

ARCADE BRITANNIA

A SOCIAL HISTORY OF THE
BRITISH AMUSEMENT ARCADE



ALAN MEADES

Arcade Britannia

Game Histories

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A Social History of the British Amusement Arcade

Alan Meades

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Series Foreword

What might histories of games tell us not only about the games themselves, but also about the people who play and design them? We think that the most interesting answers to this question will have two characteristics. First, the authors of game histories that tell us the most about games will ask big questions. For example, how do game play and design change? In what ways is such change inflected by societal, cultural, and other factors? How do games change when they move from one cultural or historical context to another? These kinds of questions forge connections to other areas of game studies, as well as to history, cultural studies, and technology studies.

The second characteristic we seek in “game-changing” histories is a wide-ranging mix of qualities partially described by terms such as *diversity*, *inclusiveness*, and *irony*. Histories with these qualities deliver interplay of intentions, users, technologies, materials, places, and markets. Asking big questions and answering them in creative and astute ways strike us as the best way to reach the goal of not an isolated, general history of games, but rather of a body of game histories that will connect game studies to scholarship in a wide array of fields. The first step, of course, is producing those histories.

Game Histories is a series of books that we hope will provide a home—or maybe a launch pad—for the growing international research community whose interest in game history rightly exceeds the celebratory and descriptive. In a line, the aim of the series is to help actualize the critical historical study of games. Books in this series will exhibit acute attention to historiography and historical methodologies, while the series as a whole will encompass the wide-ranging subject matter we consider crucial for the relevance of historical game studies. We envisage an active series with output that will

reshape how electronic and other kinds of games are understood, taught, and researched, as well as broaden the appeal of games for the allied fields such as history of computing, history of science and technology, design history, design culture, material culture studies, cultural and social history, media history, new media studies, and science and technology studies.

The Game Histories series will welcome but not be limited to contributions in the following areas:

- Multidisciplinary methodological and theoretical approaches to the historical study of games
- Social and cultural histories of play, people, places, and institutions of gaming
- Epochal and contextual studies of significant periods influential to and formative of games and game history
- Historical biography of key actors instrumental in game design, development, technology, and industry
- Games and legal history
- Global political economy and the games industry (including indie games)
- Histories of technologies pertinent to the study of games
- Histories of the intersections of games and other media, including such topics as game art, games and cinema, and games and literature
- Game preservation, exhibition, and documentation, including the place of museums, libraries, and collectors in preparing game history
- Material histories of game artifacts and ephemera.

Henry Lowood, Stanford University

Raiford Guins, Indiana University Bloomington

Preface

Between the ages of seven and sixteen, I spent as much time as possible in my local amusement arcade in the sleepy Victorian seaside resort of Broadstairs, famous for being Charles Dickens's favored summer residence. I was what you might call an arcade local, one of the thirty or so kids who hung around the arcade constantly. While summer holidaymakers would come and go, their pockets bulging with coins to spend in the arcades, we locals ran a slower but steadier race. We saved our allowance and school dinner money; we'd watch for unused credits and rejected coins and listen for the clatter of money falling spontaneously from a coin-pusher machine. We'd also play what we considered reliable, low-stakes fruit machines in the hope of earning winnings to extend our playtime. We did this not only during the summer months, but all the while the arcade was open, even after the tourist crowds had gone. For an arcade local, the arcade was not simply about the latest impressive videogames or fruit machines, but its community of arcade players, workers, managers, and owners. We grew to know and respect the managers and workers, who became recognizable but distant figures of authority. Instead of being the site of vice and risk that so many parents feared the arcade was, during my youth I knew it as a place of fun, full of adolescent peers but surrounded by other groups we were largely oblivious to, all under the sometimes-watchful eyes of the manager and staff.

My time spent in amusement arcades was not without threat, however. Visits to arcades in other towns, especially out of season, felt risky. When I'd encounter locals from other arcades on their home turf, I felt it necessary to observe the rules. Winning a jackpot on a fruit machine or spending too long on a videogame might be regarded as an infraction and draw

unwanted attention from the resident locals. The appropriate protocol differed according to the number of locals, their physical size and reputation, and the proximity of any arcade staff. But generally the smart move was to quickly and quietly leave: besides, anything beyond frosty stares might result in temporary or permanent arcade bans, and it wasn't worth reducing the number of arcades around the coast that I could visit.

Under these conditions, I watched as new machines appeared, and the games, people, and interactions within the arcades were enormously influential as I grew up. There was the day that my friend and I sat in a real Ferrari sports car after school and then played Sega's *Out Run Deluxe* afterward until our money ran out, our heads a-fizz with the blur between real life and Sega's game. I remember the day that Konami's *Teenage Mutant Hero Turtles* machine arrived in the arcade; we watched as the plastic wrap was peeled off it, and we were given free credits as the videogame was put through its paces. I remember having to balance on tiptoe on an angled rubber strip to play Taito's *Ninja Warriors* in its huge, three-screened cabinet, which was too tall for me to comfortably see. Most of all, I remember the arcade as a space defined by noise and crowds during the summer, and as a refuge from endless dreary rain as the tourist season ended and the British weather descended. Yet while it might seem familiar to readers, my preoccupation with the power tensions among the various contingents of arcade locals is only one perspective of the British arcade. Arcades were also inhabited by other groups: holidaymakers, families, elderly and very young coin-pusher players, gamblers, workers, managers, owners, occasionally distributors, and even game designers.

Arcade Britannia is an attempt to trace some of the less well-known perspectives of the British arcade, and in doing so, highlight its differences compared to North American arcades, and its place within British culture. As we shall see, the British arcade is a product of centuries of evolution of public play, gambling, and mechanization. *Arcade Britannia* tells a story of long-standing cultural motifs—traveling fairs and showfolk—of engineers, technological pioneers, and entrepreneurs who saw an opportunity to create the arcade landscape that remains important to so many to this day. Finally, this book details the British arcade as a product of legislative changes, a pendulum shift between control and liberalization, the product of continued efforts of government and concerned moralists to limit and diminish play.

Arcade Britannia is an attempt to sketch out the long history of the British arcade, with its tangled technological, social, cultural, biographic, and legislative perspectives. This is done by breaking the history into eleven chapters (plus this preface), as follows:

- Chapter 1, “The British Arcade Versus the Mythic Arcade,” traces the influence of media upon our understanding of the arcade, including selected academic literature and popular media. It describes the mythic arcade, a distorted version of the real North American arcade that has become dominant and now obstructs an understanding of regional arcades, such as those in Britain.
- Chapter 2, “From Showfolk and Sanddancers to the 1960 Gaming Act,” presents the tangled foundations of the arcade. This includes the cultural, social, historic, and legislative contexts, and it also highlights the role of traveling showfolk, moral reform, and public attitudes toward gambling, as well as inconsistent policing, in the development of the British arcade. It ends with the 1960 Gaming Act, which liberalized gambling in Britain and enabled the modern British arcade.
- Chapter 3, “Coin-Op Entrepreneurialism,” offers examples of different businesses that developed as entrepreneurs exploited the conditions of the 1960 Gaming Act, and radically expanded the British arcade and machine manufacture and distribution.
- Chapter 4, “Get This Lousy Piece of Legislation Put Right,” details the strong countermovement to the 1960 Gaming Act as the government and concerned members of the public responded to claims of arcade overexpansion, links with organized crime, and undertaxation, leading to the unveiling of the Gaming Board for Great Britain, the 1969 budget, and machine-protest bonfires around Britain.
- Chapter 5, “Pings, Pongs, and Pioneers,” details the arrival of videogames in Britain, including the Manchester-based company Alca beating Atari to the British market. It also highlights the already global and connected nature of the British amusement arcade industry.
- Chapter 6, “Copyright Defenders and the British Videogame Crash,” details the development of copyright law in relation to British videogames, the rise of unlicensed game conversion and modification services, and the global industry’s pursuit of a legal test case. It also discusses the British arcade crash of 1982.

- Chapter 7, “The Invader’s Revenge,” details the development of relationships between the Japanese and British videogames industries. It discusses the development of *The Pit*, a British-designed arcade videogame exported to Japan and the US, the arcade origins of the Nintendo (and later Microsoft) developer Rare, and the defensive move from printed circuit boards (PCBs) to large simulator machines to combat piracy.
- Chapter 8, “Anti-Groups, Addiction, and the Arcade as Cinema” details attempts of the Amusement Arcade Action Group (AAAG) to bring about radical control of the British arcade industry, as well as its (almost successful) efforts to have the arcade categorized as a cinema.
- Chapter 9, “SegaWorld, *Street Fighter II*, and Exporting Games to Japan,” details the British arcade videogame landscape of the 1990s, the heavy investment in Britain by the Japanese gaming company Sega, its failed SegaWorld theme park/arcade, and the inversion of videogame manufacturing patterns due to the strong yen and weak pound.
- Chapter 10, “Gold Dust, 20p Fruit Machines, and Redemption,” offers a companion to chapter 9, but it looks at the fruit machine and low-stakes gambling environment during a similar time period. It charts the failure of 20p fruit machine play and the segregation of the industry into juvenile and adult arcades.
- Chapter 11, “A Historic Accident,” details the 2000 *Budd Report* and 2005 Gambling Act and describes their enormous impact upon the British amusement arcade by liberalizing gambling, enabling online gambling and Fixed Odds Betting Terminals (FOBTs) to proliferate throughout Britain, and simultaneously penalizing the amusement arcade for allowing children to play low-stakes gambling machines. Framed by the *Budd Report* as a historic accident, this chapter concludes the book, showing that successive legislation has attempted to isolate the British arcade, changing it from a single site of public play for everyone to multiple isolated (and often networked) arcades for distinct groups.

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1 The British Arcade Versus the Mythic Arcade

The Mythic Arcade

I want you to imagine an amusement arcade. Start with the building: its age, its decor, the construction, the ceiling height, the lighting, and the flooring. Think of the people there: the patrons—who are they? What are their ages, their gender, and their roles? Are they playing, watching, or working? What are the sounds: is there music, is there noise? Is the arcade dark or light, cramped or airy? Finally, if you have not already, I want you to consider the machines. What games and attractions fill your imaginary arcade? What machines are there to be played?

There is a good chance that you imagined a dark cavern of neon lights, phosphorescent screens, and cramped rows of videogames. The arcade was likely filled with adolescents (mostly boys), and awash with blips and bloops, snippets of game jingles, sound effects, and cries of elation and frustration from the players, and perhaps you imagined some soft-rock music coming from a speaker. Depending on your age and nostalgic preference, you might have stocked your arcade with Atari's *Pong*, Taito's *Space Invaders*, Namco's *Pac-Man*, Sega's *Out Run*, Capcom's *Street Fighter II*, or perhaps Sega's *Daytona USA* or *Virtua Racing*. Some readers might have included a crane, a ticket-redemption machine, or a punching machine

I would wager that few readers' imaginary arcades included slot machines, fruit machines, or penny pushers—all machine types that are central to British arcades and enable low-stakes gambling. And I would expect fewer still would have imagined these machines being played by children, surrounded by apparently unconcerned adults. For many, this situation might be unfathomable or shocking—your imagined arcade dominated by neon

lights, adolescent boys, and videogames. But if you have spent any time in British amusement arcades, the vignette painted in these last sentences will seem normal—and more to the point, *is* normal. It *is* the British arcade. Examples of real British arcades can be seen in the photographs shown in figures 1.1–1.9, taken in the 1980s by the photographer and arcade bingo-caller George Wilson. How many of the images comply with the arcade that you imagined? See the Fair Ground arcade’s open doors facing the seafront. See the change booth, Perspex signage, videogames, and the pool table; and the bingo caller in the back of the arcade, and the girl and boy gambling on fruit machines, joined by an elderly woman playing games alongside them. Behold loitering in the arcades, people staring out the doors at the front as much as watching the games, and their leaderboards (KEV is in first place, with almost 60,000 points on *Defender*).

The neon-and–videogame arcade that most people imagine is simply a dominant arcade archetype that bears little relation to real arcades other than during a specific point in their continual evolution. This archetype is something I call the *mythic arcade*. The mythic arcade is a product of imagery like Flynn’s Arcade, seen in the 1982 Disney movie *Tron* and



Figure 1.1

Exterior of the Herne Bay Fair Ground and Manhattan Amusements, early 1980s. Copyright George Wilson/South East Archive of Seaside Photography, CCCU.



Figure 1.2

Exterior of the Herne Bay Fair Ground arcade; note patrons loitering in and around the space. Copyright George Wilson/South East Archive of Seaside Photography, CCCU.



Figure 1.3

Interior of the Herne Bay Manhattan Amusements arcade—the arcade for play and posturing; note the mix of games, including *The Pit*. Copyright George Wilson/South East Archive of Seaside Photography, CCCU.



Figure 1.4

Interior of the Herne Bay Pier Arcade; Britain is unique in its approach to low-stakes gambling by minors. A young girl plays a low-stakes AWP fruit machine. Copyright George Wilson/South East Archive of Seaside Photography, CCCU.



Figure 1.5

Interior of the Herne Bay Pier Arcade; British arcades attract a wide demographic of patrons, the normality of low-stakes gambling by minors is shown further here. Copyright George Wilson/South East Archive of Seaside Photography, CCCU.



Figure 1.6

Interior of the Herne Bay Manhattan Amusements arcade; arcades were often experienced as places in which to spectate and loiter. Children not only watched the games being played or their scores but also the outside world. For many, the arcade played an important social role. Copyright George Wilson/South East Archive of Seaside Photography, CCCU.



Figure 1.7

Interior of the Herne Bay Pier Arcade; note the age range of patrons playing fruit machines, the bingo prizes hanging from the ceiling, and the seaside ice cream signage. Copyright George Wilson/South East Archive of Seaside Photography, CCCU.



Figure 1.8

Interior of the Herne Bay Fair Ground arcade; Crompton's *Clean Sweep* coin pusher machine, a popular machine with all ages. Note the playfield design, resembling terraced streets. Copyright George Wilson/South East Archive of Seaside Photography, CCCU.



Figure 1.9

Interior of the Herne Bay Manhattan Amusements arcade; Crompton's *Silver Skis*, a later coin pusher. The coin pusher remains an important part of the arcade machine mix, alongside amusements and fruit machines. In this image, we see AWP, pinball, simulator and stand-up videogames, and a coin pusher. Copyright George Wilson/South East Archive of Seaside Photography, CCCU.

nostalgically reinforced in 2010's *Tron: Legacy*. Flynn's Arcade sits on the corner of an urban plot with a huge, orange neon sign; inside, it is dimly lit and tightly packed, with row upon row of arcade cabinets: we see *Asteroids Deluxe*, *Berzerk*, and *Battlezone*. The dim space is punctuated by flashing neon lights: "CODE WARS," "ZERO," and "GUNNER," and we hear a mix of 1980s pop-rock music. We hear sound effects: *Galaxian's* "pee-woo," *Space Invaders'* oppressive "chug-chug-chug," and *Donkey Kong's* "blee-bloop" score sound. In the film, a crowd forms behind Flynn, cheering him on as he scores 999,000 points on *Space Paranoids*. It is a space of orange neon, youth, noise, and technological prowess. Flynn's Arcade is how many of us imagine arcades to be; it is a prime example of the mythic arcade. *Tron*, as well as a smattering of other cultural touchstones that articulated the same technological excitement, have taken on a mythical, totemic significance, helping to establish a "collective gaming memory,"¹ and creating the mythic arcade.

What Makes Britain Different?

