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STUDYING THE MUSIC INDUSTRIES

This chapter explores several ways of unpicking and analysing the complex web of practices, strategies and narratives that characterize the music industries, from political economy and the culture industry to sociological and historical approaches. It also highlights the transformations that digital technologies have brought to all areas of the music industries.

KEY FINDINGS

- The music industries may be explored from a variety of research perspectives.
- Technological developments have had, and continue to have, significant impacts on the structure and work of the music industries.
- Interdisciplinary approaches may offer new insights into the music industries.

GETTING STARTED

The study of the music industries is not a uniform endeavour. There are many and varied approaches that yield valid, interesting and important understandings about those industries, their cultural and economic impacts, and their effects on the lives of those who work in and interact with them. These studies can happen at a macro level, in which scholars examine the effects, economic impacts and practices of the music business as a whole, and their inter-relationships with other businesses, laws and social forces. They can also happen at a micro level, where they centre on the activities of individual businesses or, indeed, individuals. Some research focuses on areas between these two extremes or examines specific sectors of the music business. One approach is never more significant

than, or entirely separate from, all of the others, and a rounded understanding of the music industries as a whole demands a grasp of the various ways that these approaches may reveal insights into the business of music. This chapter begins this process by introducing a range of research approaches, starting with organizational structure.

ORGANIZATIONAL STRUCTURE

One useful way to understand the activities of a business, whether a small-to-medium enterprise (SME) or a multinational corporation, is to examine its organizational structure. In the music industries, there will be areas of responsibility for product (or artist) development, finance, legal, technical and general organizational planning, operational and administrative staff, sales and marketing personnel and so on. In larger businesses, each of these areas will have people or entire departments who specialize in just one aspect of the business. In contrast, smaller companies may give responsibility for several, many, or even all of those roles to just one person. And of course, the roles that exist within a music organization will depend to a large extent on what particular task that organization is performing, or which sectors of the music industry that business represents and connects with.

A music business, just like any other business, does not operate in a vacuum, but has suppliers and industry partners that allow it to function without having to perform every specialist role. What is important to examine when considering a music organization is not merely the roles and responsibilities within that organization, but crucially, the relationships that that business has with outside agencies. Drawing and mapping those internal and external connections helps us gain a better understanding of the workings of these organizations and their place within the broader political economy and creative industries context.

When investigating the music industries, understanding the organizational structure of a particular business (or of more than one) can offer critical insights into how that business works, and provide useful knowledge in terms of practical applications. For example, discovering repeatable procedures for music business success (or systems and approaches to be avoided), identifying problems within the structure and linkages of an organization, or simply generating new knowledge about the ways that music organizations can and do work, can provide clues as to how they might potentially do so more profitably.

POLITICAL ECONOMY

Work in the field of political economy examines and explores the relationship between music organizations and the political and economic frameworks within which they operate. In other words, political economy is interested in power relationships and flows of capital. At its broadest, and particularly with respect to policy, this is generally understood at the level of the nation-state, and the political infrastructure into which the larger industry as a whole plays a role.

Political economy studies are primarily interested in macro-level examinations of industries and how their goods and services, production practices and management relate to and are informed by the legal and economic climate in which they operate. Accordingly, a political economy approach to analysing the music industries will be concerned with how music businesses make money, how they may affect policy, and how broader policies may in turn influence the kinds of activities in which music businesses engage. Exploring and understanding the music industries in these terms reveals the significant impact that the music industries may have to a nation's economy.

The industries not only contribute to the economic well-being of a nation and employ a great many people, but are also strongly linked to the wider political environment, and reflect the economic conditions of the times. The corporate record industry, for instance, relies upon a system of capitalism as a political framework for its activities. The division of labour, distribution of scarce resources, and dependence on financial infrastructures are, therefore, of particular interest to political economic analysis.

Economic infrastructure

Political economy approaches may examine the ways that the economic infrastructure of a business sector or organization is structured and works in practice. For instance, record labels have tended to work in a particular way over the past decades – with a few hits providing the revenue required to prop up the business, which often takes losses elsewhere on many more unsuccessful releases. Indeed it is a commonly held belief that eight out of ten releases fail to recoup costs. This is, in part, because the recorded music business has traditionally been based on a model of high fixed costs and low marginal costs. That is to say, it is (or rather, was) expensive to record an album (fixed costs), yet relatively cheap to manufacture each individual copy (marginal costs). Hence, the more copies that are sold of a particular release, the higher the profit margin on each sale made. From a record company's perspective, it is preferable to make one album that sells a million copies than to make 100 albums that sell only 10,000 copies each. The same overall number of records would be sold in both cases, but the fixed costs of producing those 99 other albums would significantly reduce the profit margin. This economic principle explains the importance of hits and hit-makers to the recorded music industry: an artist who can sell 20 million copies of a record (as Michael Jackson did with his *Thriller* album in the 1980s) is a far more valuable asset to a major recording company than an entire catalogue of artists that may collectively sell more copies between them.

