

Who Killed the Radio Star? How Music Blanket Licenses Distort the Production of Creative Content

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I. Introduction

Close your eyes. Imagine we are in the early 1940s, looking into a characteristic American family's home at the evening of a typical day.¹ If it's winter, a fire might be warming the house, if it's summer, the doors might be open to let some cool breeze in. But regardless of the season, one thing is almost granted – all family members would be sitting around the radio listening to one of their beloved shows. It might be the crime drama 'The Adventures of Bill Lance', the situation comedy 'Duffy's Tavern', or other similar shows. They won't miss their show for the world. Now open your eyes, and fast-forward to the second half of the 2010s. The typical American home has changed substantially; so have its means of entertainment. Radio, once at the centrepiece of American cultural life, has changed substantively too. And while on average 94 percent of Americans over the age of twelve still listen to it for 18 hours a week,² they listen to something significantly different in content and form than their 1940s contemporaries.

In its heyday of the 1920s-1950s, radio was at the center of culture, politics and entertainment in America. In those days, radio stations were not only disseminators of content, but also major producers of original creative content – from live musical performances to high-investment spoken word shows such as drama, comedy, documentaries, and journalism. But not for long. Since the mid-late 1950s the broadcasting landscape started shifting, and by the end of

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¹ The trends and figures that we describe here and throughout the paper are – to an extent – characteristic of several industrialized countries, of which the U.S. is a prime example (for the UK see, e.g., Sean Street, HISTORICAL DICTIONARY OF BRITISH RADIO (2nd ed., 2015); Asa Briggs, THE HISTORY OF BROADCASTING IN THE UNITED KINGDOM (1961). Canada, see, e.g., DAVID ELLIS EVOLUTION OF THE CANADIAN BROADCASTING SYSTEM: OBJECTIVES AND REALITIES, 1928-1968 (1979).

² See *infra* note 152.

that decade cultural production in radio broadcast had been radically transformed: first, spoken-word radio shows lost their prominence and music has grown to dominate the airwaves. Second, the spoken-word content that still aired transformed from original, scripted materials with an ongoing plot and purpose, to talk shows that are typically improvised, often aimed at the lowest common denominator, and that are substantially cheaper to produce.³ Third, live broadcasting of shows produced locally was abandoned in favor of pre-recorded programs, often produced centrally by a national broadcasting network and then retransmitted to its local affiliated stations.⁴ In addition, instead of offering ‘general’ music, namely, a blend of several music genres, broadcasters began to open additional stations, each devoted to just one particular music genre.

Most of the literature discussing and attempting to explain these changes has focused on technological and social changes during the transformative period. These include: the introduction of television; new technological breakthroughs in the radio industry such as the transistor and car radio; advancement in sound recording technology; the advent of microwave transmission and subsequently, the development of nationwide relay networks; and social changes regarding where, how and when people listen to radio, reflecting the evolving preferences, interests, leisure time, work habits, and cultural perceptions of listeners. It seems right to assume that not one factor, but the coalescing of many different factors explains these dramatic and rapid changes in cultural production in radio broadcast. However, we suggest, these are just part of the story. The intellectual property regime and licensing practices of musical works, we argue, played an overlooked, and might we say central, role in the transformation of cultural production in radio broadcasting. More specifically, we explain how the collective administration of performing rights by collective management organizations (CMO) and the blanket licenses that they issue have precipitated the ascendance of pre-recorded music and the concomitant decline of other types of cultural production, mainly of narrated content.

³ ‘Narrated content’ is used in this paper to describe high-investment, original, scripted spoken content; examples include: drama, comedy, documentaries, and investigative journalism. ‘Talk shows’ or ‘talk radio’ describe low-investment, ad-libbed spoken content. Talk shows are hosted by a host who often discuss topical issues by herself or with guests or listener participation. (BRIAN REGAL, *RADIO THE LIFE STORY OF A TECHNOLOGY* 112 (2005)). ‘Spoken word’ describes both narrated content and talk shows.

⁴ With the notable exception of publicly funded not-for-profit radio. See also the discussion in Part III and Part V(E) below.