Let us sketch a quick outline of the British amusement arcade landscape. Like many countries, Britain developed an appetite for coin-operated amusements during the late nineteenth century. As elsewhere, it has a community of entrepreneurs and show people who adopted new entertainment technologies for public consumption in traveling fairs, events, and amusements. The country developed a seaside-based holiday and entertainment industry focused on relatively few large resorts, and in these places, entertainments like this became highly profitable. And, as in some other countries but rarely acknowledged by game studies (due to distaste—or even prejudice?), the British demonstrated a longstanding predilection for gambling that combined exceptionally well with coin-operated machines.

By the early twentieth century, the British public had embraced coin-operated machines, amusement arcades, and low-stakes gambling. Fueled by enormous numbers of cheap, imported French, German, and then American automatics, low-stakes gambling soon became part of the very fabric of everyday British leisure, especially at seaside resorts that took on a character of abandon, license, and merrymaking. Yet despite their widespread social acceptance, gambling machines were technically illegal in Britain, and police adopted an unsustainable policy of discretionary enforcement, warnings, and ignored offenses. The gulf between public attitudes and law was untenable and politically embarrassing, and in 1960, the British government introduced the Betting and Gaming Act, which legalized two types of gambling machine: *Amusement with Prizes (AWP)* machines, low-stake entertainments with a prize of such trivial value as deemed not to be serious gambling; and *gaming machines* (also known as *club machines*) that had higher stakes and therefore posed higher risk. AWP machines could be made available to the public (including children) without restriction, but higher-stake club machines could only be operated in places that excluded the general public, such as members' clubs.

Following their creation, AWP machines became the bedrock of the British amusement arcade in urban and seaside settings, leading to enormous expansion of the industry. Arcades could now entertain the whole family with different types of coin-operated machines (AWP machines, kiddie rides, and amusements) under the same roof and could satisfy the demands of the public with impunity. This generated hefty duty for the Crown, but also became

a concern for some members of society. The act also set off a process of legislative recalibration and amendments that continue to this day, and these changes have affected the development of the British arcade. As a result of the 1960 Act (and later revisions), the UK is the only jurisdiction in the Western world that permits children to gamble on machines. This is only one example of the distinctiveness of the British arcade.

While the headline message might appear to be that this act allowed children to engage in low-stakes gambling, this is a distraction; the important repercussion was that it enabled amusements and gambling machines to sit alongside each other in British arcades. This made the amusement arcade an even more compelling destination for the family (especially on holiday), as it offered a range of activities to cater to different tastes and members of the family. The act therefore had major economic repercussions. For arcade operators, it enabled a kind of cross-subsidization; AWP income could support novelty machines (which in turn accentuated a family feel in the arcades), and prodigiously increased the revenue that could be made. The number of arcades radically increased, and manufacturers developed new machines to cater to expanded demand and the technicalities of the law. And this all happened long before the first bloop was heard from *Pong*, *Space Invaders*, or *Pac-Man*. While videogames eventually became an important part of the British amusement arcade, and arcades became the place to experience them, the industry was not defined by them. Instead, the British arcade was defined by a longer history: the relationship between amusements and gambling, public attitudes toward propriety, the development of new technologies, and the ways that legislation defines opportunities and limitations for public play.

Returning to the arcade that I invited you to imagine, I assume that it was full of videogames and lacking any form of gambling. Yet, while this might seem like a typical arcade in North America, France, or somewhere else, this kind of arcade is a rarity in Britain. It might exist as part of a larger entertainment offering, such as a bowling alley or amusement park, but most British *arcades-as-destination* depend on a mix of amusements and AWP for their income. The backbone of revenue in most British arcades is generated by AWP and low-stakes gambling, and for the majority of Britons, it is normal, accepted, and the way that it has always been.

It is therefore impossible to separate gambling income from the typical British arcade business model. Furthermore, without AWP income, the

British amusement arcade would not have grown to the size it had prior to the invention of videogames and—like the North American arcade industry—would have all but disappeared shortly after their decline (or, perhaps a more accurate word is “crash”). Gambling is such an important part of the arcade’s financial structure, but likely such a jarring concept for most readers, that it is impossible not to address it immediately.

What Does the British Arcade Look Like Today?

The 1960 Act’s successor, the 2005 Gambling Act, shares many of the same objectives. It focuses on the control and taxation of gambling machine income and the protection of the British public, especially minors, from the negative influence of gambling, and it includes mechanisms to minimize the criminal exploitation of machines. Subsequent legislative revisions have introduced new stipulations and restrictions, and since 2007, Britain’s arcade landscape consists of three license types: Unlicensed Family Entertainment Centres (UFECs), Family Entertainment Centres (FECs), and Adult Gaming Centres (AGCs).

UFECs may contain any number of machines, whether amusements-only such as videogames, or AWP machines, provided that they conform to the category D (cat D) specification. Cat D machines include cash-only fruit machines limited to a 10p (14 US cents) maximum stake and £5 cash prize (\$6.80), but also prize machines, crane grabbers, coin-pushers, and machines that offer a combination of money and nonmoney prizes. Each stake and prize limit is strictly regulated. A UFEC offers a mix of amusements and gambling: kiddie rides, videogames, cranes, coin-pushers, and low-stakes gambling machines. They are regarded as family-friendly amusements often found seen at seaside resorts. A UFEC has no legally stipulated minimum age limit, and it is perfectly legal for children to play on all the machines they contain. It is worth noting that cat D fruit machine stake and prize limits have not increased since they were first defined in 2005, and arcades reliant on these machines for income have seen their returns dwindle each year due to inflation.

Family Entertainment Centres (FECs) may include the same machines as their unlicensed equivalents, but they also can include an unlimited number of category C (cat C) machines in a separately supervised, adults-only area. Cat C machines have a higher maximum stake and cash prize than

cat D (£1 and £100, \$1.36 and \$136). FEC licenses are granted by the Gambling Commission, and successful applicants must conform to stringent criteria. An FEC is therefore best understood to be a typical family arcade, containing a mix of videogames, kiddie rides, fruit machines, cranes, and other amusements, which also includes a separate area containing higher-stakes gambling machines *only accessible by adults*. This is an example of a cross-subsidized amusement arcade, with income from each machine category fluctuating according to the season and the arcade's clientele. At the height of the season, a surge of vacationers might lead to increased income from amusements and cat D machines, while out of season, the cat C machines might make a reliable stream of income. The patterns of earnings depend on the arcade's location and its machine mix (and machine layout), as decided by its staff.

The third arcade type defined by the 2005 Gambling Act is the Adult Gambling Centre (AGC). Minors are not permitted in these arcades, and the stakes and prizes in its machine mix reflect this. An AGC may contain an unlimited number of amusements and cat C and cat D machines, but 20 percent of its total number of machines can be higher stakes category B3 (£2 and £500) and category B4 machines (£2 and £400). While other even higher-stake gambling machines exist (categories B1 and B2), these are limited to casino and betting sites and subject to further regulation. AGCs are found throughout Britain, often on main commercial streets of towns and cities.

The Gambling Commission's licensing regime, with its UFECs, FECs, and AGCs, creates another arcade type by omission. This arcade type contains no prize-giving or gambling machines, or the prizes are so trivial that no form of regulation is required. These kinds of arcade do not fit well within the historic economic model of the British arcade, which relies upon gambling for its core income, and are few and far between. Some large, amusement-focused arcades have remained in operation, but there is a sense in 2021 that this model no longer works. For example, Namco's three-floor flagship arcade Funscape County Hall, situated just off London's Westminster Bridge, finally closed on August 12, 2021. Its location commanded some of the highest tourist footfalls in the country, and it is likely this that ensured its survival for so long. At the point of closure, Namco Funscape County Hall was the largest London arcade adopting a traditional pay-per-play model. Some have seen the hall's closure as a sign of the death of the British arcade, but this is not strictly the case. It is fairer to see it as the twilight years of the traditional British arcade business model. Elsewhere, Britain has seen a rise of retro or

niche arcades, such as Arcade Club, in Bury, just outside Manchester, or FreePlayCity, in North London. These arcades cater to a more specific demographic (one that resonates with the mythic arcade), often containing retro videogames or popular music and fighting and dance games that support a competitive play community. These arcades dispense of the pay-per-play approach in favor of a flat entry price and then free play. In these modern arcades, videogames and novelties are the entire offering. Retro and modern arcades are still few in number but are growing in popularity, and traditional arcades remain across the country. The success of the new arcades suggests that there is public demand and a willingness by entrepreneurs to pioneer and establish the market—that the British interest in arcades remains, and arcades have cultural significance.

As we shall see, there has been a gradual movement from the arcade as a communal space of public play, supporting many audiences and types of play, to a mode in which are multiple types of arcades catering to specific (and, depending on changing public tastes, sometimes unsustainable) niches. This trend is important to our understanding of public play, with its logical conclusion of modern networked gambling and online gaming, playing publicly, visibly, but over networks, whether on mobile phones, games consoles, or computers, and in physical isolation. Perhaps this represents the end of the amusement arcade and the public play it facilitated.

Where Are Arcades Found Now?

Arcades are found throughout Britain, but concentrated in seaside resorts and major cities. If a destination draws sufficient holidaymakers to a beach or riverside during the all-too-short British summer, then an arcade can often be found alongside shops selling ice cream, fish 'n chips, or beach supplies, to keep tourists entertained when the rain inevitably sets in. These arcades are open and airy, their ceiling-height doors folded back to maximize visibility and to invite visitors to enter, and are only closed out of season or a when squall is blowing up. Filled with a machine mix selected to attract and retain families, they contain banks of coin-pusher machines, ticket-dispensing machines, cranes and grabbers, videogames, punching machine, kiddie rides, fruit machines, and perhaps a candy-floss machine or café.

Beyond the seaside, the AGC becomes dominant, found in almost every major town or city entertainment district. In these arcades, the focus is

decidedly on gambling, mostly playing fruit machines. Unlike their seaside cousins, AGCs have frosted glass and screens to obscure the activities within from passers-by. If you crane your neck while passing an AGC, you might catch a glimpse of flashing machine lights reflected on polished chrome or brass, and you will see posters advertising the kinds of machines within, but the sites are designed to offer their patrons privacy. AGCs share much of their decorative character with British chain pubs such as JD Wetherspoon—thick carpets, polished brass, and comfortably dimmed lighting—and have much the same everyday feel: AGC, pub, betting shop, supermarket.

Then you have the collections of machines, perhaps a motorbike racing game next to a couple of low-stakes fruit machines and a crane, sited in a bowling alley, motorway services, or cinema. Each British pub's license contains an automatic entitlement for the inclusion of two cat C or cat D fruit machines on the premises, and this number can be increased with approval from the local authorities. There was a time when almost every taxi office, fish 'n chips shop, and café would contain a fruit machine, but the 2005 Act made this illegal. You might find a videogame or a skill or quiz machine out in the wild, but such encounters became less frequent by the day.

One assumes the lure of online games and gambling on mobile phones and the move away from cash to a contactless payment society has done these other kinds of game in. At the same time, if you pay a visit to a British casino or licensed bingo hall, you will find higher-stakes gambling machines. While there are many coin-operated machines in Britain, their accessibility has been reduced and controlled, available for adults only and under licensed supervision. By contrast, the traditional amusement arcade (best captured by the UFEC, open to all) has had its perceived social risks neutered by freezing the stakes and prizes of the cat D gambling machines it contains. It is my view that by limiting the cat D stake/prize limits for so long, the British government is simply waiting for inflation to make them uneconomical, and then the peculiar but fascinating situation in which the British arcade facilitated a cross-generational novelty and gambling experience enabled by the 1960 Act will become nothing more than a historic footnote.

Who Plays in British Arcades?

Let us consider arcade audiences. Who plays in British arcades—what are their demographics and identities? This is tough to answer for several

reasons: there is little reliably available data that describes the historic or contemporary audience, and it is difficult to make general observations about British arcade audiences, as they are so dependent on an arcade's type and location, the season, and the time of day. Yet it remains a pressing question, especially in light of the technomasculine bias of the mythic arcade.

Despite the relative lack of empirical data, I can talk about my years spent growing up in and around arcades in a small British seaside town on the South East coast called Broadstairs. The arcade audience then consisted of several separate groups who appeared largely oblivious to one another. There were vacationing families that crowded the arcade in late afternoon, dragging sand onto the carpet and smelling of coconut suntan lotion before suddenly embarking on coaches and trains and returning to London. The adult members started by playing fruit machines and coin-pushers but soon got bored and disappeared to the nearby pubs, leaving behind the children, an even mix of girls and boys who ambled around the space with handfuls of money, playing machines badly. They would show their unfamiliarity with the space by doing things like not realizing they had unclaimed credits on videogames, having their extra credits taken by arcade locals on multi-player games, and playing what we saw as the worst fruit machines. The vacationing children seemed young, and I assume that the older teenagers had either decided that seaside day trips were just too uncool to be involved with or maybe had joined their parents in the pubs. By the mid-1980s, the British seaside day trip had become an anachronism, supplanted by trips to Spain or Greece, and domestic resorts remained the preserve of nostalgic elder Britons, those who had not caught on, and those who could not afford foreign travel. The holidaymaking visitors in my hometown arcade were primarily a mix of white and black working-class Londoners.

Out of season, the arcades became quieter, more personal. Many of them would reduce their credit prices on the machines so they would remain busy and inviting, and to give a little back to the locals. When the weather got really bad, the arcade was inhabited only by the dedicated arcade locals. The arcade locals, children like me who lived nearby and claimed the arcade as part of their day-to-day entertainment patch, were a different group. The crowd of about thirty recognizable arcade regulars was made up of about twenty boys and ten girls between the ages of about seven to fifteen; girls joined the arcade a few years after the boys. While seaside resorts were picturesque in the summer, in the winter everything was dead

and gray. To make matters worse, there was an absence of reliable, well-paid employment nearby, and despite the quaint Victorian seaside properties many of us lived in, income levels in the region were lower than in much of southern England. The area was not ethnically diverse, and outside the summer season, my arcade companions were primarily white, male, poor, and working class.

Younger locals played videogames and the occasional fruit machine, while the older, more serious boys tended to play fruit machines exclusively, apart from when they wanted to show off to the arcade girls. It would be wrong to regard machines as the sole attraction of the arcade; instead, it was our meeting place, our youth club. My older sister was another arcade local, although she was not there anywhere near as much as I was. She and her friends would breeze through the space, give me money (if I was lucky), show me secret techniques to work the fruit machines, and quickly diffuse any simmering tensions that might be building between the adolescent males. My sister's group would play only certain videogames (like *Pac Land*, *Wonder Boy*, *Marble Madness*, *R-Type*, *Paperboy*, and *Ghouls 'n Ghosts*) and certain fruit machines (like *Crack the Nut* and *Smash and Grab*), spending much of their time smoking cigarettes, looking tough, talking with the oldest boys, and running errands for Howard, the arcade manager. If they were not inside the arcade, they would sit on the arcade steps drinking blue Slush Puppy ice drinks until the manager had decided it was time for them to get lost. The boys in the arcade played all of the good-but-not-too-expensive videogames, such as *Final Fight*, *RoboCop*, *Gauntlet*, and later *Street Fighter II*, or machines that facilitated macho posturing. For a while, there was a *Sonic Blast Man* punching machine, its punch-pad repaired with a fraying strip of silver duct tape; patrons would demonstrate their punching power with a loud thump that reverberated through the arcade. Even though I would be engrossed in a different activity somewhere else in the arcade, I would look up at the power score on the screen as the giant crab, truck, mugger, or meteor was dispatched and make a mental note of the comparative pecking order of the arcade locals. I still remember the stomach-churning feeling of a hard punch hitting the machine, the threat palpable in my overexcitable teenage mind.

