand, it can be seen as preserving and carrying on a traditional practice of hand crafting, making do with the bare minimum of resources and exercising one's independence and free will. This is an aspect important to some makers, especially those whose interest in the object centres around notions of authenticity. This view seems particularly prevalent in the USA. For others, particularly in the UK, engagement with CBG making is more about breaking new ground, and is bound up with expressions of resistance—resistance to a seemingly never-ending cycle of capitalist consumption and the homogeneity of mass-production; or else resistance to an increasingly digital age where people have become further removed from physical, hands-on, creative activity.

Shane Speal's rediscovery of Michael Lydon's article and his consequent widespread dissemination of the instrument, initially through the Internet and later through social media, initiated what has become referred to as 'the cigar box guitar revolution' and led directly to the major object displacement of the instrument from being seen as a second-rate, basic, low grade, child-like artefact into a desirable, bespoke, anti-consumerist, serious hand-made instrument suitable for public performance and display. It is in this form that it has become the focus of a particular strand of Performative DIY, and as such, enables their makers to explore their creative abilities, their self-identities and alter egos.

Paul Atkinson

Professor of Design and Design History, Art, Design & Media Research Centre, Culture & Creativity Research Institute (CCRI), College of Social Sciences and Arts, Cantor Building, Sheffield Hallam University, 153 Arundel Street, Sheffield S1 2NU, UK.

Email: p.atkinson@shu.ac.uk

Paul Atkinson is Professor of Design and Design History at Sheffield Hallam University, UK. He has published widely on Do-it-Yourself and amateur versus professional design, including editing two special issues of this journal on these topics (*Do-It-Yourself: Democracy and Design*, 2006, Vol. 19 No. 1 and *Ghosts of the Profession*, 2008, Vol. 21 No. 4). He has authored two books on the design history of computers (*Computer, Reaktion*, 2010 and *Delete: A Design History of Computer Vapourware*, Bloomsbury Academic, 2013), and a book on the electric guitar (*Amplified: A Design History of the Electric Guitar*, Reaktion, 2021) highlighting the role of the amateur experimenter and tinkerer in its creation.

Notes

- 1 Early accounts of the making of home-made instruments describe the activity as being carried out by males, be they frontier settlers, soldiers, plantation workers or young boys. Of course, it is entirely possible that they were also made by women and that this is just not documented. The male bias with respect to DIY activity in general does seem to have remained with the making of CBGs to this day, although there are women who build them and a small number who are known as CBG players.
- 2 P. Atkinson, 'Hairy Guys in Sheds: The Rough and Ready World of DIY Cigar Box Guitar Makers', *Design and Culture*, vol. 10, no. 3, pp. 139–168.
- 3 C. Edwards, "'Home is Where the Art is": Women, Handicrafts and Home Improvements 1750–1900', *Journal of Design History*, vol. 19, no. 1, pp. 11–21.

