In this chapter, I explore the culture and practices of an online community devoted to the digitizing or “ripping” of rare and hard-to-find jazz records. I am prompted by Cheal’s (2016) conceptualization of gift economies, as part of a broader political-economic analysis, to think through the ways in which tastemakers in such communities produce, prepare, and distribute music using digital tools; their motivations for carrying out this work; the rituals of reward and reciprocation involved; and how they participate in, and respond to, the discourses of fans, artists, and critics. I locate the restoration and “remaking” of jazz records in the digital sphere as part of the “globally connected” DIY preservation that Bennett (2009, 483) argues represents a “re-writing of contemporary popular music history,” but also endeavor to contextualize this activity in relation to recent debates about file-sharing within the music industries (Lessig 2004; Shang et al. 2007; White 2010; Andersson 2013). This research reveals tensions at play between the value of these “MP3 blogs” as archives and venues for taste-making, versus the sorts of ethical, moral, and industrial complexities they engender for rights owners and other vested interests. My case study, which examines a website called My Jazz World (2007–2010), also provides an opportunity to think about the ways in which these activities embody and reflect values held by jazz fans, such as a love for high fidelity sound and audio technologies (O’Neill 2004), tendencies towards collecting and completism (Kelly 2004; Anderton 2016), fetishism of the vinyl record (Yochim and Biddinger 2008; Shuker 2010), and the importance of cultural capital and prestige among peers (Straw 1997; Shuker 2004). By offering free access to a vast archive of rare or out of print jazz music, My Jazz World became a kind of digital utopia for the jazz fan. And yet, just as the derivation of the word utopia (from the Greek meaning “no place”) provokes questions about the likelihood of such imagined perfection in society, the “world” that Smooth, the My Jazz World founder, developed online also remained heavily contested and difficult to sustain.

To explain the key terms I am using, I turn firstly to Cheal (2016, 19), who defines a gift economy as “a system of redundant transactions within a moral economy, which makes possible the extended reproduction of social relations.” He describes these transactions as redundant because the financial profit that one associates with a market economy is subjugated here in favor of “a system of transactions which are defined as socially desirable (that is, moral), because through them social ties are recognized, and balanced social relationships are maintained” (2016, 15). Within the blogosphere, transactions are not usually specific to one particular geographical area, nor are they organized around financial reward. This form of distribution also typically does not involve the licensing of intellectual property rights or the payment of royalties to copyright holders, and as a
result, many such websites maintain a complicated status with regard to copyright (Collins and Long 2015, 83). On the other hand, MP3 blogs often make a valuable contribution to articulating cultural heritage by including material that is either out of print or not commercially viable.6 If, as Baker and Collins (2015, 983) suggest, the production, distribution, and consumption of musical genres and forms that underpin the archiving of popular music tend to coincide with the “commercial logic” of the music and recording industries, then the demise of more inclusive and comprehensive digital libraries like My Jazz World represents a form of cultural erosion. A significant conceptual dimension of this research is therefore prompted by Cheal’s (2016, 4) claim that the study of gifts as an important sociological concept has been marginalized by political economists who have placed a (perhaps unsurprising) emphasis on control over the means by which goods are produced. Drawing on Mosco (2009, 2), who defines political economy as “the social relations, particularly the power relations, that mutually constitute the production, distribution, and consumption of resources, including communication resources,” I foreground the sociology of the MP3 blog within the wider political economy of the music industries, paying attention to questions of culture, technology, organization, politics, and engagement with legal systems. This allows me to explore what is possible for these kinds of communities in their interactions with the music industries and the public, without overlooking the specifics of how they function or the contributions that such communities make to our understanding of popular music.