I would rarely play on the big simulator machines like *Out Run*, simply because they were too expensive and instead played on the midtier games. When money was running out I would move to the fruit machines,

especially those my sister had trained me to play and read, and the older cheaper games on the periphery of the arcade, *Buck Rogers*, *Time Pilot*, *Tron*. I would string my money out as long as possible, oscillating between playing videogames, watching others, having small wins on the fruit machines, and grabbing any money that serendipitously fell into the coin-pusher win trays before the staff scooped it up. When my money ran out, I simply hung around in the arcade waiting for something to happen, a friend to arrive, some money to appear, or some other adventure to begin, and then I'd repeat the same thing the next day. But my account presents the British arcade as seen through the eyes of a teenage boy (even worse, the *memories* of experiencing the arcade as a teenage boy), and hence videogames, adolescent threat, and the mysterious presence of older girls are writ large and distorted.

In addition to holidaymakers and arcade locals, there were other groups that we had very little interaction with. There were the old women who came into the arcade in ones and twos and spent hours playing the 2p coin-pusher machines. I was confused that they enjoyed playing what I saw as boring, simple machines, but generally I gave the old dears a wide berth. When my grandmother visited us on vacation (from the East End of London), she joined these women, forming a quick companionship, standing for hours moving between the coin-pushers and expensive *Bar-X* fruit machines that went "dof, dof, dof" with each spin. Still, she enjoyed herself in the arcade, and my sister and I kept checking on her (and each time she would push bunches of 10p coins into our palms). And then there were the isolated, chain-smoking men who stood at fruit machines for long stretches of time. They could have been any age over twenty, but I just saw them as men. I avoided them, not out of any sense of threat but because our worlds did not intersect, almost to the point that we were invisible to each other, feeling the same intergenerational awkwardness that I felt interacting with friends' parents.

We were therefore a working-class family; my father was an electrical engineer who worked on large construction projects, including the Dungeness nuclear power station and the Channel Tunnel. Despite this, my mother was always generous and had spare change for me and my friends to go out and play, and a pound or two in our pockets was enough to justify a trip to the arcade. Certainly, some of my friends were not allowed in the arcades because their parents objected to them, but this did not seem to follow any discernible pattern. Maybe it was connected to parents' social conservatism,

the distance of the arcade to home, and fears about child safety. But this was not something that we spoke about. Some of the arcade locals had parents who worked long shifts in low-paid jobs, and for them the arcade offered something more than an empty house, but once more, this was something that was explained by my sister, not by discussion with the locals.

There is also the complication that an arcade audience also fluctuated over the course of a day. I was often one of the first to enter the arcade, sometimes waiting for the doors to be unlocked. The early morning was the preserve of excitable adolescent boys like me; it was also when the arcade manager might be visited by the owner, Jimmy Godden. By midmorning, the rest of the day's locals would arrive, and by about 11 a.m. on, the old women and holidaymakers would appear. At around lunchtime, the arcade would be graced by the local policeman (PC Simes), who would make a point of saying hello to the arcade locals who were familiar to him.

Come early afternoon, the holidaymakers began to properly fill the arcades, having walked up the promenade to eat fish 'n chips. At this point, the locals would usually leave the arcade. While you could normally find some abandoned credits or uncollected winnings in fruit machines or coin-pushers, it was generally too noisy, busy, and hot to stay there. Besides, when it was busy, the arcade workers would be hypervigilant in monitoring for machine-tampering (like bashing a penny-pusher to dislodge some coins) and sensitive to even minor infractions, and it was preferable to leave instead of risking a ban.

By early evening, the crowds dissipated, and some of the locals returned to the arcade once more. The evening and nighttime arcade contained an unpredictable mix of overnighting visitors and locals, and was generally high-spirited and fun. Slowly, the patrons would thin out, and perhaps pub-goers might pop into the arcade to play a few games before heading home, and then the arcade would shut down. There was no discernible difference between the days, except for busier weekends and manic public holidays during the summer, and for me, it was day after day of arcades until school returned and my visits were confined to weekends and a couple of evenings a week.

My experiences were with seaside arcades, primarily in my hometown but also along a small strip of South East England. I would not suggest that this audience was representative of those elsewhere, and certainly not comparable to urban arcades or contemporary arcades. I do not suggest that my experience

was representative of all seaside arcades, but it hopefully illustrates the challenge of classifying the British arcade audience. Arcades were spaces for anyone with a little money to spend, and they supported a variety of largely oblivious groups. While the manager and police cooperated to keep the locals in order, there was an undercurrent of male posturing, bravado, and pride, but I doubt any more so than any park, skating rink, or Cub Scout group. It was not a space of crime or illegality: any infractions resulted in immediate and longstanding bans, and the manager and police worked together.

There is a body of literature that offers empirical data describing the British arcade audience, but it is patchy. Building upon sources from the British Mass Observation program which documented everyday British life from 1937 to the 1950s, the leisure scholar Caroline Downs argues that the arcade was key to enabling female Britons to gamble. One observer noted that “arcades were very popular, with women and children taking part in equal number to men,”² and accounts like this suggest that, at the seaside at least, the postwar arcades’ patrons were simply people who visited a resort. In the 1980s and 1990s, a wave of moral concern about the problem of adolescent gambling led to a profusion of research offering descriptive accounts of the British amusement arcade, seeking to identify patterns of addiction. While their findings were unconvincing and varied in their methodical rigor, they offer a glimpse of the arcade audience during this period.

Mark Griffiths’s *The Observational Study of Gambling in UK Amusement Arcades*,³ written in 1991, echoes many of my experiences in arcades. In the seaside arcades he studied, male arcade-goers outnumbered females by more than two to one, and children constituted approximately two-thirds of the clientele. Most were ten- to sixteen-year-old boys, who Griffiths said played “in small groups of between two and four people on videogames and cheaper stake (2p–5p) fruit machines.”⁴ Young female visitors stayed with their parents and played “cheap stake (1p–2p) fruit machines and coin pushers,”⁵ while the youngest children (under seven years) played nongambling games supervised by their parents.⁶ The few adolescent females that Griffiths observed “tended to play in twos next to each other, on the cheap stake fruit machines or video games.”⁷ Griffiths also noted other patterns of play:

Coin pushers appeared to be played upon universally by all sexes and age groups except male senior citizens who rarely frequent arcades. Older women, i.e., middle to old age, tend to prefer cheap stake fruit machines like their much younger counterparts. Older adolescents and young men in groups (18–25 years)

tend to play games of competition (e.g., table football, rifle range, video games), whereas those on their own played upon higher-stake fruit machines and pinball machines. Young couples in their late teens and early twenties tended to play games in which prizes could be won, usually played by the male to be won for the female.⁸

In a 1995 study, Sue Fisher highlighted the importance of British arcades in adolescent leisure, saying that arcades were the single-most-visited “leisure provision for youth,” and the primary motivation of the adolescent visitors was to “hang out” and meet friends.⁹ While a 1993 *Schools Health Education Unit* report conducted by John Balding, based on a large data set, found that 28 percent of boys and 7 percent of girls aged between eleven and fifteen had spent their own money on coin-operated videogames in the previous week.¹⁰ Contrast that to 11 percent of boys and 3 percent of girls doing the same on gambling machines.¹¹ Of those who played fruit machines in arcades, 43.3 percent of played them when they were last on seaside holidays, 39.6 percent visited arcades at least once a week, and the remaining 15.6 percent claimed to visit arcades four or more times per week.¹² John Graham’s 1988 *Amusement Machines: Dependency and Delinquency* Home Office report offered further insight, concluding that patrons from working class backgrounds were “slightly over-represented,” and a slightly higher proportion of adolescents from the poorest backgrounds played fruit machines. Graham found no discernible demographic differences when videogame play was considered.¹³

According to Griffiths’s 1991 study, amusement arcades were primarily occupied by eighteen- to twenty-five-year old men, apart from the late morning from 10–12 a.m., “in which about a third to half the arcade is occupied by middle-aged women,” and the evening from 6–9 p.m., in which “as much as half the arcade may be occupied with 14–18-year old mixed-sex teenagers.”¹⁴ Much like Fisher’s adolescent arcade visitors, when interviewed, Griffiths found that “middle-aged women frequented the arcades as a break in their family shopping to play cheap stake (‘simple’) fruit machines and/or bingo to meet people, because they were socially/physically isolated.”¹⁵

Furthermore, Griffiths observed that as children approached their sixteenth birthday, the pub displaced nonarcade locations where people might find coin-operated machines. By the age of sixteen, 43 percent of fruit machine players and 29 percent of videogame players said they mostly played in pubs.¹⁶ That almost half of sixteen-year-olds were pubgoers will

come as no great surprise to those familiar with 1980s and 1990s Britain and the rite of passage that underage pubgoing represented. Instead, what is notable is that while coin-operated machines attracted players almost wherever they were sited, the amusement arcade remained an important and enduring location for adolescents and young adults, even as others diminished. What is notable is that the arcade was seen by its patrons (whether young boys or middle-aged women) as a social space, with the machines, the entertainment, the gambling, and the community each contributing to its attraction and social function.

So, how do we answer the question, who plays in British amusement arcades? It appears that for passing trade, anyone with money to spend will be welcomed in a British arcade. Whether visitors would feel welcome if an arcade's resident locals were present is harder to say. Perhaps arcade localism was meaningful only to its teenage patrons. There were arcades that I did not feel welcome in as a teenager because I was sensitive to intruding on what I saw as other locals' territory. Yet whether this was substantive or a preoccupation of a teenage boy is unclear. The amusement arcade has a bias toward working class leisure, simply because the more affluent would have opportunities beyond the British seaside resorts and city centers where arcades are found. As for the arcade locals who take ownership of a nearby arcade space, these are determined by the demographics of the resident populations with a masculine working class skew. Arcade locals in a central London FEC would likely be quite different from those in Blackpool, Margate, or Southend-on-Sea—and these make only one of the many different audiences that play in arcades.

The Future of the British Arcade

It would be misleading to say that the British arcade industry is in poor health, especially at the seaside, but arcades remain a vivid feature of contemporary British culture and generate considerable revenue. A 2019 report commissioned by the British Amusement Catering Trade Association (BACTA) argued that once additional impact layers were considered, seaside arcades generated £1.87bn in turnover, added £1.06bn to the British gross domestic product (GDP), and created 27,190 jobs in 2018.¹⁷ Yet despite these impressive figures, the decline of the arcade industry in Britain is

undeniable, with operating profits for seaside arcades decreasing by almost a third between 2015 and 2018 (£225m in 2015).¹⁸

The 2015–2020 Gambling Commission industry statistics report paints a similarly stark picture of decline across the British arcade sector. In 2011, there were 2,103 licensed AGCs in Britain, but by 2020, this figure had dropped 32 percent to 1,431.¹⁹ The contraction was even more acute for FECs, which declined by 37 percent, from 293 to 184.²⁰ This data captures only locations that require a Gambling Commission license; it omits unlicensed arcades that are authorized by local authorities. However, personal experience would suggest that unlicensed arcades have also declined in number during the same period. In addition, there are industry practices that further distort this data. Many arcades are physically subdivided, with separate entrances and multiple licenses. While an arcade-goer might view such a place as a single site with separate entrances for adults and families, the Gambling Commission would record it as multiple premises. In 2021, therefore, it is reasonable to surmise that there are fewer than 1,724 licensed arcades in Britain.

The decline of the British arcade in this period is mirrored by a major expansion of online gambling activities, the most popular of which, *online slots*, digitally replicate many elements of an arcade fruit machine. The Gambling Commission data logs the Gross Gaming Yield (GGY), which is the amount retained by operators after the payment of winnings and cost deductions—that is, profit. During 2015–2020, British FEC yield declined by a quarter, to £52.4m, and AGC yield increased by a third, to £424.8m, but the yield from online slots *almost quadrupled*, from £594m to £2.2bn.²¹ Online casino slots now generate more than four and a half times the yield (£2,211m) of all the licensed machines based in British arcades (£477.25m), and online slots generate almost 70 percent of the total online casino yield. It is important to recognize that higher-stake online slots and casino machines generate greater yields than lower-stake machines in AGCs and FECs because of the size of the stakes. While the arcade industry remains economically significant, it is now dwarfed by higher-stake and online gambling.

The COVID-19 pandemic required arcades in Britain to close to the public several times during 2020 and 2021, inevitably accelerating the adoption of online slots. Like many other businesses in the hospitality sector, British arcades lost more than thirty weeks of trade in a fourteen-month

period (the only relief is that arcades reopened briefly during the height of the 2020 summer season). John White, the chief executive of BACTA, described the situation as “the worst obstacle that the arcade industry has faced in sixty years” and suggested that for many arcade operators, income halved in 2020.²² While seaside arcades had seen steady numbers between lockdowns, inland arcade patronage was far more varied. Speaking with me just before the announcement of the third national COVID-19 lockdown in January 2021, White emphasized how critical opening for the Easter school holidays in April would be to the survival of the British arcade, and yet the regulations were not lifted until May 2021. The impacts of COVID-19 on arcades are unclear. The decline and lockdown did not only affect arcade operators’ income directly; it also inevitably pushed some business toward online alternatives. Other companies involved in the trade, including machine manufacturers, distributors, logistics and consumables, have seen their order books slashed.

It is difficult to imagine what the arcade industry will look like after COVID-19, or indeed what appetite there will be for physical, in-person, coin-operated public play. When British arcades reopened to the public in summer 2021, most seaside resorts boasted large crowds, a product of the “staycation” caused by public uncertainty over international travel due to COVID-19 and Brexit regulations. While some arcades struggled to maintain staffing levels, many in the industry quietly spoke of encouraging revenue and the resurgence of the British seaside holiday. It appears that concerns over whether people will still want to press buttons on machines after COVID-19 were misplaced. I am confident that the arcade will remain a feature of British leisure, if perhaps in smaller numbers and with slightly different offerings. After all, the British arcade industry has learned to adapt and respond to other major changes in the past.

This book tells the long history of the British amusement arcade, highlighting the ways that it differs from the dominant North American view of the arcade. This British account of the arcade is based on different long-standing cultural traditions, geography, and public attitudes. I contend that the British arcade’s industry formation, the individuals, companies and machines, and its legislative, moral hurdles, and continual evolution are important. Britain became the third-most-significant market for coin-operated videogames after North America and Japan, and it perhaps is the most significant market for coin-operated gambling innovation, and it is

now described as being fifteen years ahead of any other jurisdiction in its adoption of online gambling.²³ Furthermore, Britain remains the only country in the Western world where gambling and amusements are so entwined and it is legal for children to gamble on low-stakes machines.

Arcade Tales

This book sits alongside others that attempt to explore alternative and local histories of gaming, especially public play in and around arcades. This topic had been underresearched until relatively recently, with the publication of Raiford Guins's *Game After* and *Atari Design*, Carly Kocurek's *Coin-Operated Americans*, and Lowood and Guin's collection *Debugging Game History*. These books indicate the significance of arcades as physical spaces, as spaces for communities, as well as the complex and overlapping histories that inform them. Each offers insight into the North American arcade, but none presented regional or national differences. Arcades and their histories, architecture, communities, and significance are geographically and culturally related.

Other game studies texts offer pioneering localized play histories. Jaroslav Švelch's *Gaming the Iron Curtain* details the adoption of the home computer in Czechoslovakia, while Alex Wade's *Playback* and Alison Gazzard's *Now the Chips Are Down* offer insights into similar time periods and foci, but from a British perspective. Švelch's, Wade's, and Gazzard's books are exceptionally helpful, as they highlight similarities and differences, and we recognize seemingly monolithic ideas as culturally relative phenomena—authentic, but different. The texts not only offer insight into the historical development and cultural adoption of computers, games, and to some degree public play, but they also enable comparative judgments to be made.