Conventional wisdom recognizes that collective administration of copyrights eliminates any price competition between copyright owners. It also recognizes that the all-or-nothing nature of the blanket license allows copyright owners to capture a much larger proportion of the broadcaster's surplus, but it nevertheless assumes that collective administration provides the most efficient way to license the right to publicly perform music. Therefore, the typical law and policy response to collective administration is containment and regulation: CMOs are allowed to operate, but the prices that they charge may be regulated. Surprisingly, despite the fact that this licensing structure has been practiced for almost a century and license fees have been regulated for the better part of that century, the issue of the long-term impact of this licensing structure on the radio industry and cultural production in radio broadcast has rarely been discussed.

This paper demonstrates how the problems associated with blanket licenses are not limited to their static effects (i.e., the problems associated with supra-competitive pricing), but also include dynamic effects resulting from how the blanket license impacts the decisions surrounding radio content production. In a nutshell, the blanket license authorizes a radio broadcaster, for a certain fixed fee, to play as much music as they wish from the CMO's repertoire. Because the price of the blanket license does not depend on the number, frequency, or quality of the songs broadcast, the marginal price for the playing of each additional song from the CMO's repertoire becomes effectively zero. As a result, given the choice between content available under the blanket license and other equally attractive content, a profit-maximizing radio station would always prefer playing content under the blanket license. A radio station that chooses to broadcast content not covered by the blanket license will have to incur additional costs in producing or procuring such content, without achieving any cost savings in the price of music under the blanket license. Thus, blanket licenses encourage the broadcasting of pre-recorded music and discourage the broadcasting and production of other types of content.

The paper establishes this claim by tracing the history of radio broadcast and showing why this explanation might better explain the historic transformations in radio broadcast. We then describe why the impact of blanket licensing was not felt in earnest until the 1950s (mainly due to limited technological capabilities of records and consumer bias against recorded music). The paper then demonstrates that blanket licenses affect cultural production in present times as well. We comparatively analyze data pertaining public and commercial radio broadcast and maintain that

publicly funded radio typically offers a larger variety of cultural products and by-products: public broadcasters offer more narrated content, more live music broadcast, produces more in-house music and spoken word content and many times support their own orchestras and local ensembles.⁵ We also note recent cases in which pre-recorded licensed music was preferred over alternative content, most notably (free) creative commons licensed music and music that is in the public domain. We then suggest that lessons from the radio broadcast industry can and should inform current policy making in other IP industries that employ blanket licensing.

The paper advances as follows: in part II we provide a brief history of radio broadcast and a description of cultural production in radio broadcast throughout radio's prime (1920s-1950s). Part III describes the dramatic changes in the radio broadcast industry from the mid 1950s. In part IV we examine the different explanations to these changes that have been offered so far. In part V we provide a brief account of the IP rights that are at play in radio broadcast and explain the licensing regime. We then turn to clarify how these fundamentally impact cultural production in the radio broadcast industry; explain why the impacts were only first felt in the 1950s and not prior, and suggest that blanket licenses explain the *particular* changes evidenced in the radio industry in the 1950s; we then turn to compare current cultural production in public and commercial radio. Part VI concludes.

II. Radio's "Golden Age"

In the late 19th Century inventors started experimenting with a new technology – wireless telegraphy.⁶ In 1886, Heinrich Hertz, a German physicist, demonstrated that rapid variations of electric current can be projected into space in the form of electromagnetic waves, and a decade later, Guglielmo Marconi introduced the first successful wireless telegraphy system.⁷ By 1901, Marconi performed the first transatlantic wireless communication between Newfoundland (nowadays a Canadian Province) and Cornwell, England.⁸ In the following years the invention

⁵ Under 'public radio' we generally consider non-commercial, not-for-profit, broadcasters whose primary mission is public service. Public radio is often publicly mandated. See further discussion in Chapter V(e).

⁶ HISTORICAL DICTIONARY OF AMERICAN RADIO (Donald Godfrey & Frederic Leigh eds., 1998) xxv; Street, *supra* note 1 at xix. See also: GEORGE DOUGLAS, THE EARLY DAYS OF RADIO BROADCASTING 1-14 (1987).