**Approach and Further Context**

As part of my primary research, I conducted an in-depth interview with the founder of My Jazz World, who remains anonymous here under his online moniker “Smooth.” A jazz aficionado, record collector, and audiophile from Europe, Smooth is the main source of information about the ways in which My Jazz World was organized and how it operated. This includes the technical process of ripping LPs, the equipment used, and how music was prepared for release and distributed online. As a result of this relationship, I was able to receive copies of correspondence with third parties, including fan mail to the website, industry solicitation, and cease and desist notices, some of which has been included and anonymized. My interview with Smooth was carried out by email, and so while this necessitated a structured set of questions submitted in anticipation of detailed responses, I was able to follow up later with additional requests for information or clarification. I complemented this work with a period of virtual ethnographic research consisting primarily of examining archived pages of the My Jazz World website and comments made by the public (some of them users of the site) in online fora. As the site had closed down some years ago and was no longer publicly available online, I did not announce my presence as a researcher to members of the My Jazz World community or in other public spaces where conversations about the site had taken place. However, through the process of interviewing the founder of the website, permission was sought to use his comments in their anonymized form. I also consulted a range of secondary literature on the subjects of gifting, record collecting, popular music heritage, archiving, and memory, particularly the work of Bennett and Rogers (2015), Baker and Collins (2015), and Collins and Long (2015), the latter of which speaks directly to practices of music archiving in virtual spaces.

With regard to the broader theoretical concepts shaping this work, the major study in the area of gift exchange is The Gift by Mauss (2016, originally published in 1925), who argues that the giving of gifts is not the product of altruism, but instead involves an obligation to provide a gift in return. While the principles of reciprocity and social patterns of gift exchange are covered in some detail elsewhere (McGee and Skågeby 2004; Skågeby 2010; Yan 2012), in file-sharing communities this usually revolves around “seeding” (contributing computing resources to propagate files) and/or giving thanks to the uploader. Bauwens’s (2005) take on peer to peer (P2P) activity...
adopts a fairly neutral stance by claiming that “each contributes according to his capacities and willingness, and each takes according to his needs”; however, users of niche file-sharing communities are often bound by an obligation to seed and/or to give thanks (Carter 2013). The ability to reciprocate properly is often bound up in mastery of the customs, rituals, and language of such communities, and this is often necessary in order to maintain access. While many of the rules and regulations of file-sharing websites exist in order to protect against negative attention from rights holders and to guarantee a steady flow of new content, Strachan (2017, 24) confirms in his discussion of software piracy that “a key motivating factor for individuals involved in the scene is the accumulation of subcultural capital.” By locating, curating, and making out of print jazz records available in a digital format, Smooth came into contact with the needs and agendas of music fans, recording artists, and industry workers, some of whom provided him with the prestige and motivation required to continue his work.

As the owner of My Jazz World, Smooth’s work involved a regular routine of ripping vinyl records, digitally removing noise such as pops and clicks, encoding files in the MP3 format, and photographing and color-correcting original artwork, as well as categorizing, describing, and uploading the music to file-hosting platforms. Given that such activities require high-end audio-visual equipment, specialist editing skills, and access to rare records, this contribution represents a great deal of time and effort, as well as a significant economic investment. It is therefore not hard to see why concepts of altruism and benevolence continue to have a place in studies of gift economies (Ripeanu et al. 2006; Baym 2011). However, this situation also raises questions about the extent to which such tastemakers can determine the sound and meaning of the products they collect and distribute. If Smooth’s remastered releases offer a new experience, changing the way that the music has previously sounded or, potentially in some cases, was meant to be heard, what complexities are engendered through the remaking of the music to suit the tastemaker’s sonic ideals? And how does this challenge notions of artistic or corporate autonomy? As Laver’s (2015) work on jazz’s relationship to marketing demonstrates, there are multiple ways in which jazz values might be understood through their codification in products, so what meanings might Smooth’s intervention introduce in this context?

Throughout history, jazz has frequently been described and understood as a gift to our cultural lives. And yet, the production, distribution, and consumption of jazz is bound up in the same economic imperatives as any other form of commercial music. The transactions that took place via My Jazz World, were, on the surface, economically redundant, and the majority of music distributed through the website was either out of print or not available on compact disc at the time of posting. However, a number of parties determined that Smooth’s actions still had negative implications for jazz musicians and record labels. So, while these sorts of interactions are often symbolic in nature, it is still important not to overlook the significance of non-economic activities, even in a predominantly capitalist system. Elder-Vass (2016, 4) argues that the emergence of the digital economy has revealed a “proliferation of innovative economic forms” (2016, 4). He proposes a framework which he calls a “political economy of practices,” intended as a fluid way to understand the economy as a “complex ecosystem” (2016, 5). In this context, it becomes easier to understand both the contested space that MP3 blogs occupy and the contribution made by such sites as repositories for commercially neglected music.