- 4 See S. M. Gelber, *Hobbies: Leisure and the Culture of Work in America*, Columbia University Press, New York, 1999.
- 5 P. Atkinson, 'Do-It-Yourself: Democracy and Design', *Journal of Design History*, vol. 19 no. 1, pp. 1–10.
- 6 As Guffey notes, 'steampunk fills a [vast] realm bleeding into literature, graphic novels, music, politics, art, design, cultural theory, material culture, and the digital realm', not only DIY making. E. Guffey, 'Crafting Yesterday's Tomorrows: Retro-Futurism, Steampunk, and the Problem of Making in the Twenty-First Century', *The Journal of Modern Craft*, vol. no. 3, p. 257257.
- 7 Examples include E. Carnegie, and S. McCabe, 'Re-enactment Events and Tourism: Meaning, Authenticity and Identity', *Current Issues in Tourism*, vol. 11, no. 4, pp. 349–368; J. Lamb, 'Historical Re-enactment, Extremity, and Passion', *The Eighteenth Century*, vol. 49, no. 3, pp. 239–250; and K. M. Johnson, 'Rethinking (re)doing: historical re-enactment and/as historiography', *Rethinking History*, vol. 19, no. 2, pp. 193–206.
- 8 Examples include O. Rahman, L. Wing-Sun and B. H. Cheung, "'Cosplay": Imaginative Self and Performing Identity', *Fashion Theory*, vol. 16, no. 3, pp. 317–341; N. Lamerichs, 'Costuming as subculture: The multiple bodies of cosplay', *Scene*, vol. 2, nos. 1–2, pp. 113–125; and G. Crawford and D. Hancock, *Cosplay and the Art of Play: Exploring Sub-Culture Through Art*, Palgrave Macmillan, Cham, 2019.
- 9 Examples include C. Ferguson, 'Surface Tensions: Steampunk, Subculture, and the Ideology of Style', *Neo-Victorian Studies*, vol. 4, no. 2, pp. 66–90; E. Guffey, 'Crafting Yesterday's Tomorrows', *Neo-Victorian Studies*, vol. 4, no. 2, pp. 249–266; and S. A. Huxtable, "'Love the Machine, Hate the Factory": Steampunk Design and the Vision of a Victorian Future', in J. A. Taddeo and C. J. Miller, (eds), *Steaming into a Victorian Future: A Steampunk Anthology*, Scarecrow Press, Lanham, MD, 2012.
- 10 P. Hazell and K. Fallan, K, 'The Enthusiast's Eye: The Value of Unsanctioned Knowledge in Design Historical Scholarship', *Design and Culture*, vol. 7, no. 1, pp. 109–10.
- 11 Ibid. p. 119
- 12 S. M. Gelber, op. cit.
- 13 E. Shove, M. Watson, M. Hand and J. Ingram, *The Design of Everyday Life*, Berg, Oxford, 2007.
- 14 A. Jackson, 'Constructing at Home: Understanding the Experience of the Amateur Maker', *Design and Culture*, vol. 2, no. 1, pp. 5–26, and A. Jackson, 'Men Who Make—The "Flow" of the Amateur Designer/Maker', in M. Buszek (ed.), *Extra/Ordinary: Craft Culture and Contemporary Art*, Duke University Press, Durham, NC, 2011.
- 15 F. Hackney, 'Quiet Activism and the New Amateur', *Design and Culture*, vol. 5, no. 2, pp. 169–194.
- 16 D. Gauntlett, *Making is Connecting: The social meaning of creativity, from DIY and knitting to YouTube and Web 2.0*, Polity Press, Cambridge, 2011.
- 17 P. Pacey, "'Anyone Designing Anything?" Non-Professional Designers and the History of Design', *Journal of Design History*, vol. 5, no. 3, pp. 217–225.
- 18 J. Attfield, *Wild Things: The Material Culture of Everyday Life*, Berg, London, 2000, p. 46.
- 19 S. Knott, *Amateur Craft, History and Theory*, Bloomsbury, London, 2015, p. xi.
- 20 D. Miller, *Material Cultures: Why Some Things Matter*, UCL Press, London, 1998, p. 3.
- 21 K. Dawe and M. Dawe, 'Handmade in Spain: The Culture of Guitar Making', in A. Bennett and K. Dawe, (eds), *Guitar Cultures*, Berg, London, 2012.
- 22 E. Bates, 'The Social Life of Musical Instruments', *Ethnomusicology*, vol. 56, no. 3, p. 372.
- 23 Ibid, p. 386.
- 24 Ibid, p. 387.
- 25 Interview with Iain Moncrieff, 10 February 2018.
- 26 Interview with Den Duffy, 24 August 2019.
- 27 Interview with Nig Richards, 19 July 2018.
- 28 Examples include D. Sutton, *An Obsession with Cigar Box Guitars*, Fox Chapel Publishing, East Petersburg, PA, 2013 and W. J. Jehle, *One Man's Trash: A History of the Cigar Box Guitar*, [2nd ed.], self-published, 2016.
- 29 Permanent exhibitions in the Country Music Hall of Fame and Museum, Nashville, accessed 13 July 2017.
- 30 EFDSS, (English Folk Dance and Song Society), (n.d.) 'Cecil Sharp Project'. <https://www.efdss.org/component/content/article/10-efdss-site/105-efdss-cecil-sharp-project?Itemid=163> accessed 23 July 2019.
- 31 Jehle, op. cit., p. 13.
- 32 Edwin Forbes, Artist. *Home, sweet home. A scene in winter camp*, ca. 1876. Photograph. <https://www.loc.gov/item/2004661510/>.
- 33 N. J. Saunders, *Trench Art: Materials and Memories of War*, Berg, Oxford, 2003, p. 109.
- 34 S. Booth, S. 'Furry's Blues (1966)', in Peter Guralnick et al. (eds.), *Martin Scorsese Presents The Blues*, Harper Collins, New York, 2003, p. 140.
- 35 C. J. Farley, C. J. 'Big Bill Broonzy: Key to the Highway', in Peter Guralnick et al. (eds.), *Martin Scorsese Presents The Blues*, Harper Collins, New York, 2003, p. 239.