⁷ Street, *supra* note 1, at xix; Robert Hilliard, *Beginning, Growth and Regulation*, in RADIO BROADCASTING 14-16 (Robert Hilliard ed., 1974); ALFRED BALK, THE RISE OF RADIO, FROM MARCONI THROUGH THE GOLDEN AGE, 20-21 (2006). Balk mentions that other inventors too, were developing similar technologies at around the same time. See also: Robert Lochte, *Invention and Innovation of Early Radio Technology*, 7 J. RADIO STUD. 93 (2000); Douglas *id.*

⁸ Hilliard, *id.*, at 15.

nowadays commonly referred to as ‘radio’ was further developed and by the 1910s commercial manufacturing of radio sets started. November 2, 1920 marked the first commercial radio broadcast in the US.⁹ It did not take long before radio became commonplace throughout the industrialized world. By the mid-1920s radios were to be found in almost every American household.¹⁰

The 1920s mark the dawn of radio’s ‘golden age’ – a term used to describe radio’s prominence in the fabric of daily American life and its centrality in American culture, entertainment, and politics. Radio’s golden age lasted until the late 1950s, which denotes a significant decline in radio’s prominence, as well as substantial changes in programming and a drop in listenership.¹¹

Throughout the ‘golden age’ radio programming was similar to nowadays television programming. It relied on a block programming strategy to attract listeners.¹² Spoken-word radio consisted mainly of narrated content, namely, scripted programmes typically accompanied with background music and sound effects. Each show had a regularly scheduled time-slot. Network radio stations broadcast a mix of original content including soap operas, musical shows, comic shows, variety programs, quizzes, crime dramas, news reports, investigative radio, sporting events, and Western adventures in a set weekly schedule.¹³ Many shows became extremely popular and people followed their favourite shows avidly.¹⁴ The content – from the opening theme, via the scripted content and the accompanying sound effects, up until the closing sequel, was almost

⁹ RAY BARFIELD, LISTENING TO RADIO, 1920-1950, 3 (1996); Gary McIntyre, *The Performance Rights Act: Radio Broadcasting Faces Major Challenge in Long Battle Against Music Licensing*, 17 J. RADIO & AUD. MED. 138 (2010); Douglas, *supra* note 6 at 1.

¹⁰ Balk, *supra* note 7, at 40-43. Outside the U.S. other countries were experiencing similar growth, see: Regal, *supra* note 3, at 76.

¹¹ NORMAN FINKELSTEIN, SOUNDS IN THE AIR – THE GOLDEN AGE OF RADIO (2000); JIM COX, RADIO AFTER THE GOLDEN AGE: THE EVOLUTION OF AMERICAN BROADCASTING SINCE 1960, 4 (2013); Balk, *supra* note 7, at 74.

¹² Block programming is the arrangement of radio programs so that similar types of programs will air in succession. See: Michael Keith, THE RADIO STATION, 92 (7th ed., 2007).

¹³ Cox, *supra* note 11, at 16-20; Steve Lee, *Predicting Cultural Output Diversity in the Radio Industry, 1989–2002*, 32 POETICS 325 (2004).

¹⁴ Cox, *supra* note 11, at 16-17. Similar to nowadays television, radio personalities had the ability to attract crowds and the success of a show often rested on the shoulders of the dignitaries that narrated the shows. Radio attracted the some of the era’s most notable talents – performers, comedians, and hosts from Vaudeville and Hollywood. Presenters in radio were often been characterized by an emphasis on ordinariness, everydayness, and authenticity – Fredrik Stiernstedt, *The Political Economy of the Radio Personality*, 21 J. RADIO & AUD. MED. 297 (2014).

always produced in-house and with rare exceptions – broadcast live. Though narrated content was the focal and prime content, music shows and broadcast of sports events were also common.¹⁵

Live broadcasting was preferred for several reasons: first, live broadcasting was preferred on what can be described as ‘moral grounds’, since it suggested to the listeners that what they are getting is the ‘real thing’.¹⁶ Furthermore, broadcasters believed that if the performing artists knew that they were being recorded and additional ‘takes’ were perhaps possible, then they would not necessarily give their best performance right from the start (implicating, of course, the need to spend additional resources).¹⁷ Second, up until the mid-1950s records delivered inferior sound quality. Consequently, the national networks prohibited airing recorded materials.¹⁸ Third, the length of the records themselves was very limited – up to 3-4 minutes until the late 1940s, and just under 15 minutes until the late 1950s.¹⁹ This meant that broadcasting recorded content was a cumbersome function that also hindered the ability to broadcast smoothly.