The Rise of My Jazz World

During the early 2000s, the practice of making and distributing vinyl rips became an important part of how blog owners shared their music tastes with others. A large proportion of this activity took place via Blogger, the go-to platform for such activity despite its association with Google from 2003 onwards. My Jazz World was created between spring and summer of 2007, the same
year in which Rojek (2011, 132) claims “the CD/vinyl market in the USA shrank by nearly one third” and “digital/vinyl sales were 15.4% down”—figures that represented a twenty-year low for vinyl (Shubber 2014). As commercial music sales reached their nadir in this period (Stolworthy and Barnes 2014; Chapman 2017), the increasing availability of inexpensive, professional-grade recording and editing tools combined with free blogging platforms and ubiquitous internet access afforded vinyl enthusiasts around the world, whose records had previously rarely been seen or heard outside of their own homes, an opportunity to begin to digitize and distribute their collections.

My Jazz World was among the most prolific of such sites due in large part to the efficient technical processes employed by its owner. Inspired by MP3 blogs like Orgy In Rhythm, Baby Grandpa, and Killer Groove Music Library, Smooth started by acquiring LPs using the auction website eBay to track down what he describes as “impossibly rare stuff.” For Smooth, this typically meant music that had not been released in any format other than vinyl and was no longer readily available. Smooth acknowledges that he spent a significant amount of money acquiring many of these titles. “I wanted to share and educate,” he relates. “I could have amassed this vinyl collection for myself, but I knew sharing would be much more rewarding for me. Not financially, but spiritually.” By foregrounding his altruistic tendencies, Smooth positions himself as an educator and tastemaker. However, despite this desire to “help others fill the gaps in their collections, and serve the music world as whole,” he also acknowledges that much of this activity was motivated by competition with other bloggers, and a desire to “show taste and knowledge.” This statement chimes much more with Strachan’s (2017, 24) claims about sharing communities, revealing a focus on accumulating subcultural capital (see also Raymond 1998), as well as a general sense of the fan drive for completism common to record collectors and jazz fans. Smooth therefore achieved a sense of reward both through the act of educating others and through the kudos he received as the agent of restoration for so much neglected music.

Production, Distribution, and Consumption

Studying the production, distribution, and consumption of the content posted on My Jazz World provides an opportunity to learn more about the culture of music file-sharing communities, particularly, in this case, around niche genres like jazz. For My Jazz World, audio production centered around Smooth’s vinyl ripping station, the hub of a highly efficient process, which he claims “resulted in files that came really close to a CD and set a standard in the blogosphere.” Because of the particular applications Smooth was using, he was able to multi-task in his recording and editing process. “Usually I was working on three to four albums at the same time,” he reports. Using only vinyl classified as VG++ (very good) or mint condition, the routine began with cleaning each record on a Hannl Mera cleaning machine. Smooth then played the record on a high-end Nottingham Analogue Spacedeck turntable through a Heed Audio Quasar phono pre-amp. He used a separate Apogee Rosetta 200 A/D-converter to capture the digital audio, connected through “only the highest quality cables.” Once the audio existed on the computer, Smooth removed clicks and pops with ClickRepair, a piece of software selected because it removes undesirable noises using a mathematical algorithm rather than an audio-degrading filter. He would then split the audio file into individual tracks, normalize the files (uniformly increasing the amplitude of the audio waves), make a fade in and fade out for each using an audio editor, and then use iTunes to add all of the metadata and the cover art. He archived the original files in the Apple Lossless format (a typical format of choice for audiophiles) and offered MP3s encoded at 320kbps through the My Jazz World website.

When reproducing album artwork, one of the problems that Smooth encountered is that LP sleeves do not fit on A4 scanners. He considered stitching two halves of the image together in Photoshop, but eventually opted to create a mini photo studio specifically for the purpose of
digitizing record sleeves. Using a Nikon D300s with a 50mm prime lens mounted on a tripod, the camera would be focused on the floor where the album cover would be positioned. Smooth set up two professional photography lights about four feet to the left and right of the target, which ensured that no reflections would be seen on the image. He used a variety of techniques to achieve depth of field, photographing even warped covers sharply, and attended to white balance by placing white paper on the floor next to the cover. In editing, Smooth used an array of tools to ensure the cover was properly aligned and square before removing any imperfections and correcting color to match the original object. Finally, the image would be exported for use on the web. Through this process, Smooth created digitally remastered versions of more than 1,000 jazz, funk, and soul albums in just three years.