The reader can start to make sense of how play, games, and attitudes toward technology differ and remain the same in different countries, populations, and sociopolitical contexts. *Arcade Britannia* is intended to serve as a companion to Lowood, Guins, and Kocurek's work in the same way that Švelch's, Wade's and Gazzard's books connect to offer scholars greater perspective. While the amusement arcade has received relatively little direct scholarly attention, many people from diverse perspectives and disciplines have ventured into its territory—albeit rarely in a British context.

Arcade Britannia is not the first attempt to tackle the amusement arcade from a critical historical perspective. Arcades, quite often North American

arcades, feature heavily in several historic accounts of videogames: J. C. Herz's *Joystick Nation*, Tristan Donovan's *Replay: The History of Video Games*, and Steven Kent's *The Ultimate History of Video Games* tell a well-trodden story of the emergence of videogames, the overexpansion of videogame arcades, their commercial collapse, and then the resurgence of videogames in the home, not in the arcade. We then have other texts that recognize a longer and more complicated history: we have Mark J. P. Wolf's *Before the Crash: Early Video Game History*, Carly Kocurek's *Coin-Operated Americans* and Raiford Guins's *Game After*, which challenge and destabilize these historical accounts of technological and arcade development by extending and critiquing the narrative before, during, and after the North American arcade's golden age. There are also books that are presumably written for acolytes of the mythic arcade wishing to fill their man caves with pristine machines, which catalog and describe machines in technical detail, such as Bill Kurtz's *Encyclopedia of Arcade Video Games* and *Arcade Treasures*.

While scholars like Jaraoslav Švelch, Alex Wade, and Alison Gazzard offer scholarly accounts of arcades and videogame development from national perspectives that challenge the myth, there are also other texts in leisure, tourism, and local studies that are largely unknown but contribute to an understanding of the importance of the arcade. We have deeply specific accounts from the perspective of the United Kingdom, such as Nic Costa's *Automatic Pleasures* and *More Automatic Pleasures*, which collate the author's decades-old coin-operated trade newspaper articles (that in turn were a product of decades of thorough coin-operated industry research). Costa is the definitive British coin-op historian and many subsequent texts, such as those by Paul Braithwaite, clearly build upon his work. There is Nick Laister's *Pennies by the Sea*, which offers an account of Bridlington's Joyland arcade, and James Fairley's *Fun Is Our Business: The Story of Barry's Amusements*, offering a similar project to Laister's, but about the largest amusement park in Ireland. There are autobiographical accounts of playing games which, while often rich and entertaining, vary in their levels of criticality. These include Martin Amis's *Invasion of the Space Invaders*, the brash and droll counterpart to David Sudnow's *Pilgrim in the Microworld*, both now reissued for a modern audience. Sudnow's masterly book explores the impact, importance, and pleasures of Atari's *Breakout*, both in the arcade and at home. Amis's book, on the other hand, appears to be an embarrassed exercise in snark, writing about a subject that he seems to feel is beneath

him. We also have Tony Temple's 2020 book *Missile Commander*, which approaches Atari's 1980 *Missile Command*, oscillating between the history, development, and pleasures of committed play. These are rich and deeply interesting texts, especially for those interested in autoethnography, coin-operated machines, and a cultural perspective of public play.

Understandably, critical approaches to arcade history are found in game studies monographs and journals. In *Coin-Operated Americans*, Kocurek challenges the dominant mythology of the North American arcade, especially the way that spaces, games, and audiences are defined by "technomascularity," which she describes as an "idealized vision of youth, masculinity, violence, and digital technology."²⁴ For Kocurek, accounts of the American arcade and the development of videogames—and my criticism of many of the texts listed here—is that they are "thoroughly reductive, a popular fiction of a popular medium."²⁵ In his work on the development of arcades, Erkki Huhtamo suggests that this popular fiction did not develop by chance, but rather has been perpetuated by "industry publicists and corporate cryptohistorians,"²⁶ who have usefully presented the arcade and electronic gaming as a prehistory to contemporary videogames. In addition to offering an origin story, this approach legitimizes an industry that is obsessed with the new, with technology, and with the periodic repackaging and remastering of the past. Through this myth, the gender inequalities and identity politics of contemporary game culture are retrospectively projected upon the real historic arcade, and thus are incrementally normalized and legitimized, creating an apparently coherent lineage between the old and new and gradually chipping away at any incongruities. This myth says that arcades have always been for boys, that boys have always been more interested in arcade games than girls, men, or women. Certainly, arcade videogames were marketed to a male audience from the start, as was much of the erotically charged Mutoscope content in the early arcade, but whatever the actual gender dynamics of actual arcades, the mythic arcade is adolescent and male. The mythic arcade implies that therefore, accounts of the arcade that do not focus on boys and technology are somehow peripheral or less important.

This myth also emphasizes the transactional nature of pay-per-play, normalizes modern downloadable content (DLC) packs and microtransactions, and presents arcades as a transitory point for the public to access videogames. It also suggests that *videogames* were the sole critical product of the arcade, and that now it no longer exists. The mythic arcade,

therefore, offers an origin story for the modern videogame industry, but it also frames videogame audiences and constrains player identities. It presents the arcade as an almost entirely adolescent and masculine space, and this seductive myth has become dominant and passively accepted around the world. Perhaps the only territory not to have capitulated to the mythic arcade is Japan, with its lively and ongoing arcade culture, which we know depressingly little about (although Nic Costa's little-known work states that even Japanese pachinko machines were initially British-made copies of Bavarian coin-operated machines).

The mythic arcade has become so compelling, so dominant, that it now stands as an obstacle against attempts to recognize the amusement arcade's place in cultural instead of technological history. The issue with such a dominant myth is what it displaces. For example, what do we know of the arcade beyond North America? What do we know about the wider social, cultural, and economic (as opposed to technological) significance of the arcade? What do we know of the arcade before the invention of videogames and after their gradual substitution by home consoles, personal computers (PCs), and mobile phones? What do we know of the national amusement arcade identity or the industry's international links? Sadly, the answer to all of these questions, especially beyond the scattered fan and aficionado communities, is *very little indeed*.

Over the last decade, several scholars have produced work that challenges the technomale mythic arcade, even if not by name. Raiford Guins's notion of "Visible Evidence of Who Plays (VEWP)" recognizes that these histories disproportionately regard the arcade as a masculine (and adolescent) space because the focus is placed on the machines.²⁷ On the subject of North American arcades, Guins states that "you may notice that there are actually girls and young women in the arcade. Now look again and see how many of them are playing games? Chances are that hardly any of them are feeding quarters into those beautiful profit centers."²⁸ Guins's point is that the arcade was inhabited by a female audience, but not necessarily female *players*: by prioritizing pay-to-play, machines, and technology, the mythic arcade diminishes their presence. And this is important because the real arcade is a site of leisure as well as play, and different kinds of play, videogame play, gambling, and play that has very little to do with machines—the social and public play of loitering, seeing, and being seen.

Kocurek recognized the arcade as a commercial space that “encouraged quick play cycles, and a set of pay-for-play ‘economic decision making’ and related cultural values” that she calls “coin-drop capitalism.”²⁹ Coin-drop capitalism is by definition inhospitable to patrons who do not have or are unwilling to spend money, and yet most arcade operators were wise enough to view site income as a totality instead of requiring each individual to pay. So long as enough patrons were engaging in coin-drop capitalism, the arcade could accommodate those who did not spend, and according to Guins’s VEWP concept, this included a greater proportion of female patrons.

There has therefore, been a gradual shift of view of the arcade from the technomasculine account proposed by cryptohistorians to one that sees the arcade as a social space. Samuel Tobin’s 2016 article “Hanging in the Video Arcade” is a good example of this, overtly recognizing the contribution of “hangers-on and hangers-out” to the experience and character of the arcade, but also the assortment of “lurkers, lingerers, wallflowers, delinquents, and most of all loiterers.”³⁰ This is right and admirable; it begins to reframe the arcade as a cultural space, a social space, and starts chipping away at the mythic arcade’s commercial neon foundations. Benjamin Litherland develops this theme even further, looking at the development of mid-twentieth-century arcades in London, proposing the term “Ludosity,” defined as the “quality of game participation as shaped by a range of agents, institutions, and contexts,” and making the point that “games history needs to center players in order to fully conceptualize games in history.”³¹

While I advocate the reframing of game histories from machines and technologies onto players (and indeed the nonplayers in the same spaces), the reality is that this is exceptionally difficult to do. We are reliant on archive materials and documentary evidence of the historic arcade, and more often than not what remains are commercial success stories, physical machines, and the testimonies of individuals who gained accolades. It is almost impossible to capture the story of the everyday arcade-goer, or the commercial failure of a machine, let alone the failed business. The small or mundane stories that are as important to our understanding of a phenomenon as the others are often simply lost.

Consequently, we therefore encounter different kinds of research that talks about arcades. Erkki Huhtamo’s essay “Slots of Fun, Slots of Trouble,” found in the *Handbook of Computer Game Studies*, gives an excellent overview

of the development of slot machines (and of the first generation of games history, on which the mythic arcade rests), and we have Alison Gazzard's work on videogame clones,³² arcade photography,³³ and the role of arcade photography to reinforce the arcade myth. Like Gazzard's, Alex Wade's work explores 1980s videogame culture from a British perspective,³⁴ including the arcade's role in educating "individuals into extending play into the realm of a postindustrial economy."³⁵ Interestingly, as an arcade-goer, Wade recognizes the edginess of arcades and subterranean "arcaves,"³⁶ which became part of their adolescent pleasure and attraction. Once more, countering the technologically and economically compliant teenage boys in the mythic arcade, Wade explains that, from a British perspective at least, "amusement arcades, with their position geographically and culturally underground, gave rise to proliferating and, at times, nefarious subcultures,"³⁷ such as the tricks and systems used to undermine and even invert the automated balances of coin-drop capitalism. Like the loiterers, the hangers-on, the female nonplayers, and the gamblers, members of Wade's nefarious subcultural players do not fit into the arcade myth. Neither do the contributions of scholars from disciplines as wide-ranging as law, gambling studies, history, and tourism studies, which touch upon arcade territory. All of these sources intersect on the subject of the British arcade and *Arcade Britannia*.

It would be wrong to suggest that game studies is immune to the seduction of the mythic arcade. The games scholar Soraya Murray criticized game studies' "continued embrace of specific notions of innovation, genius, and a future orientation," describing it as a fairy tale of technological progress, "science fiction, not history."³⁸ Murray calls for an approach to games history that not only recognizes technology but is *entangled* with "politics, culture, economics, identity politics, and the interests of those who wish to codify that history as one thing and not another."³⁹ *Arcade Britannia* is intended as an entangled history of the British arcade, albeit one that leans heavily on the evolution of the arcade industry via archive materials and interviews. It is in part history, biography, cultural analysis, and personal account. It is also partially autobiographical.

I should make my interests clear: I have been a lifelong arcade patron, an arcade local at a British seaside resort. I am passionate about videogames and sometimes play fruit machines, but have no interest in online gambling (I am too risk averse to find high-stakes gambling enjoyable.) Since the age of seven, I have enjoyed playing videogames and low-stakes

gambling machines, putting money in coin-pushers, and generally hanging around arcades. I am an arcade fan and feel some nostalgia for my favorite arcade videogames and fruit machines. I've rescued, restored, bought, and sold classic arcade videogames, and I have come to realize the sad achievability of nostalgia; the physical machines never quite trigger the anticipated excitement or emotions. What I now find more compelling is the sense of the British arcade as a *cultural institution*—a space that not only was influential to me as an adolescent (a place to play, to loiter, to explore independence), but also informed my relationship with videogame play, gambling (I have learned that you cannot gamble yourself out of a hole), and public play. To me, the arcade was a formative space; I accessed technology, learned the risks, rewards, and pleasures of gambling, and became part of a group of friends. Subsequently, I have discovered that many others share this view of the British arcade. My intention here, therefore, is not to codify the British arcade as a stepping stone of videogame technological development, or as a purely nostalgic space, but rather one that speaks of the economic, political, social, and cultural conditions of Britain.

In their sociohistorical overview of videogame arcades and the *Street Fighter II* community, Michael Skolnik and Steven Conway talk about arcades as metaphysical spaces. While not talking about British arcades, with their mix of videogames and gambling, Skolnik and Conway's position is pertinent here. They say that in addition to their "material dimensions, videogame arcades were simultaneously metaphysical spaces where participants negotiated social and cultural convention,"⁴⁰ and they recognize that while arcades are now fewer in number, the "metaphysical elements of the arcade persist."⁴¹ In other words, the practices that came from the historic arcade now influence behavior, norms, and practices in the contemporary fighting game community. While this does not sound that significant, and indeed aligns with the mythic arcade's notion of the arcade as progenitor of contemporary videogame culture, Skolnik and Conway talk of the arcade as a social environment and its importance as a space, alluding to its significance beyond the source of fighting game etiquette: "The arcade is a different world, wherein, phenomenologically, a different sense of being emerges. The metaphysical space of the arcade, the world that is built, is the social world the participants create through their performance of individual and collective identity."⁴²

While I might hesitate to suggest that a different sense of being emerges (for me, the arcade was and is far more normal than is being suggested

here), the idea of the arcade as a social world that allows performance of individual and collective identities is key. If we accept that different participants inhabit arcades (as comprehensively shown by Guins's VEWP, Tobin's loiterers, and Wade's subterranean subcultures), that their performances inform their collective and individual identities, and that their performances were facilitated by the specific machines, protocols, laws, and makeup of the audience, then there is a need to document accounts of different arcades and understand how these form. In other words, the formation of the laws, the machines that were placed in arcades, and the wider cultural contexts that inform the performances in arcades matter—even if they do not matter because they were eventually replaced by videogame culture, as the mythic arcade and cryptohistorians might claim, but because they matter in their own right, telling us more about what it means to play publicly, our relationship with technology, and cultural history.

When I began to research arcades, my intention was to document the arcade *beyond the machines*—the activities, behaviors, norms, and accounts of socializing in and around British arcades. I interviewed many players and uncovered narratives of dedicated gameplay, such as one-credit-completing *Nemesis*, finding hidden exploits in fruit machines, and particularly British accounts of spending the change from weekly meat-tray purchases on videogames, tough girls, and teenage experiments in smoking, shoplifting, and first romances. I turned some of these accounts into the *Arcade Tales* comic book series, each telling a different story and enabling me to better articulate my gradually coalescing research aims.

The choice of printed and freely distributed comics was important. The idea was that a comic would reach places I could not, and was far more likely to be read than an email from a British games scholar. While the *Arcade Tales* interviews gave colorful, resonant, and often bittersweet accounts, they remained recognizable and familiar. Perhaps unsurprisingly, when focused on the players, the history of the British arcade became little more than a collection of accounts of British youth culture. I felt that accounts of play and mastery, of boundary-testing and rulebreaking, of pivotal moments in personal history, whether amorous, violent, or serendipitous, were actually mundane. I felt the narratives could have occurred in the municipal park, schoolyard, or fish 'n chips shop as much as in the arcade. While this reinforced my view of the arcade as a cultural space, it did not offer an especially coherent or distinctive account.

On an arcade videogame collectors' forum, I read of the perceived barbarism of one arcade manager. This manager had smashed an old machine, now considered a valuable retro videogame, to pieces rather than sell it to a collector. The consensus on the forum was that arcade owners had somehow *ruined* British arcades. They had abandoned videogames in favor of fruit machines or cranes, they smashed machines without emotion, and so they were only in it for the money. It was apparent that even arcade videogame fans held strong and often negative views of those who ran British arcades.