Almost all radio stations also had their own orchestra (or orchestras), house band, or at least some smaller ensemble of musicians.²⁰ The musicians were in charge of accompanying the narrated content with music – everything from the theme music to sound effects. But that was not the musicians’ only or even necessarily main pursuit, they also delivered full-length musical productions of everything from popular, to classical and even jazz music.²¹ The music played was

¹⁵ Cox, *supra* note 11, at 20. Balk mentions that in prime time about 20% of the content being broadcast was music radio and about 80% was talk radio, Balk, *supra* note 7, at 245.

¹⁶ HUGH CHIGNELL, KEY CONCEPTS IN RADIO STUDIES 46 (2009); CHRIS RASMUSSEN, LONELY SOUNDS: RECORDED POPULAR MUSIC AND AMERICAN SOCIETY, 1949-1979, 17 (2008) (PhD dissertation, AAI3297654, available at: <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1015&context=historydiss>); Stephen Perry, *The Demise of Live Radio Entertainment in the Heartland: A Case Study*, 20 J. RADIO & AUD. MED. 134 (2013); ASA BRIGGS, THE BBC THE FIRST FIFTY YEARS 121 (1985).

¹⁷ Briggs, *id.* Chignell notes that while in the golden age of radio almost all radio was broadcast live, currently most of what we hear is pre-recorded. However, he maintains, live broadcast is still a defining feature of radio (Chignell, *id.*, 16, at 11, and at 87-89).

¹⁸ With the exception of small local stations that did use records. Rasmussen, *supra* note 16, at 24; *Old Time Radio History*, <http://www.onesmedia.com/old-time-radio-history-ezp-12.html> (last accessed 18 Oct., 2016); Perry notes that The American Federation of Musicians even banned recording altogether, (Perry, *supra* note 16, at 135).

¹⁹ See discussion in part V(C) below.

²⁰ See: Cox, *supra* note 11, at 15; Balk, *supra* note 7, at 210-217.

²¹ Cox, *supra* note 11, at 15; James Kraft, *Musicians in Hollywood: Work and Technological Change in Entertainment Industries, 1926-1940*, 35 TECH. & CUL. 289, 305 (1994). In addition, the house bands were responsible for live advertising jingle melody (Cox, *supra* note 11, at 15). Up until today some of the bigger broadcasters (usually public broadcasters) have their own orchestras. Famous examples, include the five(!) BBC Orchestras (see: Street, *supra* note 1 at 228), the Vienna Radio Symphony Orchestra, MDR Leipzig Radio Symphony Orchestra (see: <http://www.mdr.de/konzerte/artikel111394.html>).

usually mixed genre: most stations played a mix of different types of music, and not many ‘specialized’ stations, namely stations dedicated to a particular type of music, existed. This is not to suggest that records were not to be found in the broadcast industry or that they were never played on the radio. Pre-recorded music preceded radio, and broadcasters could, and very often did, obtain licenses to play pre-recorded music. However, the option of playing pre-recorded music was seldom used in the golden age.²²

As listenership grew, so did the quest for radio talent. Radio personalities (the narrators, presenters, etc.) were of the utmost importance to programming.²³ Radio personalities often became celebrities and enjoyed high regard and decent income. Similar perhaps to nowadays movie stars, the radio personality system was a strategy by which broadcasters handled risks and uncertainties – personalities had the ability to attract listenership, increase predictability in audience response and reduce production costs.²⁴ At the same time, it is important to note that, by and large, singers did not enjoy celebrity status. While there were of course some famous singers, songs were not, generally speaking, linked to a particular performer and it was even not uncommon that two or three versions of the same song were produced by different record labels.²⁵

In its golden age, radio was at the core of American life, most Americans experienced music and other cultural content through its live shows. Cultural production in radio broadcast in that era was nothing like we know today – radio broadcasters produced a large variety of narrated content and music, produced live and in-house, and enjoyed extremely high listenership ratings and advertisement revenue. Radio was, as Norman Finkelstein describes:

“[A] magical link to an enchanted world of entertainment, news and culture. By the mid-1930s the radio was the most important item in the home. It provided shared experiences to everyone [...] [and] created an image of ideal America”.²⁶

²² In fact, as mentioned, some stations prohibited the use of records due to their inferior quality.

²³ Stiernstedt, *supra* note 14, at 290. See also: Hilliard, *supra* note 7, at 24 .