As I have discussed elsewhere in my work on jazz radio (Barber 2010), musicians, producers, record labels, and the media are already engaged in a contest for authorial control over musical material. The participation of the MP3 blogger further complicates this process, both through the unprompted act of bringing a physical artifact into the digital domain and, perhaps more invasively, by deciding what “corrective” work might be required. Through this account of the production process, we can begin to appreciate the extent to which the conversion of the analog audio and the reproduction of the record sleeve remediates the fetishized vinyl object for online distribution in line with the tastemaker’s sonic and visual ideals. Moreover, the technically advanced interventions that Smooth makes during this process raises questions about the concept of the “amateur archivist,” a category in which such workers have been placed (Collins and Long 2015). If we were to compare Smooth’s work with the technical standards adopted by jazz record labels in the reissue market, it is conceivable that, acknowledging the absence of proper licensing, My Jazz World would be understood as one of the most prolific organizations devoted to the preservation of this music, a situation that would seem to defy conventional notions of amateurism.

Turning to the distribution of the content online, we can begin to think more specifically about how MP3 bloggers accomplish the act of sharing files, and how gifting works practically within these communities in the face of critical attention from the outside. The process of disseminating music via My Jazz World involved the creation of a zip-archive containing the files for each album, which were then uploaded to the file-sharing service, RapidShare. During this period, links to unauthorized content via RapidShare were typically prone to expiration or removal in response to copyright claims. As a result, Smooth endeavored to ensure reliability by acquiring premium hosting: “I paid for a pro account,” he relates, “that allowed the files to reside online indefinitely.” By investing significant time and money, Smooth endeavored to ensure the sustainability of the archive he was creating, and the reliability of access to the music for the user. As is customary on music sharing blogs like My Jazz World, the RapidShare links to the files were usually placed not in the main body of the post but in the comments section as a way to evade the eyes of the casual browser or even the uninitiated copyright owner. While this would appear to feed into Barbrook’s (1998) discussion of the web as an “anarcho-communist utopia,” the home page of My Jazz World did contain the proviso that copyright owners could have their works removed at any time. If, as Cheal (2016, 11) argues, an adequate model for understanding reciprocal expectations would require “microstructural analyses of the communication processes by which expectations are formed and maintained” (2016, 11), then we can observe that through his attempts to offset criticism for unauthorized use of intellectual property, Smooth demonstrates a desire to introduce an ethical framework for his activities (Shang et al. 2007) and to make expectations clear for rights owners.

In keeping with Godbout and Caille’s (2014) claim that the modern gift is uniquely characterized by the altruistic desire to give, Smooth kept up what he described as a “frantic pace,” posting an LP almost every day for three years. In doing so, Smooth created a notable archive of jazz music that was out of print or had become lost to the ages in some way, and introduced his
audience to some obscure gems; however, he also attracted a significant amount of criticism. By examining the consumption and reception of this content, we can get a sense of how fans, artists, and critics responded to these activities and tease out some of the tensions that exist between those who seek access to specialist knowledge and material versus rights owners and other vested interests who may find such opportunities morally or legally unsound. My Jazz World generated a fervent following, developing relationships with music fans, jazz artists, and the publicity departments of record labels. According to figures acquired via Google Analytics, from April 27, 2009 to May 3, 2009 My Jazz World received 66,000 page views and almost 30,000 hits from 13,631 unique visitors. Given that these numbers represent a single week of activity, we can conclude that the site was a popular destination for music fans, particularly the audience for obscure 1970s and 1980s jazz, funk, soul, and rhythm and blues (R&B), and that visitors were returning to the site more than once in a given week. These statistics also raise further questions about the nature of the audience. Were these people jazz fans? To what extent did the audience for the site comprise file-sharers whose goal was simply to accumulate music files on the basis that the content is rare or collectible, many of which they would never actually listen to? In the end, there were a few distinct groups that emerged, having made contact through the site. The first category of these were fans and musicians who appreciated the work Smooth was doing:

WOW! What a wonderful effort! Thank you so much for compiling these all in one place. I am Ilona, fiance of Gerry Brown (the drummer on these recordings). He and I are eternally grateful for what you have done—Ilona & Gerry Brown.

Thanks Smooth for making this available!!! I didn’t have a copy of this album. And I played on it—John Rowin.