At first, I took these accounts on face value despite them feeling at odds with my experiences growing up in arcades. Yet, something seemed off. I wondered why someone would destroy a machine rather than sell it for profit. Could the machine not be part-exchanged or kept in operation? Eventually, these uncertainties coalesced into more pressing questions (especially since nobody on the forum had answers): What do arcade operators say about this? Who has asked them? I decided that while players' and collectors' perspectives of British arcade had legitimacy, these people were unaware of the pragmatics of arcade operation, and in the case of collectors, they were driven to extraordinary lengths by the nostalgically distorting mythic arcade. Despite having been an arcade local, I had to admit to having zero understanding of how arcades worked, beyond a vague, peripheral understanding of coin-collections, new machines, and machine maintenance.

After interviewing arcade players for *Arcade Tales*, I was introduced to Scott Turner, the exuberant manager of Cain's Amusements, Herne Bay, Kent, an arcade that opened in 1978. Turner very patiently explained the day-to-day operation of the arcade and challenged the collector's account of arcade operators' barbarism. He recalled witnessing the destruction of a *Gorgar* pinball machine in the period between it having commercial value and collectors being interested in it. With an old, no-longer-income-generating machine, with maintenance requirements and no storage space available, the machine was destroyed, but it was interesting that the event remained a memorable point of frustration and spectacle. Turner became an advocate for my *Arcade Tales* project, arranging a meeting with the arcade's owner, David Cain, and suggested many people in the British industry whom I should contact, including Phil Silver, then head of compliance at BACTA.

Through the connections made via Turner, Cain, and Silver, members of the British amusement industry became involved in my project, and it became clear how little I knew. I learned of the links between showfolk

and arcades, of British manufacturers, uniquely British machines, and an intricate scaffold of legislation and trade organization policies. I learned of BACTA's role representing the arcade industry and serving as a bridge between the government, manufacturers, and arcade operators. I also learned of the British fairground trade's weekly *World's Fair* newspaper and its supplement, *Coin Slot*, which became the voice of the British arcade through much of its development. I contacted David Snook, *Coin Slot's* long-standing editor, to see if he knew of an accessible archive of back issues, but there was none. I visited Sheffield University's National Fairground and Circus Archive, which holds the only complete collection of *World's Fair* newspapers, only to discover, much to the horror of the archivists, that the *Coin Slot* supplement was missing from almost the entire collection. Evidently nobody else before me had been that interested in looking at *Coin Slot* and the week-by-week account of the British industry it contained. It became clear that despite the amusement arcade's significant position in British popular culture, its history was undocumented, and furthermore, that the opportunity to document it was disappearing, if not perhaps already gone.

It was at this point that the challenges of constructing a history based upon anecdotes, memories, and personal accounts became apparent. As I interviewed arcade players, owners, manufacturers, and distributors, the lack of reliable supporting evidence became obvious. The accounts and narratives were colorful, detailed, fascinating, and often accompanied by snippets of supporting evidence, but remained problematic. The materials were diverse: machines, coins, accounts, photographs, promotional literature, industry magazines, flyers, price lists, legal guides, patents, police statements, films, and personal memoirs all contributed to my growing understanding of the British arcade. Yet, it became difficult to connect individual accounts with any confidence. Chronology, names, details, and interconnections were uncertain and amorphous, and this became pronounced as differing accounts and opinions became apparent. I became very much aware that memories fail, accounts differ, and knowledge is lost as people die. The entangled history risked becoming indecipherable—a Gordian knot.

While visiting the London Entertainment, Attractions and Gaming International Expo (EAG), I was fortunate enough to talk with John Stergides, the managing director of one of Britain's most successful amusements manufacturers, Electrocoin. Stergides explained that in the late 1990s, the *World's Fair* newspaper changed ownership, and industry members took the

opportunity to swiftly digitize the accessible *Coin Slot* print run. Unfortunately, almost twenty years after this took place, Stergides did not know the archive's whereabouts. He suggested that he had lent his copy to an industry friend, Freddy Bailey, who lives in the United States, but he didn't know if he still had it. In early 2019, following years of purchasing individual issues of *World's Fair* from auctions and chasing many leads, I located and purchased a copy of the archive. This archive of *Coin Slot* newspapers allowed me to connect the narratives into a chronological framework, and as I did so, the complex mesh of economic, cultural, and social factors became apparent. *Arcade Britannia* is the product of one interrogation of this archive, intended to describe the shape, form, and dynamics of the British arcade industry.

Why Study British Arcades?

The image of the amusement arcade has become a global cultural motif. It is used to historically root the contemporary videogame industry, and in addition to now becoming shorthand for "a place where people played videogames in the 1980s," it has helped form videogame genres, cultural practices, and player identities. But the amusement arcade that most of us bring to mind is a specifically North American manifestation, a product of the economic, social, and historic particularities of coin-operated play in that region only. The dominant North American arcade motif is something that I call the *mythic arcade*. The mythic arcade is adolescent, masculine, technology-centric, and almost wholly focused on videogames—it is deeply entrenched in what Carly Kocurek calls the "technomasculine."⁴³ While this vision of the arcade shares elements with those elsewhere in the world, there are notable absences and differences: for example, gambling is omitted from the mythic arcade but is central to arcades in Britain. These similarities and differences are significant: they are worthy of study because by doing so, we illuminate parallel accounts of the development of public play and videogames and expose the unstable foundations of the dominant mythic arcade.

You might reasonably wonder: Why bother to study the arcade industry in Britain? With a modern videogames industry so acutely influenced by North American and Japanese innovations, what can we learn from the British industry that you might assume is decades-gone? I will illustrate through this book that Britain has an important story to tell about the global adoption of videogames, but that due to legislative peculiarities and

global economics, it became closely linked with the American gambling industry and the Japanese videogame industry. The relationships between the Japanese and British coin-operated industries became so intertwined that by the mid-1990s, Britain had become the preferred manufacturing base for Japanese games that were subsequently exported to Japan. Arcade games such as the coin-pusher were invented in Britain, responding to the opportunities and demands of the British arcade, which in turn were a product of British legislation and leisure history and have subsequently been embraced globally. Therefore, Britain became a pivotal region for the adoption of games outside North America and Japan.

Unique to Britain, and central to its development as a conduit of arcade play, development, and distribution, is a single piece of legislation that affects British arcade culture to this day: the 1960 Gaming Act. The act modernized British gambling laws; one thing it did was legalize the public availability of low-stakes, coin-operated gambling in arcades, making them profitable. Consequently, since the act came into power in 1961, and unique in the Western world, British citizens of all ages (including children) have legally gambled on coin-operated machines in Britain. It is not that British arcades grew to facilitate child gambling, but that the 1960 Act enabled British arcades to become entertainment destinations containing activities for the entire family, for adults as well as children; furthermore, the income from this machine mix of gambling, amusements, and eventually videogames became central to the profitability and survivability of the arcade.

While the mythic arcade feeds upon nostalgia for North American arcades of the past, in Britain, the amusement arcade remains culturally and economically visible and valuable. A 2019 Centre for Economics and Business Research report produced for BACTA estimated that British sea-side arcades generate more money by themselves than radio advertising or rail freight.⁴⁴ Despite these factors, the story of the development of the British arcade industry, its global resonance, and the impacts of legislative, historic, and social factors have not previously been told. At the same time that the mythic arcade has dominated discourses around arcades and videogames, the British industry itself has remained private, closed, and largely absent from discussions of the development of public play. *Arcade Britannia* is an attempt to address this shortfall, to tell part of the story of the British arcade, and to chip away (if only infinitesimally) at the foundations of the mythic arcade.

References

- Ackerman, Rudolf (1808–1810). *The Microcosm of London*. London: R. Ackermann.
- Alca Electronics (1968). *Attack*. Electromechanical game.
- Alca Electronics (1970). *Super Missile*. Electromechanical game.
- Alf Crompton (Amusements) Ltd. (1967). *Cake Walk*. Electromechanical game.
- Alf Crompton (1966). *Penny Falls*. Electromechanical game.
- Alf Crompton (1963). *Wheel-a-Win*. Electromechanical game.
- Amis, Michael (1982). *Invasion of the Space Invaders: An Addict's Guide to Battle Tactics, Big Scores and the Best Machines*. London: Hutchinson & Co.
- Ashcraft, Brian (2008). *Arcade Mania: The Turbo-Charged World of Japan's Game Centers*. Tokyo: Kodansha International.
- Ashton, James (2017). "Casino Operators Seeking Four Times as Many One-Arm Bandits." *Daily Telegraph*, April 17: 5.
- Atari (1979). *Asteroids*. Videogame.
- Atari (1981). *Asteroids Deluxe*. Videogame.
- Atari (1976). *Breakout*. Videogame.
- Atari (1985). *Gauntlet*. Videogame.
- Atari (1980). *Missile Command*. Videogame.
- Atari (1972). *Pong*. Videogame.
- Bacon, Ranulph (1970). "The Gaming Act, 1968, Takes Hold." *The Police Journal: Theory, Practice and Principles*, October 1.
- Bailey, Freddy (2015). *Coin-op community*. June. Accessed June 8, 2017. <https://archive.coin-opcommunity.co.uk/wp-content/uploads/uploads/2015/06/Freddy-Bailey-started-in-the-coin-operated-machine-industry-in-1954-when-his-late-father.pdf>.

- Bailey, Freddy (2012). *On the Pier Part 3 Section One*. June. Accessed June 5, 2017. <http://www.coin-opcommunity.co.uk/wp-content/uploads/2012/06/Freddy-Bailey-On-the-Pier-Part-3-SECTION-ONE.pdf>.
- Bailey, Freddy (2015). *A Pictorial History of Freddy Bailey: His Creativity in the World of Coin Operated Amusement Machines*. CoinOpCollectorForum.com • View topic—My Biography. <https://www.coinopcollectorforum.com/viewtopic.php?f=6&t=3887>.
- Bailey, Freddy (2016). "The Phonographic Equipment Company Ltd." *Coin-Opcommunity.co.uk*. May 28. Accessed July 18, 2017. <http://www.coin-opcommunity.co.uk/wp-content/uploads/2016/05/Freddy-Bailey-The-Phonographic-Equipment-CompanyLtd.pdf>.
- Balding, John (1993). *Schools Health Education Unit: Young People in 1992*. Exeter, UK: University of Exeter.
- Bally Manufacturing Co. (1965). *Gold Award*. Electromechanical game.
- Bally Manufacturing Co. (1965). *Jolly Joker*. Electromechanical game.
- Bally Manufacturing Co. (1966). *Penny Belle*. Electromechanical game.
- Bally Manufacturing Co. (1966). *Sir Prize*. Electromechanical game.
- Bally Manufacturing Co. (1963). *Super Treble Chance*. Electromechanical game.
- Barcrest (1986). *Smash and Grab*. Fruit machine.
- Barcrest (1988). *Crack the Nut*. Fruit machine.
- Bar-Hillel, Mira (2005). "£225m Trocadero to Be Guttled." *Evening Standard*, May 23.
- Batt, Betty (1966). "Pioneers Past and Present." *Coin Slot*, April 23: 16.
- Batt, Betty (1977). "Confidence Grows in New Spanish Pintables." *Coin Slot*, October 8: 14.
- Batt, Betty (1978). "Electrocoin's First Video 'Doing Well'." *Coin Slot International*, March 25: 14.
- Battersea Park Pleasure Gardens (1951). *Pleasure Gardens Guide*.
- Beatles (1967). "Penny Lane." Comp. John Lennon–Paul McCartney.
- Beaufort, Bingo (1961). "Rush of Operators Greets U.K. Coin Show." *Billboard*, February 6: 53.
- Béliard, Yann (2014). "Introduction: Revisiting the Great Labour Unrest, 1911–1914." *Labour History Review* 79: 1–17. 10.3828/lhr.2014.1.
- Bell-Fruit Manufacturing (1963). *7T*. Electromechanical game.
- Bell-Fruit Manufacturing (1963). *Line 'em Up*. Electromechanical game.
- Bell-Fruit Manufacturing (1963). *Robin Hood*. Electromechanical game.

- Bell-Fruit Manufacturing (1963). *Tic Tac Toe*. Electromechanical game.
- Berry, Leslie (1969). "Dreamland's Bargain Week." *Coin Slot*, November 29: 18.
- Braithwaite, Paul (1997). *Arcades and Slot Machines*. White Waltham, UK: Carters Books.
- British Library (n.d.). *Illustration of Bartholomew Fair*. Accessed July 5, 2019. <https://www.bl.uk/collection-items/illustration-of-bartholomew-fair>.
- Budd, Alan (2001). *Gambling Review Report*. London: HM Stationery Office.
- Butterworth, Christine (1992). "New Games Galore at Creative Meeting." *Coin Slot International*, July 17: 5.
- Calder, Simon (1996). "I Have Seen the Future of Fun. And It Works. Sort Of." *Independent (London, England)*, September 14: 13.
- Canstin, Monty. (2013). *Greetings from Shitsville UK*. London: Carpet Bombing Culture.
- Capcom (1989). *Final Fight*. Videogame.
- Capcom (1988). *Ghouls 'n Ghosts*. Videogame.
- Capcom (1998). *JoJo's Bizarre Adventure*. Videogame.
- Capcom (1991). *Street Fighter II*. Videogame.
- Capcom (1999). *Street Fighter II: Third Strike*. Videogame.
- Carter, Albert, and John Carter (1970). Improvements Relating to Coin-Operated Gaming or Amusement Machines. United Kingdom Patent GB1292712A. January 20.
- Cash Box (1961). "Late Las Vegas Coin, English Distrib Firm." *Cash Box*, June 24: 54.
- Cassidy, Rebecca (2020). *Vicious Games: Capitalism and Gambling*. London: Pluto Press.
- Centre for Economics and Business Research (2019). *The Contributions of Seaside Arcades to the UK Economy: A Cebr Report for BACTA*. London: Cebr.
- Centre for Social Justice (2017). "Lowering the Stakes on Fixed Odds Betting Terminals." August. Accessed March 10, 2021. https://www.centreforsocialjustice.org.uk/wp-content/uploads/2018/03/FOBT_Publiciation.pdf.
- Chapman, Anya, and Duncan Light (2016). "Exploring the Tourist Destination as a Mosaic: The Alternative Lifecycles of the Seaside Amusement Arcade Sector in Britain." *Tourism Management (Elsevier)* (52): 254–263.
- Coates, John (1981). "No Enigma about Zilec Team." *Coin Slot International*, June 27: 32.
- Coates, John, and Andrew Wyke (1993). "AWP Industry Back on Its Feet." *Coin Slot International*, May 21: 10–23.