Oligopoly and the star system

The political economy approach is also interested in the form that the industry takes as a whole. The recorded music business is, arguably, an oligopoly: an industry in which very few players dominate the market. This is certainly true

in sheer financial terms, as three major multinational companies (known as the 'majors') command the majority of revenues within the globalized music industry, whether under their own label names, or as owners of many of the larger, so-called independent labels (see Chapter 2). This oligopolistic market concentration is of significance for scholars, since it not only impacts upon the organization of capital and political impact of the majors, but also affects how culture is produced and disseminated. That is to say, the political and economic structure and organization of the major recording companies can have a direct bearing on the kind of music that gets made and heard. For instance, the predominant economic model of the recording industries is based on the 'star' system, in which a relatively small number of artists provide the vast majority of revenue. This model guides the strategy and thinking of the major record companies, so affecting the choices that record company personnel make regarding which artists should be released and promoted to the buying public.

The political economy approach may, then, reveal how and why unequal power relations can have an effect on the music that gets created, promoted and released. Not only do patterns of corporate ownership affect the selection and availability of music that gets broadcast and sold in stores, but similarly, commercial pressures can impede and suppress oppositional forces. The purpose of multinational corporations is not to distribute works of art, but to maximize profit (not simply 'make money') – and political economists stress that it is the maintenance of control over the means of production and distribution that is paramount to the interests of the corporate music business world.

The music industries as copyright industries

The political economy approach revolves around an understanding of the numerous ways that money can be made from music, and how that money is then distributed. The central mechanism for revenue generation in the music industries (at both a macro and a micro level) has been copyright, which is a form of intellectual property. In fact, Patrik Wikström (2009) goes so far as to assert that the music business is fundamentally a copyright industry, which marks it out as distinct from other kinds of industries that deal in goods and services. Copyright ownership, and control over intellectual property assets, serve to create wealth in different ways to that seen when, for example, buying and selling commodities (sugar, wheat, copper and so on) or providing services (financial, legal, personal and so on). Copyright is so central to the music industries that it will be discussed in much greater detail in Chapter 9, but it is worth mentioning here that copyright exploitation is central to the political economy approach to understanding the music industries.

Perhaps most importantly, it is crucial to remember that the political economy of the music industry is always changing, and that this is affected by a wide range of forces. Changes in public policy brought about by a change in government or the changing of hands of a portfolio between different political representatives

can have wide-reaching influences. The sale or purchase of record companies by other organizations can affect the whole of the music business. Changes in public taste can also impact the fortunes of whole sectors of the music industries. Even changes in other, related industries can have a huge impact, for instance, radio station formats change over time and the consumer electronics industry continually experiments with new devices and ideas. Technology can, of course, have a major role in the changing fortunes of the music industries, and this will be examined in more detail in later chapters.

CULTURE INDUSTRY

The music business is commonly referred to in the literature and in public policy as one of the 'cultural industries' or 'culture industries'. These are usually described as those industries that create, produce and distribute goods and services that are cultural in nature, and may be further defined by their relationship to copyright as a primary means of control over the economic functions of those industries. In one sense, to study the music business as a culture industry is little different to the study of the music business in terms of its political economy, but the critical focus as well as the key thinkers and core texts tend to have some significant differences.

Commodification and standardization

The term 'culture industry' was first coined by Theodor Adorno and Max Horkheimer in *Dialectic of Enlightenment* (2002, originally published in German in 1944). They argued that industries that create and distribute artefacts of popular culture are in essence no different from factories producing standardized goods, and that the simple gratifications produced by mass culture consumption have the net political effect of calming and appeasing the public at large. Their critique of the music business suggests that the commodification and standardization of popular culture creates a single marketplace in which the most popular works succeed, regardless of their 'artistic merit' or 'cultural worth' (both entirely problematic terms that require some unpacking when working in this area of critical theory).

In addition, Adorno and Horkheimer suggest that the vast majority of this standardized fare is owned and controlled by a very small number of major corporations that claim to serve consumer needs by supplying what audiences want – and that point to the popularity of their successes as evidence that they are serving this need. However, by both creating and meeting demand for standardized products, the culture industries are described as manipulating the public, so that the identities and individual tastes of consumers are minimized. In this way, the music business can perpetuate the 'star' system that, as noted earlier, is the most effective profit-generating method for the recording industries: producing more copies of fewer and fewer items.