Many thanks for your site. As a consequence, I went to the attic and unboxed my vinyl. The records sounded terrible. Pops, cracks & surface noise. So, I got a Knosti record bath. It was a real eye opener. I now have a new hobby, and it’s all thanks to you—Craig.

In these examples, Smooth provided a valuable service to musicians who did not own copies of recordings they had performed on, and one visitor paradoxically rediscovered a love for physical vinyl. In addition to this form of fan mail, some enthusiasts sent important contextual information about the recordings, which contributed to the sharing of knowledge and the development of the archive:

Be careful, friends. This is not an Antonio Carlos Jobim album. This is a fake. The album is a compilation of rare Luiz Bonfa material from the Sixties. All titles, authors and credits listed are inventions—Sam Laurie.

The second category of correspondence derived from music industry workers seeking publicity/promotion. For instance:

Hello, since you seem to be a major fan of Chico Freeman, please be informed that Chico is about to reissue large part of his back catalog. If you want to support this initiative we suggest you embed in your blog our widget for Chico Freeman on GetJuke. We thank you for your help!—The GetJuke Team.

And finally, critics emerged in the form of music fans, industry workers and artists:

No one’s holding a gun to your head, making you spend so much time on this blog. There are musicians on this blog that cannot afford health insurance. Shame on you and all of the other music bloggers. You should all be ashamed of yourselves—Gavroche Thénardier.
Guys, this is how I make my living, and I wouldn’t ask you to forward your pay check to me, nor expect to come to your house and take some of your property—David Diggs.

I happen to know that Mike Mainieri’s rights were in the process of being retrieved for this album, and now you’ve jeopardized a re-release. Why don’t you look Mike Mainieri up and send him your original copy? I’m sure he doesn’t even have one of his own—Sarah.

Although so-called “parasitic” gifting communities like Napster (Giesler and Pohlmann 2003; Giesler 2006) have received scholarly attention with regard to the role they can play in evolving consumption, the chief criticism of My Jazz World, which was the primary source of tension between My Jazz World and the wider music industries, was the position that, despite the fact that these albums were not readily available commercially, Smooth had done such a good job on remastering the LPs that these informal “releases” were destroying the market for future legitimate re-issues.

The Fall of My Jazz World

My Jazz World met its end in 2010 through a confluence of two events. In the first instance by the so-called musicblogocide (Michaels 2010) in which Google, without warning and citing copyright violations, shut down at least six of the most popular music blogs, instantly deleting years of archives. And latterly, once My Jazz World was relaunched elsewhere, its ultimate demise was brought about by the threat of legal action from jazz-funk flugelhornist Chuck Mangione. From the start, the website attempted to deflect negative attention by only posting music not currently available on compact disc, and by displaying a notice on the front page of the site that stated that that copyright holders could have their work removed at any time. In the event of a reissue, Smooth updated his existing posts with links to buy those releases at Amazon. However, this approach didn’t work for jazz musician Adam Niewood, son of the late saxophonist Gerry Niewood, who protested strongly about the posting of his father’s material. Says Smooth: “They had the idea that his mother could live off his old catalog, and now that I had re-released his old records, this would no longer be possible.” Niewood also alerted Mangione’s management to the infringement taking place on the site, and Smooth was soon in receipt of what he described as a “frightening letter” from Mangione’s lawyers.

We call upon you to immediately remove these recordings from your website and cease making them available to the public. We also call upon you to immediately furnish us with information as to how many copies of these albums have been downloaded—Mangione’s legal representation.

Smooth took the website down the same day in an effort to appease Mangione’s legal team and no further action was taken, but he maintains that he was justified in his approach to sharing: “If those people are unable to keep the material in print or if they let the music fade into oblivion,” he says, “then music fans have the moral right and duty to remedy the situation with vinyl rips and sharing blogs.” In his book Free Culture (2004), Lawrence Lessig divides the different kinds of content shared by file-sharers into five categories, including one devoted to content that is no longer commercially available:

For content not sold, this is still technically a violation of copyright, though because the copyright owner is not selling the content anymore, the economic harm is zero—the same harm that occurs when I sell my collection of 1960s 45-rpm records to a local collector.