- Coin Slot (1966). "Beat the Weather Bid." *Coin Slot*, May 28: 1.
- Coin Slot (1966). "Committee Wary of Pub Fruits." *Coin Slot*, February 5: 6.
- Coin Slot (1966). "Death of Alfred Compton." *Coin Slot*, June 25: 1.
- Coin Slot (1966). "Finance Measures' Mixed Reception." *Coin Slot*, July 30: 1.
- Coin Slot (1966). "Government to Aid 'Sun City' Project." *Coin Slot*, April 9: 1.
- Coin Slot (1966). "M.P.s Ask for Tax on Gambling." *Coin Slot*, February 26: 1.
- Coin Slot (1966). "Penny Falls Multi-Player Steals Show." *Coin Slot*, November 12: 26.
- Coin Slot (1966). "Proposed Slice for the Chancellor." *Coin Slot*, March 5: 1.
- Coin Slot (1966). "Special Committee for Manx Project." *Coin Slot*, March 12: 1.
- Coin Slot (1967). "£15M. Resort Plan to Go Ahead." *Coin Slot*, June 17: 1.
- Coin Slot (1967). "All Clear for Sunday Opening." *Coin Slot*, July 29: 1.
- Coin Slot (1967). "Licensees Win Sessions Appeal." *Coin Slot*, April 8: 1.
- Coin Slot (1967). "M.P. Slams Betting and Gaming Act." *Coin Slot*, November 4: 1.
- Coin Slot (1967). "Objections to Sunday Opening." *Coin Slot*, March 25: 1.
- Coin Slot (1967). "Phonographic & R. & W. in Proposed Merger." *Coin Slot*, October 21: 1.
- Coin Slot (1967). "'Rigid Attitude' to Pub Fruits." *Coin Slot*, September 23: 1.
- Coin Slot (1967). "Preview 68—A Gala Affair." *Coin Slot*, November 4: 21.
- Coin Slot (1968). "Applications for Arcades Pour In." *Coin Slot*, May 18: 1.
- Coin Slot (1968). "A.T.E. Report." *Coin Slot*, January 20: 1–16.
- Coin Slot (1968). "Councillor Hits at Gaming Act." *Coin Slot*, December 28: 1.
- Coin Slot (1968). "Golden Mile Centre in Full Swing." *Coin Slot*, August 24: 1.
- Coin Slot (1968). "London Sunspot for Ruffler and Walker." *Coin Slot*, December 7: 1.
- Coin Slot (1968). "More Support for Check on Spread of Arcades." *Coin Slot*, August 10: 1.
- Coin Slot (1968). "Notices." *Coin Slot*, June 15: 25.
- Coin Slot (1969). "Associations Act on New Taxes." *Coin Slot*, April 26: 1.
- Coin Slot (1969). "Bonfire of Machines." *Coin Slot*, November 15: 1–4.
- Coin Slot (1969). "Multi-slots Not to Be Classed as One Machine." *Coin Slot*, May 3: 1.
- Coin Slot (1969). "'Seaside Caterers Unite!'" *Coin Slot*, September 13: 1.

- Coin Slot (1969). "Seaside Operators Fix London Meeting." *Coin Slot*, October 20: 1.
- Coin Slot (1970). "The 10-Point Plea." *Coin Slot*, October 10: 1.
- Coin Slot (1970). "Arcades 'Harmful to Children'." *Coin Slot*, March 7: 1.
- Coin Slot (1970). "'Ban Children Under 17 from Arcades'—Call." *Coin Slot*, March 7: 1.
- Coin Slot (1970). "Muddled and Spineless." *Coin Slot*, September 26: 1.
- Coin Slot (1970). "Pier Sale Due to Tax 'Burden.'" *Coin Slot*, August 15: 1.
- Coin Slot (1970). "Success with Shooters." *Coin Slot*, January 10: 15.
- Coin Slot (1970). "Thirty Showboat Centres Planned." *Coin Slot*, July 4: 1.
- Coin Slot (1971). "Bell-Fruit's Exports Top £350,000 in 12 Months." *Coin Slot*, September 4: 1.
- Coin Slot (1971). "Nothing for Us!" *Coin Slot*, April 3: 1.
- Coin Slot (1971). "Third Fire of Year Hits Arcade Proprietor." *Coin Slot*, August 14: 1.
- Coin Slot (1972). "Alca Hit Big Time!" *Coin Slot*, October 21: 1.
- Coin Slot (1972). "Arcade Gutted by £60,000 Blaze at Resort." *Coin Slot*, September 2: 1.
- Coin Slot (1972). "Mayfield Go into liquidation." *Coin Slot*, March 18: 1.
- Coin Slot (1972). "Panamanian Firm Take Over Alca." *Coin Slot*, June 10: 1.
- Coin Slot (1972). "Pool: Here to Stay?" *Coin Slot*, June 10: 13.
- Coin Slot (1973). "2,000th Ping Pong Comes Off the Line." *Coin Slot*, November 3: 1.
- Coin Slot (1973). "A.L.L. Join T.V. Tennis Game Range." *Coin Slot*, May 19: 1.
- Coin Slot (1973). "Atari Ready for 200 a Week." *Coin Slot*, August 11: 1.
- Coin Slot (1973). "'Ban Children Under 17 from Arcades'—Call." *Coin Slot*, April 28: 1.
- Coin Slot (1973). "COPS 'Sink Everything' into TV Tennis." *Coin Slot*, July 7: 1.
- Coin Slot (1973). "Midway's Latest." *Coin Slot*, March 24: 19.
- Coin Slot (1973). "Music Hire Seek to Double Sites." *Coin Slot*, October 20: 1.
- Coin Slot (1973). "Pier Blaze: Tributes to Staff's Fire Drill." *Coin Slot*, September 29: 1.
- Coin Slot (1973). "Summerland Blaze: Alarm System Failed." *Coin Slot*, November 24: 1-4.
- Coin Slot (1973). "Taylor to Market TV Game." *Coin Slot*, June 23: 1.
- Coin Slot (1973). "Wimbledon (Nee Ping) Now Coming Off Line." *Coin Slot*, July 28: 1.

- Coin Slot (1974). "Alca's New Table Tennis 'Hottest Game Since Video'." *Coin Slot*, June 15: 1.
- Coin Slot (1974). "Booth and Wither Join London Coin's 'Men at the Top'." *Coin Slot*, April 6: 1.
- Coin Slot (1974). "Delinquency: Church Report Clears Pin Tables, Machines." *Coin Slot*, December 14: 1–4.
- Coin Slot (1974). "Notice to All Arcade Operators." *Coin Slot*, April 6: 7–9.
- Coin Slot (1974). "Receiver in at Atari." *Coin Slot*, December 7: 1.
- Coin Slot (1975). "Clamp Down on Arcades—M.P." *Coin Slot*, September 27: 1–2.
- Coin Slot (1975). "Colin Moves to Margate." *Coin Slot*, February 15: 4.
- Coin Slot (1976). "£4m Boost to Blackpool's 'Golden Mile'." *Coin Slot*, August 14: 1–28.
- Coin Slot (1976). "Over 5,000 Enter Hazel Grove's £1,000 Pool Contest." *Coin Slot*, June 12: 1.
- Coin Slot (1976). "Rogers Slams Press Attack on Arcades." *Coin Slot*, June 12: 1–24.
- Coin Slot (1977). "Coral Island to Have £225,000 in Machines." *Coin Slot*, April 16: 1–24.
- Coin Slot (1979). "This Must Be the Biggest." *Coin Slot*, February 14: 1.
- Coin Slot (1980). "The Grape Vine." *Coin Slot*, August 30th: 4.
- Coin Slot International (1977). "Black Hawk." *Coin Slot International*, October 22: 19.
- Coin Slot International (1978). "450 Machines for Coral Island." *Coin Slot International*, March 11: 1.
- Coin Slot International (1978). "Space Invaders." *Coin Slot International*, November 18: 19.
- Coin Slot International (1979). "Atkins to Alca and Space Attack to Joyland." *Coin Slot International*, March 3: 1.
- Coin Slot International (1979). "Bell-Fruit to Make Namco Video Games." *Coin Slot International*, November 10: 1.
- Coin Slot International (1979). "The Grapevine." *Coin Slot International*, August 25: 4.
- Coin Slot International (1979). "R. and D. Seal Distribution for Japanese Firm." *Coin Slot International*, December 22: 1–28.
- Coin Slot International (1979). "Taito, Ameco and Streets Exhibiti at the Imperial." *Coin Slot International*, February 24: 24.
- Coin Slot International (1980). "The Anglo-Italian Connection . . ." *Coin Slot International*, April 19: 1.

- Coin Slot International (1980). "Japanese Video Shocks for World." *Coin Slot International*, October 18: 1.
- Coin Slot International (1981). "Alca Launch Two New Fruit Machines and Electrocoin Join Market." *Coin Slot International*, September 19: 1–48.
- Coin Slot International (1981). "Association Ready for a Test Case." *Coin Slot International*, October 24: 1.
- Coin Slot International (1981). "Atari, Sega Hit Copiers." *Coin Slot International*, November 14: 1.
- Coin Slot International (1981). "B.G. Video and Alca Build Scramble." *Coin Slot International*, April 18: 1–28.
- Coin Slot International (1981). "Bromley Case in £2.7m. 'Settlement'." *Coin Slot International*, August 22: 1.
- Coin Slot International (1981). "Conversion Boom Follows Video Slump." *Coin Slot International*, October 17: 19.
- Coin Slot International (1981). "Copyright Broadside!" *Coin Slot International*, June 6: 1.
- Coin Slot International (1981). "Copyright: Sega Hit Back." *Coin Slot International*, November 28: 1.
- Coin Slot International (1981). "Crompton Sells Arcade to Save Company." *Coin Slot International*, November 14: 42.
- Coin Slot International (1981). "End of Line for Cromptons." *Coin Slot International*, December 26: 1.
- Coin Slot International (1981). "Invader's Revenge for United States." *Coin Slot International*, July 11: 46.
- Coin Slot International (1981). "John Richards Attacks Video Big Guns." *Coin Slot International*, November 21: 1.
- Coin Slot International (1981). "Subelectro Celebrate 2000 Machines in 1981." *Coin Slot International*, April 11: 1–18.
- Coin Slot International (1981). "Video War Hots Up." *Coin Slot International*, January 10: 1–76.
- Coin Slot International (1981). "Williams Seize 50 More 'Copies'." *Coin Slot International*, August 1: 1.
- Coin Slot International (1981). "Williams Seize Further 25 Defender Copies." *Coin Slot International*, April 18: 1.
- Coin Slot International (1982). "£250 Fines for Contempt—Trolfame." *Coin Slot International*, December 4: 1.

- Coin Slot International (1982). "Alca to Challenge Frogger Copyright." *Coin Slot International*, February 20: 1.
- Coin Slot International (1982). "Alca to Keep Names Under Wraps." *Coin Slot International*, May 24: 1–32.
- Coin Slot International (1982). "British Coin-Op Industry Holds Its Own." *Coin Slot International*, September 4: 1–32.
- Coin Slot International (1982). "British Video Games Market Is Not Dead, Claims John Stergides." *Coin Slot International*, March 6: 1–32.
- Coin Slot International (1982). "Copyright Exists in Games." *Coin Slot International*, July 10: 1.
- Coin Slot International (1982). "Injunction for Sega on Frogger." *Coin Slot International*, May 1: 1.
- Coin Slot International (1982). "Malcolm and John Shoot Out the 'Face Invaders'." *Coin Slot International*, January 16: 10.
- Coin Slot International (1982). "Sega Granted Order in Frogger Case." *Coin Slot International*, March 27: 1.
- Coin Slot International (1982). "Trolfame Given a Last Chance to Comply with Order." *Coin Slot International*, November 20: 1–32.
- Coin Slot International (1982). "Zaxxon Copyright in High Court." *Coin Slot International*, August 7: 1.
- Coin Slot International (1984). "Anti-arcade Bombshell." *Coin Slot International*, November 30: 1–26.
- Coin Slot International (1984). "BACTA Ask Critics for Evidence." *Coin Slot International*, February 4: 1.
- Coin Slot International (1984). "Receivers in at Taitel Electronics." *Coin Slot International*, July 20: 1.
- Coin Slot International (1984). "Taitel Comeback!" *Coin Slot International*, August 24: 1.
- Coin Slot International (1985). "BACTA Opens Fire." *Coin Slot International*, January 18: 1–32.
- Coin Slot International (1985). "British Distributors Win Pledge on Video Games from JAMMA." *Coin Slot*, October 11: 1.
- Coin Slot International (1985). "Capcom Boards Top 15,000." *Coin Slot International*, June 7: 13.
- Coin Slot International (1985). "Capcom Line on Move." *Coin Slot International*, November 15: 28.

- Coin Slot International (1985). "Deith Handles Hang On." *Coin Slot International*, July 19: 1.
- Coin Slot International (1985). "J.P. Go It Alone." *Coin Slot International*, August 30: 1.
- Coin Slot International (1985). "Threat to Videos." *Coin Slot International*, April 5: 1.
- Coin Slot International (1985). "Tsujiimoto to Deal in Europe." *Coin Slot International*, February 1: 28.
- Coin Slot International (1985). "Video Madness!" *Coin Slot International*, July 5: 1–20.
- Coin Slot International (1986). "New Cabinet from Taitel." *Coin Slot International*, May 30: 24.
- Coin Slot International (1986). "Stop Press." *Coin Slot International*, November 7: 1.
- Coin Slot International (1986). "UK Dumping Ground." *Coin Slot International*, May 16: 1–28.
- Coin Slot International (1987). "Arcade Probe." *Coin Slot International*, May 15: 1.
- Coin Slot International (1987). "Yes, a Video Is a Cinema." *Coin Slot International*, April 3: 1.
- Coin Slot International (1988). "'Anti' Group Onslaught." *Coin Slot International*, November 25: 1.
- Coin Slot International (1988). "BACTA Protests at TV Debacle." *Coin Slot International*, January 29: 1.
- Coin Slot International (1988). "No Seven Year Itch for Goliath!" *Coin Slot International*, September 2: 20.
- Coin Slot International (1988). "Total Victory!" *Coin Slot International*, February 5: 1–32.
- Coin Slot International (1989). "Brent Turns 'Turtle'." *Coin Slot International*, October 20: 1–32.
- Coin Slot International (1989). "Electrocoin in £3m. Taito Deal." *Coin Slot International*, October 27: 1.
- Coin Slot International (1990). "Comment." *Coin Slot International*, October 26: 1–2.
- Coin Slot International (1990). "Corton Beached as Funds Dry Up." *Coin Slot International*, October 19: 1–36.
- Coin Slot International (1990). "Feeling the Pinch." *Coin Slot International*, October 26: 1–2.
- Coin Slot International (1990). "Konami Refocuses on UK." *Coin Slot International*, December 14: 1.

- Coin Slot International (1990). "Mecca Fights Off £506m. Rank Bid." *Coin Slot International*, June 8: 1–2.
- Coin Slot International (1990). "Noble Sells 43 Arcades." *Coin Slot International*, March 9: 1.
- Coin Slot International (1990). "Rank Faces Bingo Sell-off." *Coin Slot International*, August 10: 1.
- Coin Slot International (1990). "Redemption—Saviour of the Industry?" *Coin Slot International*, November 9: 10.
- Coin Slot International (1990). "Stop Press." *Coin Slot International*, December 28: 1.
- Coin Slot International (1990). "Turtles Forgers Foiled." *Coin Slot International*, June 15: 1.
- Coin Slot International (1991). "Electrocoin—Investing in Exports." *Coin Slot International*, October 25: 8.
- Coin Slot International (1991). "Gauselmann Tests Water with First UK Buy." *Coin Slot International*, November 29: 1.
- Coin Slot International (1991). "Make or Break." *Coin Slot International*, January 4: 1.
- Coin Slot International (1991). "Nintendo Releases Super System." *Coin Slot International*, September 20: 6.
- Coin Slot International (1991). "R360 Takes Off!" *Coin Slot International*, May 1991: 1.
- Coin Slot International (1991). "Recession Bites at AL. . . ." *Coin Slot International*, November 8: 1–20.
- Coin Slot International (1991). "Sega/Namco in Deith Partnership." *Coin Slot International*, January 11: 1–6.
- Coin Slot International (1991). "'Soft' Market Prevails but US Industry Fights Blues." *Coin Slot International*, April 5: 10–11.
- Coin Slot International (1992). "'92 Sales in the Doldrums." *Coin Slot International*, October 23: 15.
- Coin Slot International (1992). "BFM Goes to Town with Noddy Venture." *Coin Slot International*, August 28: 1–20.
- Coin Slot International (1992). "Griffith Refutes Takeover Rumours." *Coin Slot International*, August 21: 1–28.
- Coin Slot International (1992). "Hamleys for Sega." *Coin Slot International*, September 25: 1–28.