Creative work and everyday practice

In *The Cultural Industries* (2007) David Hesmondhalgh suggests that cultural and creative businesses create and disseminate texts that 'have an influence on our understanding of the world' (2007: 3). As such, these industries help shape and define what our culture is and how we relate to it. It is, therefore, crucial to have an understanding of how these texts are arrived at and selected, and how these decisions are made with respect to the corporate desire to not just make profit but to maximize it. A culture industries analysis of the music industries will also pay attention to the 'work' that is done in that context, and how cultural workers spend their time. Hesmondhalgh's more recent book with Sarah Baker, *Creative Labour: Media Work in Three Cultural Industries* (2011), goes into some depth on the work that employees of the cultural (or creative) industries, including the music business, actually do, the extent to which it can be considered creative work, and what it is that constitutes 'good work' in that context.

Similarly, Keith Negus offers a more nuanced examination of the recorded music industries in *Music Genres and Corporate Cultures* (1999). He argues that it is difficult to apply Adorno and Horkheimer's critique equally across all cultural industries: that there are significant differences between (for instance) the film industry and the recorded music business. He also problematizes the relationship between industry and 'creativity' – that is to say the tension between what artists want to create and what their record companies wish to produce, promote and release. Furthermore, Negus explores the idea that not only does industry produce culture, but culture produces industry. In other words, music businesses capitalize on and exploit existing cultural practices and scenes as much as they seek to create them. As with Hesmondhalgh's later work, Negus is concerned with understanding the role of workers within recording companies. He finds that, while the term has a somewhat different meaning in the corporate context, record companies can be discussed in terms of an internal 'culture' that informs and shapes practices and decisions made by personnel working within them (Negus, 1999; see also Negus, 1992). Indeed, understanding and analysing what people do within the music industries is an important approach to the scholarly study of the music industries and offers insights that may not be gained with an abstract political economy approach to that same business or sector.
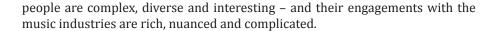
SOCIOLOGY

The study of the music industries as a function of culture and society is another popular approach to understanding the music industries. Music is culture, and industries are formed from aspects of cultural engagement. It is too easy when studying music as an industry to fall into the logical trap that suggests that people are simply consumers that are marketed to, and who purchase undifferentiated products from footwear to chocolate bars to pop music. In fact,

people are complex, diverse and interesting – and their engagements with the music industries are rich, nuanced and complicated.

Symbolic meaning

In short – music creates symbolic meaning for people, and that meaning is expressed in all sorts of different ways. People do not simply discover, buy and listen to music. They dance to it, they gather with others who enjoy the same music, they collect and organize music, and they create new knowledge around that music. Subgenres form, and scenes are created that support and reinforce those subgenres. Clothing and personal styles represent a kind of tribal affiliation with different kinds of music (note, for instance, the differences between emo attire, hip hop fashion, skater punk clothing and club wear for house music fans) and identity is formed and expressed through music, particularly – though hardly exclusively – by young fans (see Frith, 1996).

Moreover, the culture of music is expressed in many varied ways, all of which are worthy of study. Examples include the venues attended by music fans, and how those venues form the basis for social cohesion and the formation of scenes, the musical heritage of cities and nations and their impact on cultural identity, and the broadcast of local music and its effect on both civic pride and the development of local music industries. There is also the relationship between music, race and gender, and the ways that our personal daily routines are integrated with music listening in supermarkets, shopping malls, health clubs and other places where people perform social and cultural activities.

The study of music as culture and as a social force allows for a deeper understanding of how musical meanings are created and communicated. It also sheds light on how these meanings form the basis of the music industries and the opportunities that exist for businesses to engage with subcultures, scenes, and daily activities. As such, what people do with music in a broader sense, other than simply listening to it, can reveal fascinating insights and great potential for research. For a deeper understanding of the study of popular music culture, see Tim Wall's (2003) *Studying Popular Music Culture*.

MUSICOLOGY

Musicology is the study of musical works as texts for critical analysis. Arguably, there is very little overlap between the world of the musicologist and the student of the music industries. Yet, there is considerable scope for interdisciplinary research, study and teaching across these fields in relation to the creation, performance and reception of musical works. Knowledge of the specialist language of musicology (or the musicological study of musical texts) is not strictly essential for studying the music industries, but an awareness of the terminology and an appreciation of how the musical 'text' (whether on paper, on record or in performance) works will offer a broader and more grounded understanding of the art, expression and culture at the heart of the field. A broad musical palate,

a wide range of listening, an understanding of a variety of musical genres, and the ability to talk about music in a way that communicates with musicians and music professionals is a good basis for professional conduct within the music industries. In other words, while it is not necessary to be able to compose a song, write an arrangement, transpose a work to another key or be able to play the drums in a 6/8 time signature, it is a good idea to know what such things are when studying the field or working with musical people.