(Lessig 2004, 68)
If, as Lessig suggests, the economic harm of such actions is likely to be zero, one can begin to appreciate Smooth’s rationale, particularly given the comprehensive nature of some of these archives and the knowledge they represent about our cultural heritage. Nonetheless, this position fails to address the main objection raised in the previous section, which concerns the notion that once music is released for free in a high-quality digital format, the market for a future commercial release is potentially damaged or compromised, even when the informal release is not sourced from the original master tape but derives from an out of print analog artifact. Ultimately, the efficiency and technical facility with which Smooth industrialized the art of the vinyl rip, and his desire to lead in this community through sharing his work, hastened the failure of his utopian experiment.

**Conclusion**

In this chapter, I have primarily been concerned with how production, distribution, and consumption are organized in music file-sharing communities, and the sorts of limitations tastemakers encounter in their relationships with the music industries. While the discourses of audiophilia, record collecting, and social status that surround jazz music and constitute its culture are writ large in the microcosm of My Jazz World, Smooth’s vision for this digital utopia was essentially a response to a situation in which all of the world’s music was not available to him, and other collectors, in high-quality digital formats. This is significant because it suggests that there is an extent to which MP3 bloggers understand vinyl records as a wellspring of music that can be laundered from its rights associations through transfer to the digital domain. However, through his ideology, Smooth was forced to confront the dominant modes of thinking within the music industries (and among some fans) about what happens when private individuals make executive decisions about the intellectual property of others. As a result, he was left with a negative view of both the American legal system and companies like Google, whom he aligns with the “big brother” tradition of dystopian science fiction.

While the example of My Jazz World helps to illustrate Elder-Vass’s (2016, 5) notion of the complex ecosystem that governs the digital economy, it is still difficult to see how models such as these will become politically, economically, and socially feasible in the long-term. With the resurgence of vinyl as a commodity and websites like Discogs allowing us to access detailed data on more than ten million recordings by six million artists as well as a marketplace in which those artifacts are sold, there is perhaps less of a demand for this kind of activity in contemporary blogging practices. While I am not claiming that MP3 blogs are a relic of the digital age, it is useful to consider the next steps in building sustainable archives based on user-edited databases, where the emphasis is not transferring music from an analog to a digital domain for free distribution online, but discovering, documenting, and purchasing the world’s physical music products in their original formats. As for Smooth, the future of his utopian vision for jazz remains equally as uncertain:

> At the moment I cannot tell if, when, how and where my state-of-the-art vinyl rips will resurface. Should I decide to continue, you will hear about it in the blogosphere—Smooth.

**Notes**

1. “Ripping” refers to the practice of recording both sides of a vinyl record into a computer to create a digital version of an album.
2. The general notion of online communities as participatory is a recurrent theme here drawn from the work of Jenkins (2006).
3. MP3 is the digital audio coding format used to compress audio files for convenient distribution via the Internet and other forms of media. An MP3 blog is a website where the primary purpose is to make MP3 files available for visitors to download.
4. Most references to utopia derive from Sir Thomas More’s sixteenth-century book *Utopia* (1516), which gives an account of a fictional island society.

5. Blogosphere is a collective term for a network of blogs.

6. Scholars like Sterne (2006) have argued in favor understanding the MP3 as a cultural artifact in its own right.

7. All direct quotes from Smooth come from an interview conducted via email on August 23, 2015.


9. In *Envisioning Real Utopias* (2010), Wright gives the example of Wikipedia as an egalitarian venture which could be considered anti-capitalist.

10. This is not to suggest that all MP3 blogs focus on commercially neglected music. It is perhaps a consequence of *My Jazz World’s* visibility in this period that its owner adopted what he perceived to be an ethical policy with regard to copyright.

11. The central importance of the Blogger platform to this culture was identified by Collins and Long (2015, 81) in their work on archival practice in online communities.

12. It is still possible at the time of writing to find about 1,000 covers online that were photographed by Smooth during this process.


14. RapidShare was a file-hosting service that existed from 2002 to 2015.

15. Cenite et al. (2009) proposed a multitude of motivations for file-sharing based on Lessig’s model.

16. Currah (2007) and Baym (2011) are two scholars who have begun proposing ways in which gift economies and industrialized creativity can coexist.


References


Shubber, Kadhim. 2014. “Vinyl Record Sales to Top 1M for First Time since 1996.” Financial Times. www.ft.com/content/e5f3f08e-55e3-11e4-a3c9-00144feab7de.