- Coin Slot International (1992). "Hedgehog Homes in on Hamleys!" *Coin Slot International*, December 4: 1.
- Coin Slot International (1992). "Manufacturers Bite the Bullet." *Coin Slot International*, September 11: 1–20.
- Coin Slot International (1992). "Maygay Monopoly." *Coin Slot International*, September 11: 1.
- Coin Slot International (1992). "Namco Signs for Brent." *Coin Slot International*, September 4.
- Coin Slot International (1992). "New Assault on Copiers." *Coin Slot International*, September 4: 1–20.
- Coin Slot International (1992). "Nintendo Quits—Official." *Coin Slot International*, August 7: 1–2.
- Coin Slot International (1992). "Noddy in High Street." *Coin Slot International*, November 27: 1.
- Coin Slot International (1992). "'Pioneer' Laid to Rest." *Coin Slot International*, November 20: 1–20.
- Coin Slot International (1992). "Street Fighter Causes a Stir." *Coin Slot International*, April 3: 4.
- Coin Slot International (1992). "Viewpoint." *Coin Slot International*, September 4: 2.
- Coin Slot International (1993). "BFM Gears Itself for Dedicated Video Game Launch." *Coin Slot International*, December 10: 1.
- Coin Slot International (1993). "BLMS Launches Inland Campaign." *Coin Slot International*, June 4: 1.
- Coin Slot International (1993). "Copy Board Crackdown." *Coin Slot International*, February 12: 1.
- Coin Slot International (1993). "Debenhams Takes UK's First Store FEC." *Coin Slot International*, November 5: 1.
- Coin Slot International (1993). "Deith Received 6,000th Monopoly." *Coin Slot International*, February 19: 4.
- Coin Slot International (1993). "Electrocoin Homes in on Japan." *Coin Slot International*, January 29: 1.
- Coin Slot International (1993). "Rank Unveils £1/2m Investment." *Coin Slot International*, May 7: 1.
- Coin Slot International (1993). "Video slump!" *Coin Slot International*, July 2: 1–24.

- Coin Slot International (1994). "BFM on the Rise." *Coin Slot International*, October 28: 7.
- Coin Slot International (1994). "BFM Stakes Claim on Video Market." *Coin Slot International*, February 4: 20.
- Coin Slot International (1994). "Double Whammy!" *Coin Slot International*, December 2: 1.
- Coin Slot International (1994). "Funland Takes Virtua Formula." *Coin Slot International*, February 11: 1.
- Coin Slot International (1994). "Sega Quits Germany." *Coin Slot International*, February 4: 1.
- Coin Slot International (1994). "UK Tournament Keeps It in the Family." *Coin Slot International*, December 30: 1.
- Coin Slot International (1995). "Concessions Ease Burden." *Coin Slot International*, April 7: 1.
- Coin Slot International (1995). "High Yen Forces Sega to Slash Profits Forecast." *Coin Slot International*, April 21: 1.
- Coin Slot International (1995). "Letter from Japan." *Coin Slot International*, February 10: 1.
- Coin Slot International (1995). "Namco's £7m Wonder Debut." *Coin Slot International*, July 28: 1.
- Coin Slot International (1995). "Sega Targets Trocadero!" *Coin Slot International*, February 17: 1.
- Coin Slot International (1995). "Time for Action!" *Coin Slot International*, June 9: 1.
- Coin Slot International (1995). "Video Threat Is Eliminated." *Coin Slot International*, October 6: 1.
- Coin Slot International (1996). "Atari Acquired by Namco." *Coin Slot International*, October 25: 1.
- Coin Slot International (1996). "Byron Evans Leaves Sega!" *Coin Slot International*, October 11: 1.
- Coin Slot International (1996). "Grapevine." *Coin Slot International*, December 20: 5.
- Coin Slot International (1996). "Segaworld Set for Relaunch." *Coin Slot International*, December 27: 1.
- Coin Slot International (1997). "Burford Buys Back 'Troc'." *Coin Slot International*, July 11: 1.
- Coin Slot International (1997). "Sega and Bandai Set to Join Forces." *Coin Slot International*, January 31: 38.

- Coin Slot International (1997). "Henley Centre Model Unveiled." *Coin Slot International*, November 21: 3.
- Coin Slot International (1998). "Don't Turn Out the Lights." *Coin Slot International*, December 11: 1.
- Coin Slot International (1998). "Jaleco Makes It Official." *Coin Slot International*, September 11: 4.
- Coin Slot International (1998). "Sega's New Team." *Coin Slot International*, August 28: 1.
- Coin Slot International (1998). "What Now for Redemption?" *Coin Slot International*, July 10: 15–18.
- Coin Slot International (1999). "BACTA Reacts to Budget Inaction." *Coin Slot International*, March 26: 4.
- Coin Slot International (1999). "Bill Ruffler Special." *Coin Slot International*, May 7: 6.
- Coin Slot International (1999). "Budget Fails to Deliver – Again." *Coin Slot International*, March 19: 1.
- Coin Slot International (1999). "Family Leisure Buy Segaworld." *Coin Slot International*, September 17: 1.
- Coin Slot International (1999). "Fish and Chips, Fretwork and a Well-Invested Guinea." *Coin Slot International*, October 15, 1608 ed.: 10–11.
- Coin Slot International (1999). "Sad Day for Tipperary." *Coin Slot International*, June 4: 1.
- Coin Slot International (1999). "Sega Dream Turns into a Nightmare." *Coin Slot International*, May 7: 1.
- Coin Slot International (1999). "Sega in Second Major Sell-off." *Coin Slot International*, October 15: 1.
- Coin-opcommunity (2013). "Derek Horwood Remembers Ken Wilkinson Bell-Fruit Manufacturing Company." July 10. Accessed June 9, 2018. https://web.archive.org/web/*/http://www.coin-opcommunity.co.uk/blog/8557-derek-horwood-remembers-ken-wilkinson-bell-fruit-manufacturing-company/.
- Committee on Government Operations (1971). *Fraud and Corruption in Management of Military Club Systems*. Senate Report. Washington, DC: U.S. Government Printing Office.
- Competitive Video (1980). "Super Space Invasion by Competitive Video." *Coin Slot International*, February 9: 30.
- Costa, Nic (1982). "Notes from Nic." *Coin Slot Magazine*, August: 39–40.
- Costa, Nic (1988). *Automatic Pleasures: History of the Coin Machine*. London: Kevin Francis Publishing.

- Costa, Nic (2013). *More Automatic Pleasures*. Lemona: D'Aleman Publishing.
- Crompton, Alfred James Litolff (1945). Apparatus for Playing a Ball Game. United Kingdom Patent GB605226A. December 18.
- Crompton, Alfred James Litolff (1956). Improvements in or relating to amusement apparatus. United Kingdom Patent GB796371A. January 16.
- Crompton, Alfred James Litolff (1957). Improvements in or Relating to Amusement Apparatus. United Kingdom Patent GB824701A. March 27.
- Crompton, Alfred James Litolff (1962). Automatic Amusement Machine. United Kingdom Patent GB967343A. February 6.
- Crompton, Alfred James Litolff (1965). Coin-Fed Amusement Machine. United Kingdom Patent GB1067385A. July 6.
- Cromptons Leisure Machines Ltd. (1994). "Jim's Page: Company History (1945–1951)." *Cromptons Chronicle*. no. 2. Cromptons Leisure Machines Ltd.
- Cromptons Leisure Machines Ltd. (1994). "Jim's Page: Company History (1952–1960)." *Cromptons Chronicle*. no. 3. Cromptons Leisure Machines Ltd.
- Cromptons Leisure Machines Ltd. (1994). "Jim's Page: From Electromagnet to Microchip." *Marketing Materials*. no. 4. Cromptons Leisure Machines Ltd.
- Cromptons Leisure Machines Ltd. (1995). "Jim's Page: Company History (1961–1965)." *Cromptons Chronicle*. no. 5.
- Cromptons Leisure Machines Ltd. (1996). "Jim's Page: Company History—The Sixties." *Cromptons Chronicle*. no. 6.
- Cromptons Leisure Machines Ltd. (1998). "Jim's Page: Company History 1970–1973." *Cromptons Chronicle*. Winter.
- Crompton Ltd. (1956). *Film Star*. Electromechanical game.
- Crompton Ltd. (1957). *Six-Way*. Electromechanical game.
- Crompton Six-Way Machine Company Ltd. (1960). *Archers*. Electromechanical game.
- Crompton Six-Way Machine Company (1962). *Derby Racer*. Electromechanical game.
- Crouch, Tracey (2018). Twitter post. November 1. Accessed March 10, 2021. https://twitter.com/tracey_crouch/status/1058053597399789568/photo/1.
- Dallas, Duncan (1971). *The Travelling People*. London: Macmillan Books.
- Data East (1988). *RoboCop*. Videogame.
- Data East (1991). *RoboCop 2*. Videogame.
- Deith Leisure (1991). "Time Traveler Advert." *Coin Slot International*, August 9: 7.

Department for Communities and Local Government (2008). *England's Seaside Towns: A "Benchmarking" Study*. London: HM Stationery Office.

Dixon, David (1983). "Illegal Gambling and Histories of Policing in Britain." *Society for the Study of Gambling Newsletter* 3.

Donovan, Tristan (2010). *Replay: The History of Video Games*. East Sussex, UK: Yellow Ant.

Downie, Graham (1987). *All the Fun of the Fair*. Showmen's Guild of Great Britain.

Downs, Carolyn (2011). "Two Fat Ladies at the Seaside: Gambling in Working Class Holidays 1920–1970." *Leisure Studies* (112): 51–73.

Duedil.com (n.d.). *Crompton's Leisure Machines Limited*. Accessed March 5, 2020. <https://app.duedil.com/company/gb/00804597/crompton-s-leisure-machines-limited>.

Ebert, Roger (2001). "Review: Last Resort." February 23. Accessed May 11, 2020. <https://www.rogerebert.com/reviews/last-resort-2001>.

Electrocoin (1979). "Universal Games of Tokyo, Japan Now in Europe." *Coin Slot International*, March 17: 29.

Electrocoin (1981). *Bar-X*. Fruit machine.

Electrocoin (1983). "Buy the Best from the Best." *Coin Slot International*, February 12: 29.

Electrocoin Sales (1992). "Notice." *Coin Slot International*, April 17: 3.

Empire Games (1991). "Empire Games." *Coin Slot International*, April 12: 24.

Euromax Video PCBs (1991). "Euromax Video PCBs." *Coin Slot International*, April 26: 26.

Fairhad, Harry (2016). *i-programmer.info*. December 4. Accessed March 20, 2021. <https://www.i-programmer.info/news/82-heritage/10324-bbc-micro-turns-35.html>.

Fairley, James (2006). *Fun Is Our Business: The Story of Barry's Amusements*. Newtownards, UK: Colourpoint Books.

Fatnick (2019). *8-Bit Showdown: How Popular Were the Master System and the NES in the UK?* July 3. Accessed March 20, 2021. <https://mechafatnick.co.uk/2019/07/03/8-bit-showdown-how-popular-were-the-master-system-and-the-nes-in-the-uk/>.

Festing, Sally (2012). *Showmen: The Voice of the Travelling Fair People*. Donnington, UK: Shaun Tyas.

Fisher, Sue (1995). "The Amusement Arcade as a Social Space for Adolescents: An Empirical Study." *Journal of Adolescence*, February 1: 71–86.

Fourdrinier, Paul (1982). "Alca's Deficit: £2¾ million." *Coin Slot International*, September 11: 1.

- Future Publishing (2000). "Videogaming: The Odyssey." *Edge*, January: 76.
- Gambling Act 2005*. April 7. Accessed April 8, 2020. <http://www.legislation.gov.uk/ukpga/2005/19/contents>.
- Gambling Commission (2020). *Industry Statistics—November 2020*. November 26. Accessed December 20, 2020. <https://beta.gamblingcommission.gov.uk/statistics-and-research/publication/industry-statistics-november-2020>.
- Gambling Commission (2019). *Young People and Gambling Survey 2019: A Research Study Among 11–16 Year Olds in Great Britain*. Birmingham, UK: Gambling Commission.
- Gaming Board for Great Britain (1994). *Report of the Gaming Board for Great Britain 1993/1994*. London: Home Office.
- Gaming Board for Great Britain (1996). *Report of the Gaming Board for Great Britain 1995/1996*. London: Home Office.
- Gazzard, Alison (2016). "Between Pixels and Play: The Role of the Photograph in Videogame Nostalgias." *Photography and Culture* (Taylor and Francis Online) 9(2): 151–162.
- Gazzard, Alison (2016). *Now the Chips are Down: The BBC Micro*. Cambridge, MA: MIT Press.
- Gazzard, Alison (2014). "The Intertextual Arcade: Tracing Histories of Arcade Clones in 1980s Britain." *Reconstruction* 14(1): <https://web.archive.org/web/20150719071422/http://reconstruction.eserver.org/Issues/141/Gazzard.shtml>.
- Genco Inc. (1933). "Silver Cup." *Billboard*, August 12: 66.
- Get Carter* (1971). Dir. Mike Hodges. Hollywood, CA: MGM-EMI Distributors.
- Graham, John (1988). *Amusement Machines: Dependency and Delinquency*. London: Home Office.
- Green, Michael (2007). "Michael Green's First Half Century." *InterGame*, February: <https://pennymachines.co.uk/.Arena/Speakeasy.shtml>.
- Griffiths, Mark (1991). "The Observational Study of Adolescent Gambling in UK Amusement Arcades." *Journal of Community & Applied Social Psychology*, 1(4): 309–320.
- Griffiths, Mark (1993). "Factors in Problem Adolescent Fruit Machine Gambling: Results of a Small Postal Survey." *Journal of Gambling Studies*, 31–45.
- Gross, Charles (1906). "The Court of Piepowder." *Quarterly Journal of Economics*, 20(2): 231–249.
- Guins, Raiford (2014). *Game After: A Cultural Study of Video Game Afterlife*. Cambridge, MA: MIT Press.

- Guins, Raiford (2020). *Atari Design: Impressions on Coin-Operated Video Game Machines*. London: Bloomsbury.
- Guins, Raiford (2004). "Intruder Alert! Intruder Alert! Video Games in Space." *Journal of Visual Culture* 3(2): 195–211.
- Guins, Raiford, and Henry Lowood (2016). *Debugging Game History: A Critical Lexicon*. Cambridge, MA: MIT Press.
- Hansard (1968). *Gaming Bill House of Lords Debate*. June 20. Accessed March 5, 2020. <https://api.parliament.uk/historic-hansard/lords/1968/jun/20/gaming-bill>.
- Hansard (1982). *Video: Control of Public Exhibitions*. July 19. Accessed January 3, 2020. https://api.parliament.uk/historic-hansard/written-answers/1982/jul/19/video-control-of-public-exhibitions#S5LV0433P0_19820719_LWA_12.
- Hansard (1985). *Greater London Council (General Powers) Bill*. May 13. Accessed August 6, 2018. https://api.parliament.uk/historic-hansard/commons/1985/may/13/greater-london-council-general-powers#S6CV0079P0_19850513_HOC2_417.
- Harper, Todd (2014). *The Culture of Digital Fighting Games: Performance and Practice*. New York: Routledge.
- Harris, Mervyn (1973). *The Dilly Boys*. London: Croom Helm Ltd.
- Herz, J. C. (1997). *Joystick Nation: How Videogames Ate Our Quarters, Won Our Hearts, and Rewired Our Minds*. Boston: Little, Brown.
- Home Office (1980). *Report of the Gaming Board of Great Britain 1979*. London: Her Majesty's Stationery Office.
- Horowitz, Ken (2018). *The Sega Arcade Revolution: A History in 62 Games*. Jefferson, NC: McFarland & Company, Inc.
- House of Commons Communities and Local Government Committee (2007). *Coastal Towns Report 2006–7*. London: Stationery Office.
- Huhtamo, Erkii (2005). "Slots of Fun, Slots of Trouble: An Archaeology of Arcade Gaming." In *Handbook of Computer Games Studies*, edited by Joost Raessens and Jeffrey Goldstein, 3–22. Cambridge, MA: MIT Press.
- Huxley, Justine, and Douglas Carroll (1992). "A Survey of Fruit Machine Gambling in Adolescents." *Journal of Gambling Studies*, 8: 167–179.
- Ignatieff, Michael (2005). "Police and the People: The Birth of Mr. Peel's "Blue Locusts"." In *Policing: Key Readings*, edited by Tim Newburn, 25–29. New York: Willan.
- iINTERGAME (2011). *Trocadero Closure Statement*. July 12. Accessed June 6, 2017. <https://www.intergameonline.com/coin-op/news/4952/trocadero-closure-statement>.
- Irem (1987). *R-Type*. Videogame.