Taking popular music seriously

The serious study of popular music works as texts has been a fairly recent development, in part because many musicologists have been slow to accept popular music forms as worthy of scholarly attention. It has been pointed out, for example by Simon Frith and Andrew Goodwin (1998), that many rock musicians and rock critics lack the specialist vocabulary and techniques of musical analysis that academic critics of 'serious' music forms command. However, popular music forms are increasingly garnering the attention of musicologists. For instance, the International Association for the Study of Popular Music (IASPM) is an interdisciplinary organization established in 1981 to connect scholars working on different aspects of popular music business and culture, and has over 600 members worldwide. At an IASPM conference, you are as likely to hear people talk about polyrhythm in jazz or the relationship between Frank Zappa and Third Stream music as you are to discuss the marketing strategies of major record labels or electronic ticketing at music festivals.

When understanding and analysing the music industries, it is a good idea to bear in mind that there are other things at stake than just the commercial infrastructure and political economies of labels and distributors. To many people within both academia and the broader music industries, the artworks at the centre of those industries are of paramount interest. Musicology provides the language by which those works can be discussed with clarity and an agreed set of terms. Fundamental concepts and modes of analysis can be found in Allan Moore's *Rock: the Primary Text* (2001) and David Machin's *Analysing Popular Music* (2010).

METANARRATIVE

A metanarrative is 'a global or totalizing cultural narrative schema which orders and explains knowledge and experience' (Stephens and McCallum, 1998). It is a grand, unifying story that makes sense of all of the little stories that happen along the way – by making them part of a bigger, universal picture. The term was originally introduced and critiqued by the French philosopher Jean-François Lyotard (1984) and was used in relation to such metanarratives as Marxism and religious doctrine, where the unifying story is understood as embodying universal truth. It has since been used more narrowly within literary criticism and communication studies to examine specific narrative fields (for example,

see Baringer, 2004), and it is in this more limited sense that we use the term here. By examining metanarratives we can unpick the simplistic cause and effect explanations provided for often complex inter-relationships and conflicts, and investigate the purposes to which they are used. Two examples of metanarratives are given here, each of which offers an all encompassing way to think about historical change within the music industries.

Music industry responses to socio-technological change

First, we can understand major recording company campaigns to sue file-sharers and digital pirates as part of a bigger story about the ways in which large, incumbent organizations who have been doing well for a long period of time react defensively when they perceive that their way of life and means of income generation are under threat from a changing environment. As a common thread through the larger narrative of the music industries, this is a recurring theme. For example, broadcast radio was perceived as a major threat to the recording industry when it was introduced in the 1930s: if audiences are able to listen to music for free on the radio, why would they buy it? A parallel with the current situation regarding illegal downloads and streaming services is clear, with the metanarrative of an industry under threat being used to lobby for stronger copyright legislation and enforcement.

'Read–write' vs 'read-only' culture

A second example of a music industry metanarrative is the tension between what is often referred to as 'read–write' culture versus 'read-only' culture. The professionalized, broadcast-centric, one-to-many infrastructure of the recorded music business changed people from being active participants (purchasing a score in order to play it on an instrument at home) to passive recipients whose relationship to the music was merely as listeners. It can be argued that this narrative is seeing a long-overdue return to a read–write culture in which digital technology facilitates active engagement with musical content: passive consumers are once again becoming active participants in the music creation process (see Chapter 8). Thinking of consumers in this way places power in the hands of music users rather than music producers and is related to the wider metanarrative of the freedom of information on the internet, and those seeking either the relaxation of copyright laws or the enhancement of fair dealing provisions and protection of the public domain (see Chapter 9).

HISTORICAL ANALYSIS

Historical analysis allows researchers to offer detailed examinations of very specific aspects of the music industries in ways that may not be accessible

otherwise. Here, metanarratives are replaced by small, local narratives (Lyotard, 1984) and, if handled well, an historical approach to a particular musical figure, recording studio, record label, promoter, city scene or genre can reveal details and subtleties that explain or express aspects of the music industries that would otherwise be invisible. Examples of these popular music histories abound, and fill not only the pages of academic journals and scholarly books, but also the shelves of popular bookstores in the form of biographies and other works aimed at a general readership.

Popular music history is also increasingly found in the form of radio and television programmes. National Public Radio (NPR) and the Public Broadcasting Service (PBS) in the United States have many popular and acclaimed series that explore the origins and the events that have shaped the business, while the BBC and other broadcasters offer similar coverage in the United Kingdom. Many of these shows are demarcated by musical genre, such as the BBC 'Britannia' series of documentary programmes (including *Jazz Britannia*, *Pop Britannia*, and *Folk Britannia*). There are also programmes that focus on specific artists and record companies or on the production of particular popular music artefacts or events, most notably the *Classic Albums* television series where each episode examines a specific record as an item of historical significance.