- 36 R. Beecher, Sleeve notes to Audio CD *Lightnin' Hopkins: Short Haired Woman*, Catfish entertainment/Charly Records, SBLUECD 023.
- 37 P. Trynka, P. 'uddy Guy Arrives in Chicago', in Peter Guralnick et al. (eds.), *Martin Scorsese Presents The Blues*, Harper Collins, New York, 2003, p. 222.
- 38 Interview with Nig Richards, 16 February 2016.
- 39 Available at <https://www.cigarboxguitar.com/knowledge-base/christmas-eve-with-uncle-enos-by-daniel-c-beard-circa-1884/> accessed 23 July 2019
- 40 D. C. Beard, D. C. *The American Boy's Handy Book*, Scribner, New York, Scribner, 1890.
- 41 P. Atkinson, *Amplified: A Design History of the Electric Guitar*, Reaktion Books, London, 2021.
- 42 Advert for Skinderviken Transmitter Buttons by Johnson Smith and Co., *The Electrical Experimenter*, March 1920, p. 1187.
- 43 Anon, 'Student Constructs Loud Speaking Electric Guitar', *Mechanix Illustrated*, June 1938, p. 81.
- 44 M. Lydon, 'A Great American Tradition: The Cigar Box Guitar', *Guitar Player Magazine*, December 1976, pp. 80–82.
- 45 M. Lydon, Communication with the author, 1st October 2019.
- 46 D. Sutton, *Cigar Box Guitars*, Fox Chapel Publishing, East Petersburg, PA, 2012, p. 34.
- 47 S. Speal, (n.d) <https://shanespeal.com/press-kit> accessed 21st June 2018.
- 48 D. Sutton, *Cigar Box Guitars*, Fox Chapel Publishing, East Petersburg, PA, 2012, p. 35.
- 49 Jools' 14th Annual Hootenanny, *BBC Television*, Sun 31 Dec 2006. <https://www.bbc.co.uk/programmes/p006yy96> accessed 1 October 2019.
- 50 Interview with Woofie, 20 July 2018.
- 51 P. Atkinson, "'It Might Be Rubbish, but it's *My* Rubbish": How the Makers of Cigar Box Guitars Resist Throwaway Culture', *Journal of Sustainability Research*, vol. 2, no. 4. DOI:10.20900/jsr20200038
- 52 M. Csikszentmihaly, *Flow: The Psychology of Optimal Experience*, Harper & Row, San Francisco, 1990.
- 53 M. Danahay, 'Steampunk and the Performance of Gender and Sexuality', *Neo-Victorian Studies*, vol. 9, no. 1, p.142–3.