- Johnny Go Home* (1975). Dir. John Willis.
- Kent, Steven (2002). *The Ultimate History of Video Games*. New York: Random House.
- Knapp, Andrew, and William Balwin (1824). *The Newgate Calendar; Comprising Interesting Memoirs of the Most Notorious Characters Who Have Been Convicted of Outrages on the Laws of England Since the Commencement of the Eighteenth Century; With Anecdotes and Last Exclamations of Sufferers*. London: J. Robins and Co.
- Kocurek, Carly (2012). "Coin-Drop Capitalism: Economic Lessons from the Video Game Arcade." In *Before the Crash: Early Video Game History*, edited by Mark J. P. Wolf, 189–208. Detroit: Wayne State University Press.
- Kocurek, Carly (2015). *Coin-Operated Americans: Rebooting Boyhood at the Video Game Arcade*. Minneapolis: University of Minnesota Press.
- Konami (1981). *Scramble*. Videogame.
- Konami (1982). *Time Pilot*. Videogame.
- Konami (1985). *Nemesis/Gradius*. Videogame.
- Konami (1989). *Teenage Mutant Ninja Turtles*. Videogame.
- Kurtz, Bill (1999). *Arcade Treasures*. Atglen, PA: Schiffer Publishing Ltd.
- Kurtz, Bill (2004). *Encyclopedia of Arcade Video Games*. Atglen, PA: Schiffer Publishing Ltd.
- Laister, Nick (2006). *Pennies by the Sea: The Life and Times of Joyland Amusements, Bridlington*. St. Albans, UK: Skelter Publishing.
- Leftly, Norman (1996). "Comment by Norman Leftly." *Coin Slot International*, September 13: 20.
- Limb, Maureen (1988). *Bell-Fruit Manufacturing 1963–1988*. Nottingham, UK: Bell-Fruit Manufacturing.
- Litherland, Benjamin (2021). "Ludosity, Radical Contextualism, and a New Games History: Pleasure, Truth, and Deception in the Mid-20th-Century London Arcade." *Games and Culture*, 16(2): 139–159.
- Mayfield Electronics (1967). *Penny Lanes*. Electromechanical game.
- Mayfield Electronics (1969). *Indianapolis*. Electromechanical game.
- Mellor, John (1990). "Mecca Bows to Rank." *Coin Slot International*, July 6: 1.
- Meston, Lord (1960). *Shaw's Guide to the Betting and Gaming Act, 1960*. London: Shaw and Sons.
- Midway Games (1982). *Tron*. Videogame.
- Midway Games (1984). *Marble Madness*. Videogame.
- Midway Games (1984). *Paperboy*. Videogame.

- Miers, David (2003). "Gaming Machines in Great Britain: A Century of Change." *Gaming Law Review* (Mary Ann Liebert, Inc.) 7 (2): 131–147.
- Mott, Tony (2000) "Videogaming: The Odyssey." *Edge Magazine*, January 80: 76.
- Murphy, Chris (1993). "Press Preview Segaworld." *Coin Slot International*, July 30: 1–20.
- Murray, Soraya. (2019). *The Triumphant Procession*. July 1. Accessed July 3, 2019. <https://romchip.org/index.php/romchip-journal/article/view/77>.
- Namco (1980). *Pac-Man*. Videogame.
- Namco (1979). *Galaxian*. Videogame.
- Namco (1984). *Pac-Land*. Videogame.
- Newton, Mike (1989). "John Stergides—a Man with a Mission." *Coin Slot International*, August 11: 4.
- Next Generation Magazine (1997). "Sony PlayStation—The People's Choice." *Next Generation*, June: 56–57.
- Nintendo (1981). *Donkey Kong*. Videogame.
2015. *Norfolk at the Pictures*. Accessed July 5, 2019. <http://norfolkatthepictures.org.uk/history/great-yarmouth/marina-picture-palace-the-paradium/>.
- Orrick, David (1997). "Symbolising Success!" *Coin Slot International*, February 14: 12.
- Payne, Matthew (2008). "Playing the Déjà-New: 'Plug It in and Play TV Games' and the Cultural Politics of Classic Gaming." In *Playing the Past: History and Nostalgia in Video Games*, edited by Zach Whalen and Laurie N. Taylor, 51–68. Nashville: Vanderbilt University Press.
- Pearson, Lynn F (1991). *The People's Palaces: The Story of the Seaside Pleasure Buildings of 1870–1914*. Buckingham, UK: Barracuda Books.
- Pearson, Roger (1981). "After a Disastrous 1980, Cromptons Take the Eggs out of One Basket." *Coin Slot International*, January 31: 22.
- Pennymachines.co.uk (2010). *Cresset Pickwick Papers*. February 7. Accessed June 5, 2019. <https://pennymachines.co.uk/Forum/viewtopic.php?f=13&t=1650>.
- Pimlott, J. A. R. (1947). *The Englishman's Holiday: A Social History*. London: Faber and Faber.
- Pratt, Adam (2013). *The Arcade Experience: A Look at Modern Arcades and Why They Still Matter*. CreateSpace.
- Property Litigation Association (n.d.). *London Trocadero Ltd v Family Leisure Holdings Ltd*. Accessed March 5, 2020. <https://www.pla.org.uk/2012/08/london-trocadero-ltd-v-family-leisure-holdings-ltd/>.

- Property Litigation Association (2012). *London Trocadero Ltd v Family Leisure Holdings Ltd*. August. Accessed May 21, 2020. <https://www.pla.org.uk/2012/08/london-trocadero-ltd-v-family-leisure-holdings-ltd/>.
- Quality King Distributors, Inc. v. L'Anza Research International, Inc.* 1998. 96–1470 (United States Supreme Court, March 9).
- Quatermass and the Pit* (1958). Dir. Rudolph Cartier. London: BBC Television.
- Ricards, John (1982). *Video Report*.
- Sega (1982). *Buck Rogers: Plater of Zoom*. Videogame.
- Sega (1986). *Out Run*. Videogame.
- Sega (1986). *Wonder Boy*. Videogame.
- Sega (1992). *Virtua Racing*. Videogame.
- Sega (1993). *Virtua Fighter*. Videogame.
- Sega (1994). *Daytona USA*. Videogame.
- Sega (1994). *Sega Rally*. Videogame.
- Sega (1994). *Virtua Cop*. Videogame.
- Sigma (1980). *The Gokuh*. Videogame.
- Sigma (1980). *Red Tank*. Videogame.
- Silverball Heroes vs. Video Invaders* (1983). Dir. Mike Wallington.
- Singleton, John (1960). "You've All Been Warned; The Rest Is Up To You" *The Coin Slot*, December 31: 24.
- Skolnik, Michael Ryan, and Steven Conway (2019). "Tusslers, Beatdowns, and Brothers: A Sociohistorical Overview of Video Game Arcades and the Street Fighter Community." *Games and Culture*, 742–762.
- Snook, David (1972). "Bell-Fruit and Mecca in £1.7m. Deal." *Coin Slot*, January 29: 1.
- Snook, David (1972). "'Why I Joined Alca"—Michael Green Tells All." *Coin Slot*, October 28: 6.
- Snook, David (1973). "Still a Small Man's Trade . . ." *Coin Slot*, October 20: 1.
- Snook, David (1974). "Dransfield's New Premises 16 Times Larger Than 'the Old Place'." *Coin Slot*, December 7: 13.
- Snook, David (1980). "The Great British Video Debate." *Coin Slot International*, July 12: 10–11.

- Snook, David (1982). "British Manufacturing Companies Triumph at Japan's Show-piece." *Coin Slot International*, October 9: 1.
- Snook, David (1982). "Fruits Reclaim Crown." *Coin Slot International*, January 23: 19–23.
- Snook, David (1982). "London Coin Close Down." *Coin Slot International*, May 8: 1.
- Snook, David (1985). "Capcom to Open in US." *Coin Slot International*, October 11: 14.
- Snook, David (1986). "JAMMA Hit by Copiers." *Coin Slot International*, October 17: 1–56.
- Snook, David (1986). "Tokyo show—dedicated to beating the video copiers." *Coin Slot International*, October 24: 9–10.
- Snook, David (1987). "Coren—the Man in the Brent Hot Seat." *Coin Slot International*, September 4: 24.
- Snook, David (1987). "Importance of Importing." *Coin Slot International*, September 4: 24.
- Snook, David (1988). "Arcades Pass the Test." *Coin Slot International*, August 5: 1–2.
- Snook, David (1991). "AOU Reflects Japan's Thriving Games Market." *Coin Slot International*, March 15: 12.
- Snook, David (1992). "AOU-Japan Widens Product Base." *Coin Slot International*, March 13: 4.
- Snook, David (2009). *Pushing Coins Through the Ages*. February 26. Accessed July 20, 2016. <https://www.intergameonline.com/coin-op/features/pushing-coins-through-the-ages>.
- Stafford, Dennis (2007). *Fun-Loving Criminal: The Autobiography of a Gentleman Gangster*. London: John Blake Publishing.
- Stern Electronics (1980). *Berzerk*. Videogame.
- Sudnow, David (1983). *Pilgrim in the Microworld*. New York: Warner Books.
- Surman, David (2007). "Pleasure, Spectacle and Reward in Capcom's Street Fighter Series." In *Videogame, Player, Text*, edited by Barry Atkins and Tanya Krzywinska, 204–221. Manchester, UK: Manchester University Press.
- Švelch, Jaroslav (2018). *Gaming the Iron Curtain: How Teenagers and Amateurs in Communist Czechoslovakia Claimed the Medium of Computer Games*. Cambridge, MA: MIT Press.
- Taito (1978). *Space Invaders*. Videogame.
- Taito (1987). *The Ninja Warriors*. Videogame.

- Taito (1992). *Sonic Blast Man*. Videogame.
- Takoushi, Tony (1988). "Thanks for the Memories." *Computer + Video Games: Arcade Action*, February: 14–18.
- Technos (1987). *Double Dragon*. Videogame.
- Temple, Tony (2020). *Missile Commander*. Kindle.
- Temple, Tony (2021). *Missile Commander: A Journey to the Top of an Arcade Classic*. La Vergne, TN.
- Tendler, Stewart (1981). "Customs Recover Record £2.7m from Amusement Arcade VAT Frauds." *The Times*, August 20: 1.
- The Times (England)* (1992). "Brent to Confirm £1.6bn Funding." March 30: 19.
- The Deregulation (Gaming Machines And Betting Office Facilities) Order 1996*. (1996). SI 1996/1359. Her Majesty's Stationery Office (HMSO). Accessed April 22, 2020. <https://www.legislation.gov.uk/uksi/1996/1359/contents/made>.
- Tobin, Samuel. (2016). "Hanging in the Video Arcade." *Journal of Games Criticism*, 3(1): <http://gamescriticism.org/articles/tobin-3-a>.
- Toulmin, Vanessa (n.d.). *From Van Dwellers to Showmen's Guild*. Accessed July 10, 2019. <https://www.sheffield.ac.uk/nfca/researchandarticles/fromvandwellers>.
- Trading Economics (n.d.). *GBPJPY Exchange Rate*. Accessed April 20, 2020. <https://tradingeconomics.com/gbpjpy:cur>.
- Traveller Movement (n.d.). *Gypsy Roma Traveler History and Culture*. Accessed July 5, 2019. <https://travellermovement.org.uk/about/gypsy-roma-traveller-history-and-culture>.
- Tribe, John (1996). "Queue! What a Torture." *The Times (London, England)*, December 14: 19.
- Tron* (1982). Dir. Steven Lisberger. Los Angeles: Walt Disney Productions.
- Tron: Legacy* (2010). Dir. Joseph Kosinski. Los Angeles: Walt Disney Pictures.
- UK Statutory Instruments (2018). *The Gaming Machine (Miscellaneous Amendments and Revocation) Regulations 2018*. November 15. Accessed May 10, 2020. <http://www.legislation.gov.uk/uksi/2018/1402/contents/made>.
- Video Game Sales Wiki (n.d.). *Fourth Generation of Video Games*. Accessed March 3, 2021. https://vgsales.fandom.com/wiki/Fourth_generation_of_video_games.
- Wade, Alex (2018). *Playback: A Genealogy of 1980s British Videogames*. London: Bloomsbury Academic.
- Wade, Alex (2020). "Extended Play: Hands on with 40 Years of English Amusement Arcades." In *Hands on Media History: A New Methodology in the Humanities and Social Sciences*, edited by Nick Hall and John Ellis, 145–159. London: Routledge.

- Walton, John K. (1983). *The English Seaside Resort: A Social History, 1750–1914*. Leicester, UK: Leicester University Press.
- Waterhouse, Ronald (2013). *Child of Another Century: Recollections of a High Court Judge*. Abingdon, UK: Radcliffe Press.
- Wendlandt, Astrid (2003). "Rank Sells Its Games and Slot Machines Division for £30m." *Financial Times*, October 31: 26.
- White, Matthew (2009). *Georgian Entertainment: From Pleasure Gardens to Blood Sports*. October 14. Accessed July 8, 2019. <https://www.bl.uk/georgian-britain/articles/georgian-entertainment-from-pleasure-gardens-to-blood-sports>.
- Williams Electronics (1979). *Gorgar*. Pinball machine.
- Williams Electronics (1981). *Defender*. Videogame.
- Williams Electronics (1981). "Notice." *Coin Slot International*, April 18: 31.
- Wise, Gerry (1982). "Cinema Act Casts Cloud Over Video Use." *Coin Slot International*, October 9: 1.
- Wise, Gerry (1982). "Sega Slap Seven Writs on Italian Copiers." *Coin Slot International*, May 1: 1.
- Wise, Gerry (1982). "Star Video Is British Made." *Coin Slot International*, January 17: 27.
- Wolf, Mark J. P. (2012). *Before the Crash: Early Video Game History*. Detroit: Wayne State University Press.
- Wycherley, Lisa (1997). "Video Nation." *Coin Slot International*, October 31: 9–10.
- Wyke, Andrew (1991). "Rank Spending tops £9m." *Coin Slot International*, December 13: 1.
- Wyke, Andrew (1991). "We'd All Like to Be Beside the Seaside—or Would We?" *Coin Slot International*, November 8: 8.
- Wyke, Andrew (1994). "Complete Nonsense!" *Coin Slot International*, December 23: 1.