It may be argued that the history of popular music industry and culture is, in and of itself, a music industry form. The publication and production of popular music history books and documentaries meets a consumer desire for a closer connection with and understanding of music and musicians. There are, for instance, hundreds if not thousands of books about The Beatles alone, and this not only provides an incredible wealth of material for someone investigating that band and its influence on the course of popular music business, but is in itself a phenomenon worthy of study.

Historiography

The music industries are, at the simplest level, people being industrious with music, and stories about people and their work contribute greatly to the knowledge we have about how the industries operate. Furthermore, through the critical practice of historiography, we are able to study how and why those histories are told in the ways that they are: to examine their discourses, reliability and methods of enquiry, as well as to understand the critical (and political) frameworks and biases that underlie them. What guides the choices of important dates? What information is included or excluded? Which albums and artists are lauded and which ignored? Sarah Thornton (1990: 89) notes that the subject matter of music histories is often rooted in 'sales figures and personality' or in 'aesthetic/political radicalism and ... sustained media attention'. In essence, history is 'written by the victors' and so a great deal of history is ignored. The strategies identified by Thornton may lead to the canonization of music histories into discrete cultural narratives that serve to exclude the cultural experiences of people whose music tastes do not match those of cultural and media critics. Such

canons should be examined and critiqued through historiography (for example, see Kurkela and Väkevä, 2009) in order to understand the processes by which they come to form, or to offer alternative voices and stories.

TECHNOLOGICAL DEVELOPMENT

When studying the music industries, it is difficult – perhaps impossible – to overlook the impact and influence of developments in technology. It is possible to chart the progress of the sector in direct relationship to the development and dissemination of different technologies of music composition, production, distribution, promotion and consumption. In fact, it is possible to argue that the emergence and widespread acceptance of different technologies (within the recording industries and in the hands of consumers) have driven change in both the music business and in popular music culture.

It goes without saying that musical instruments – from the violin and the harpsichord to the synthesizer and the electric guitar – are themselves technologies. That is, they are tools created and fashioned by human beings to perform specialist tasks. Different types of musical instrument have allowed for different types of music to be created, different genres of music to be established and new types of musical creation to emerge. Through the development of amplification and electrification, different sounds and effects have been made possible. The cultural impact of these changes is difficult to over-estimate, as Bob Dylan discovered when he switched from the acoustic to the electric guitar only to be confronted with boos and cries of 'Judas!' in the mid-1960s (Shelton, 2003).

Technologies of production

One of the first technologies to revolutionize and create the music industries as we know them today is audio recording. Thomas Edison's 'talking machine' was invented during the final years of the nineteenth century, yet it was in the early parts of the twentieth century – and significantly, after the First World War – that audio recordings of music became a mass-produced phenomenon. The impact upon the dominant form of music business at the time – the printed sheet music industry – was understandably devastating. In fact, at the time of that change, many musicians and members of what was then 'The Music Business' (in the same way that the record companies are considered 'The Music Business' today) resisted the new technology strenuously. The notion of singular idealized performances of popular songs recorded by international artists that could be played over and over again without the involvement of live musicians must have seemed a major threat to the success of the mainstream industry of the time, though of course that industry soon adapted.

For a long time, the vinyl 7" single was the defining medium and format for popular song. As a physical disc of a particular size that revolved at a certain speed – 45 revolutions per minute (or 45 rpm) – the single could only contain

songs up to a maximum running time of around four minutes. Consequently, what we know today as the 'perfect 3-minute pop song' has its roots in the physical characteristics of a recorded medium, rather than in some abstract ideal of what music should sound like. Similarly, the widely understood concept of the 'album' – a collection of songs by an artist that represents a single body of work – also has certain characteristics based on the physical attributes of the recorded medium – whether the 12" 33 1/3 rpm Long Play (LP) vinyl record, or the longer compact disc format. In fact, certain genres of music, such as progressive rock (which included longer, more ambitious tracks and the idea of the 'concept album'), grew in part from the artistic and creative exploration of the physical characteristics of the LP. More recently, technologies such as the Apple iPad have allowed musicians to experiment with and expand the potential of the album even further using apps (which are computer programs that run on tablets, smartphones and similar devices) (see Box 1.1).

Box 1.1
Björk's *Biophilia* (2011)

Biophilia (2011) was Björk's seventh studio album release as a solo artist. It was presented as a multimedia experience across a range of technologies including CD, vinyl, digital download, digital book, live performances and the Apple iPad/iPhone. Described as the first proper 'app album' for the iPad, it features a free 'app box' that displays a series of constellations in a three dimensional universe. Each constellation represents one of the album's ten songs and each song is purchasable separately as an app that offers audio-visual experiences (essays, animations and so on) and opportunities for user interaction. For instance, the track 'Crystalline' includes an interactive animated game in which users navigate tunnels and collect crystals, with their gameplay affecting the structure of the music as it plays. The publicity that surrounded the album and its claim to be 'the first' of its kind was helpful for its promotion and marketing campaign, but we might question how many other music artists will follow suit. Few have the financial backing to create an elaborate package of this sort, while many more might prefer to focus on making music than working with interactive artists and app developers.