²⁴ Stiernstedt, *id.*, at 292.

²⁵ See discussion in part IV below.

²⁶ Finkelstein, *supra* note 11, at 117 (2000).

III. Post Golden Age

In the mid 1950s currents started shifting, and shifting rapidly. Radio started its demise as the nation's cultural pivot and by 1960 radio's golden age was over. The end of the golden age, *inter alia*, means that from then and on cultural production in radio broadcast changed significantly. Radio as people knew it in the 1950s was a very different creature than the 1960s radio. There are several notable changes: a dramatic change in the dominance of spoken-word vs. music broadcast – with music rather than spoken-word becoming the dominant content; a change in spoken-word radio itself – talk shows became the main spoken-word content rather than narrated content; a transformation from in-house, live production to the using of pre-recorded material; and the rise of genre-dedicated music radio stations (that is stations dedicated solely, or mainly, to one specific genre such as smooth jazz, gospel music, Americana, etc.). We now turn to briefly describe each of the changes and how it impacted cultural production in radio broadcast.

A fundamental change in the post golden age era is the shift in dominance of spoken-word vis-à-vis music broadcast. In the late 1950s, narrated programs' listenership swiftly declined: This included almost all narrated formats – comic shows, soap operas, crime dramas, Western adventures etc.²⁷ After a very short period of trial and error with new spoken-word formats (such as simulcasting audio portions of television shows or 'pay radio') radio broadcasters dropped the block programming strategy and turned to recorded music to attract listeners.²⁸ While music was undeniably prominent in radio broadcast during the golden age, in the post golden age years its prominence surged.²⁹ Music arguably became the main defining feature of post golden age radio.

²⁷ See Chignell, *supra* note 16, at 22.

²⁸ Radio networks and their affiliates, through trial-and-error, tried to cope with the new realities in different ways: simulcasting audio portions of television shows; asking their stars to work without live orchestras or writers; resurrecting old concepts such as pay radio or creating new ones such as home music services (similar to cable TV). As we know, little worked. See: Huseyin Leblebici, Gerald Salancik, Anne Copay, & Tom King, *Institutional Change and the Transformation of Interorganizational Fields: An Organizational History of the U.S. Radio Broadcasting Industry*, 36 ADMIN. SCI. Q. 333, 355 (1991); Peter Fornatale & Joshua Mills, RADIO IN THE TELEVISION AGE 7 (1980); JIM COX, SAY GOODNIGHT GRACIE – THE LAST YEARS OF NETWORK RADIO 19-20 (2002).

²⁹ See: Chignell, *supra* note 16, at 28; Bruce Lenthall, RADIO'S AMERICA 61 (1992).

Currently, the vast majority of radio programming is music based.³⁰ Estimates place the numbers at around 85% in the U.S.³¹

While music broadcast indeed increased at the expense of spoken-word, much spoken-word content was, and still is, being broadcast. Yet spoken-word content itself has also changed significantly in the aftermath of radio's golden age. Narrated content was swapped in favor of talk shows. This change in spoken-word is manifested both in the *kind* of spoken content and the way it is *expressed*. The *kind* of spoken content changed from sophisticated, original scripted materials that required prior thought, investment, ongoing plot and purpose (e.g., drama shows, comedy shows), to talk shows that are typically improvised, aimed at the lowest common denominator, and are of 'lighter' character (e.g., listener participation call-in radio shows, radio quizzes, celebrity interviews, lifestyle advice).³² The change in the way radio is being *expressed* means that acceptable content limits have been constantly pushed further and further.³³ Respectable narrators, once the epitome of spoken-word radio, were widely replaced by talk-radio hosts who express themselves in a deliberately offensive, inept, or provocative manner.³⁴ A notable exception to this phenomenon is public radio, which during and after the golden age continued to provide highly regarded narrated content.³⁵

Another essential change is a substantial decrease in live broadcasting and in-house production, and a shift to pre-recorded programs often produced by centralized radio outlet corporations.³⁶ This is particularly notable in music broadcast, where in the post golden-age era almost all material is pre-recorded and very rarely broadcast live, save for the occasional live broadcast of a gig usually preformed in a designated venue. Radio broadcasters post the golden-age era very rarely own an orchestra or a house-band.³⁷

³⁰ CHRISTOPHER STERLING & MICHAEL KEITH, SOUNDS OF CHANGE: A HISTORY OF FM BROADCASTING IN AMERICA 133 (2008); Jarl Ahlkvist & Robert Faulkner, "Will This Record Work for Us?": *Managing Music Formats in Commercial Radio*, 25 Qual. Socio. 193 (2002); Chignell, *supra* note 16, at 33.