There are a number of other technologies that have also significantly affected the production and potential of recorded music as a creative form (see Katz, 2010). These include: magnetic tape and multi-track recording, which allowed editing, splicing and overdubbing of musical recordings, electronic effects, effects pedals and samplers, which added new and previously unheard sounds to the palette of musical performance, and the computerization of recording and composition. This latter example allowed for non-destructive editing, 'step programming' and sequencing, and – perhaps most significantly – the opportunity to record

professional-sounding works in non-professional situations such as 'bedroom studios' (see Chapter 4).

Technologies of consumption

Consumer technologies have also revolutionized the experience of music. Numerous recorded music formats have been introduced – some more successfully than others – such as quarter-inch reel-to-reel tapes, compact audio-cassettes, 8-track cartridges, mini-disks, digital audio tapes (DATs), compact discs (CDs), DVD-Audio, and USB flash drives (amongst many others). Each of these media forms had specific characteristics that gave them a distinctive and sometimes competitive edge at various times. These include audio fidelity, the length of the recorded media, the ability to rewind and fast-forward tracks or have instant access to them, and the size, shape and content of the packaging and artwork. Such characteristics impacted upon the success or otherwise of each medium, as did marketing, timing and pricing. Yet, when we read about recorded media, it is only usually the successful formats that are mentioned – as if the record industry moved smoothly from records and cassettes to CDs, and now from CDs to MP3s – when in fact the transitions were far more complex, problematic and worthy of study than such a simplified narrative suggests.

MEDIA ECOLOGY

Media ecology examines the far-reaching impact of a changing technological environment, and regards technologies as environmental forces that exert influence over human affairs. At its simplest, it explains the differences between technological ages, and how the activities, industry, communication and ways of thinking that are found in those ages are influenced by technology. Applying this approach to the study of the music industries helps us to understand the changing fortunes of the sector in relation to the rapid and accelerating technological change seen over the past 100 years. These changes can be studied at a paradigmatic level – large-scale developments such as the shift from print culture (sheet music) to electric culture (recorded music and broadcasting) – and at the level of specific technologies, such as the introduction of stereo recording and the development of transistor radios or MP3 players for portable and individual listening.

From the electric to the digital age

Arguably, the music industries are experiencing a paradigmatic change in the early twenty-first century. Just as the music industries were profoundly and irrevocably changed in the shift from the print age to the electric age, so too are we seeing a profound reconfiguration of the music industries as we shift from the electric age to the digital age. Digital technologies have continued to

transform every aspect of the music business from composition right through to consumption. Consequently, the predominant (electric) music industries of the late twentieth century appear to be under threat in much the same way as the print music industries were a century ago. And this is where the media ecology approach is so important and timely: because if that is the case, then the shift to digital and online music is not merely a change in format (as was the shift from vinyl records to CDs) but a complete change in the media environment and a radical restructuring of the whole industry. In other words, the sale of recordings, like the sale of sheet music, may well become a proportionately minor aspect of popular music consumption, and industries that fail to adapt run the risk of becoming an increasingly niche proposition.

Technological determinism

It is important to raise one particular warning about the media ecology approach – and that is the ease with which it is possible to fall into a position of technological determinism. Technological determinism is the notion that technology is the driving force of a society's history and culture. That is, the idea that technology is something that happens to culture and business, and that we are powerless to control or choose our reactions to it. And while it may seem that a media ecology approach demands that conclusion, in fact the ecological framework offers a more subtle relationship than mere cause and effect. As with any environmental shift, it is necessary to adapt in order to survive and thrive when the technological environment shifts. However, adaptations are not caused by environmental change, but are developed in response to them. That is to say, we choose our responses and so our uses of technology are socially negotiated.

For instance, when wireless telegraphy was first used for commercial purposes by Marconi, it was intended as point-to-point communication over distance – and in particular, ship-to-shore. When telephones were first introduced into the home, the imagined consumer use was to pick up the receiver at a particular time (and to this day we still call it a receiver, and not a transmitter) and listen to a public performance from the concert hall at the end of the street. In fact, users and entrepreneurs of the media decided to use the telephone for two-way point-to-point communication, and conversely, wireless telegraphy (or radio, as it became known) as a means of disseminating musical performances to geographically dispersed audiences.

So while it is true that a refusal or inability to adapt and change to a transformed media and technological environment is analogous to the dinosaurs' inability to adapt to a changed physical environment, the environment itself doesn't force a single and predictable change: we can select and negotiate our responses to that change. In other words, the technology 'affords' a certain range of possibilities, and we have agency in choosing our responses within that process. For more on media ecology, Marshall McLuhan's seminal work *Understanding Media* (1964) is an ideal place to start.

DIGITAL TECHNOLOGIES

It is fair to say that digital technologies have already transformed or are in the process of transforming the entirety of the music industries, and there are dozens, if not hundreds of ways that digital technologies have affected the music industries: from their impacts on copyright and distribution to those upon composition, production, distribution, promotion and consumption. There is also a rich vein of research that examines how digital technologies influence music business activities, and great scope for future study.

Digital media technologies have been in use since the 1970s, so to speak of them as 'new technologies' or 'new media' can be somewhat misleading. Digital media are different in many ways from physical media, and the differences are of considerable consequence for the future of the music industries. There are a number of different approaches and areas of investigation that can, and should, be given serious critical analysis, though we must continue to be wary of technological determinism in our discussions. Of particular importance is the need to consider those characteristics and aspects of digital media that mark them out as different from analogue and physical media (though it must be remembered that some technologies, such as the CD, are actually a combination of physical format and digital content).

Digital is discrete

The first thing to note about digital media is that while analogue audio recordings capture and reproduce sound as a continuous wave, digital recordings sample sound in discrete audio 'snapshots', where each snapshot is described by digital information in the form of binary digits (1s and 0s). In the case of the CD, the sound is sampled 44,100 times per second. From this very finely granular data, the CD player can convert the captured sound back into waveforms, but even at this very accurate level, this is merely an approximation of the original analogue data.

Digital is perfectly replicable

The second thing to know about digital media is that the relationship between original and copy, as seen in the physical world, does not apply in the same way to the digital world. A physical copy of an artefact is always imperfect in comparison to a physical original, as anyone who has taped from cassette to cassette can tell you. In contrast, a digital copy of a digital 'original' is fundamentally the same as that original, and does not deviate in any observable way from it. Digital media can be infinitely replicated and distributed in a near frictionless manner, and the copied files are indistinguishable from the original to the extent that they might as well be the original. Put another way, the original is simply another copy. They can be described, to draw on Jean Baudrillard (1994), as simulacra: copies for

which no original exists. In some cases, such as MP3, file-conversion programs are used to create smaller ('lossy') files by removing some parts of the audio information, but once converted, each MP3 copy is perfectly replicable without further loss of quality.

Copying could, in fact, be said to be the natural state of digital media. When files are moved (uploaded/downloaded) from place to place in the digital realm nothing physically moves, so when you download a song from an online retailer that song never actually leaves the store. Instead, your computer is issued with instructions as to how to make a perfect copy of it. The implications of this for copyright and the music industries in general are profound, and the philosophical, economic and legal ramifications are significant. If there is infinite supply of an item, how can pricing be agreed? If no loss incurred when unauthorized duplication takes place, can there be theft? While the answers to these questions are far more complex than might appear at first glance, there is certainly more than one 'obvious' answer, and these answers have been central to debates within the music industries since the advent of digital media – and certainly since the rise of online transmission and replication of audio files.

Digital transformations: production

One of the most significant impacts of the development and rise of digital technologies over the past 25 years or more is the extent to which the composition and production of music has been made more accessible. Not only has the creation of recorded music become 'democratized' (quotation marks included to signify the deeply problematic nature of that term), practices such as sampling, remixing and the production of music videos have become affordable and achievable for much wider participation. In a way, the de-professionalization of certain areas of music production – due to massive reductions in the cost of entry and the ease with which quality results can be achieved without years of training and the mastery of specific skill sets – has created both a serious problem for the music industries, and a significant opportunity.

Digital transformations: consumption

Digital media have also affected the ways that people consume music. Examples include the rise of portable MP3 players for personal music playback, the development of video games such as *Guitar Hero* and *Rock Band*, and the emergence of streaming 'cloud' music services such as Spotify, Last.fm and Pandora that challenge the traditional (at least for the last century) system of purchasing or owning recordings. Likewise, collecting, organizing and creating knowledge about music has transformed through the use of online fora and community discussion groups centred on specialist interests and niche music. Deleted and out-of-print recordings are shared amongst fans, and recordings of concerts and demos can be centrally stored but accessed globally.

Digital transformations: distribution

The impact of digital technology upon the distribution of music – through 'legitimate' means as well as via unauthorized, peer-to-peer file-sharing sites – is worthy of ongoing investigation, as is digital's role in the decline of the independent and chain retail music store. The long-tail effect observed by Chris Anderson (2006) has important ramifications for the economics of music retail in the online environment, as it challenges the notion of the 'hit' as the central mechanism for revenue generation, or as the only framework for business success at a mainstream corporate level (see Chapter 5). Yet the impact of digital technologies goes deeper than simply the sale of recordings to consumers. For instance, major record labels have made considerable inroads into business-to-business (B2B) strategies and markets with respect to mobile handset manufacturers, soft drink companies, and other corporate entities wishing to supply music as a value added feature to attract their own prospective customers.

Digital transformations: promotion

Promotion of music is also affected by digital technologies. Rather than relying on opinion leaders and taste-makers authorized by the mainstream press and electronic media, digital technology affords the potential for publishing and distribution of opinion through social media sites and blogs. Independent companies and so-called 'unsigned' artists have taken to giving their recordings away as a method of removing barriers and developing a fan base. Author Kevin Kelly wrote on his blog that the independent artist could make a decent and sustainable living from a base of just '1,000 true fans' (2008). He argued that artists should focus on increasing the annual spend of their most enthusiastic fans, rather than attempting to increase the number of individual sales to an anonymous and transient audience.

ISSUES

As we have seen throughout this chapter, the study of the music industries can take on many and varied forms and may emerge from a range of critical positions. As a result, it lends itself to cross-disciplinary approaches. Sociologists, business scholars, musicologists, psychologists, engineers, media academics and scholars from many other disciplines besides all have good cause to study the music industries as a natural part of their field. But of course, this raises some issues for the music industries scholar (from whatever field they may come).

The problem of specialism

For a start, each specialism has its own language. Musicologists freely use terms that are often obscure to sociologists, and vice versa. This can have the effect of

fragmenting the field, and making some works that would be of interest and of benefit to some scholars inaccessible because they are unfamiliar with the terminology that has been developed and used by their neighbouring field over a period of decades. At academic conferences, such as those of IASPM, it is possible to attend presentations that explore the technological, social, textual, historical, cultural, or business aspects of music, based on research and studies carried out by scholars from as many different fields. The issue of communicating across disciplinary language barriers can be problematic in such contexts, yet interdisciplinary study and new, integrated and 'joined-up' avenues of research can emerge that offer cross-pollination and collaboration, and new insights into the music industries.

The problem of fandom

One tendency to be cautious of – and it is a trap that many music industries students immediately fall into when commencing their studies – is the temptation to focus one's scholarly attention on some variation of the topic: 'Why my favourite band is so great.' There is, of course, a difference between research and advocacy, and between scholarly activity and fandom, though that is not to say that one should not shine an academic light on something you are enthusiastic about. In fact, for many scholars, the relationship between academic and fan, or Aca-Fan as scholar, blogger and author Henry Jenkins describes himself (2006) – can be very close (see also Jenson, 1992). Having the advantage of a wealth and depth of knowledge about a subject can be a very good starting point, and involvement in a scene or aspect of the business can be a very useful entry point into the study of that scene or organization. Nevertheless, it is important to separate the enthusiasm of a fan who wishes to convert prospective readers to the wonders of their favourite type of music or artist, and scholarly research that analyses and sheds light on the meanings and implications of that object of study.

CONCLUSION

This chapter has provided a number of theoretical frameworks through which students of the music industries can approach the analysis of their chosen subject. We have demonstrated that there are multiple ways of examining and interpreting meanings within the field. In addition, the purpose of this chapter has been to highlight the complex and discursive nature of the music industries and to show that describing 'The Music Industry' as if it is a simple, coherent or indeed explainable object of analysis with commonly held and universally shared characteristics misunderstands or over-essentializes the field. The music industries exist within a wide range of geographic, temporal, legislative, technological, economic, media and cultural contexts that influence how they operate, and the cultural meanings that they contribute. Finally, the chapter has suggested that an approach which brings together a range of different academic disciplines has the potential to reveal more nuanced and integrated insights about the different sectors of, and issues within, the broad-based music industries.

FURTHER READING

David Hesmondhalgh's *The Cultural Industries* (2007) and Tim Wall's *Studying Popular Music Culture* (2003) are each highly recommended for thinking further about how industries work with cultural artefacts such as music. Keith Negus' *Popular Music in Theory* (1996) is similarly recommended for its useful guidance on reading popular music histories critically, while Tim Wall and Paul Long's 'Jazz Britannia: mediating the story of British jazz's past on television' (2009) offers a useful example of how music history is presented and interpreted through television. Discussions about the impact on the music industries of digital technologies and the internet may be found in Andrew Leyshon's 'Time-space (and digital) compression: software formats, musical networks, and the reorganisation of the music industry' (2001), Chris Anderson's *The Long Tail* (2006) and Patrik Wikström's *The Music Industry* (2009).