³¹ See discussion in Part V(E) below.

³² Sterling & Keith, *supra* note 30, at 190.

³³ *Id.*, at 192.

³⁴ Sterling & Keith, *supra* note 30, at 168, and at 235.

³⁵ See *supra* note 5, and further discussion in Part V(E). See also, for example: Michael McCauley, *Leveraging the NPR Brand: Serving the Public While Boosting the Bottom Line*, 9 J. RADIO STUD. 65, 67-68 (2002) (demonstrating how NPR provides quality programming while being economically stable).

³⁶ See: Keith, *supra* note 12, at 348-350. See also: Cox, *supra* note 11, at 123 and at 153 (also c.f. to recent trends at 174).

³⁷ With exception of some public radio broadcasters. See *supra* note 21.

An additional change in the radio broadcast industry is a shift from stations playing ‘general’ music formats, namely a blend of different musical genres, to the proliferation of stations that are dedicated to narrowly targeted formats.³⁸ This trend started in the 1950s, and increasingly grew throughout the following decades.³⁹ These have become so specific that current estimates put the numbers at 100 different music radio formats.⁴⁰ A station’s format, as some scholars have noted, is one of the most fundamental features that define a music radio station.⁴¹

The above shifts and changes not only depict how cultural production in radio broadcast has changed after radio’s golden age, they also describe what radio has become since the mid-1950s: no longer at the center of American culture and life, but rather another cultural producing medium trying to capture as many listeners as possible.⁴² Moreover, radio has become a cultural good that audience consume adjacent to other activities rather than the focus of their attention. What caused these dramatic changes? That is the question we now turn to explore.

IV. The Decline of Radio’s Golden Age—Explanations

There is no single account that fully explains what led to this remarkable change in cultural production in radio broadcast. Rather, there are several explanations that together portray a changing landscape in many walks of American life. Substantial technological advances as well as cultural and social shifts are usually cited as the main reasons for the transformations in radio broadcast. These include the advent of television, new technologies allowing portability and ubiquity of radio, changes in recording technology, the inception of FM radio, microwave transmission technology, the growth of suburban America, and the rise of the rock star.⁴³ We now turn to describe these changes.

³⁸ GABRIEL ROSSMAN, CLIMBING THE CHARTS: WHAT RADIO AIRPLAY TELLS US ABOUT THE DIFFUSION OF INNOVATION 72 (2012); Keith, *supra* note 6 at 16-17; Robert Hilliard, *Format, in* Radio Broadcasting *supra* note 6, at 105. See also: Fornatale & Mills, *supra* note 28, at 61.

³⁹ Rossman, *Id.*

⁴⁰ Current estimates suggest that there are over 100 different radio formats. This allows broadcasters to target specific demographics (Cox, *supra* note 11, at 110, and at 115).

⁴¹ Rossman, *supra* note 38, at 71.

⁴² Chignell, *supra* note 16, at 34.

⁴³ Before we turn to discuss the many different reasons attributed to the transformations in the radio industry, we find it important to note that many of the technological, cultural and social changes described hereinafter are linked to WWII and its aftermath. Radio technology was used, and advanced by the fighting militaries in WWII, notably – the U.S. forces. After WWII economic currents shifted in the U.S. and in many other Western countries. The postwar era

Video, as the lyrics of the Buggles' famous song suggest, killed the radio star.⁴⁴ Indeed, television is often credited with being one of the main reasons for radio's demise, and seemingly, rightly so. Soon after its introduction, television replaced radio at the heart of American homes, and culture and entertainment.⁴⁵ Media reports from the 1950s demonstrate how impactful television's introduction was on radio broadcast, with headlines such as "TV is hot on radio's heels".⁴⁶ Television's impact was felt in almost every aspect thinkable, for example: revenues were going down as advertisers were abandoning radio in favor of television; salespersons, program producers and radio talents were moving to the new medium *en masse*; and smaller stations were pressuring the big networks to abandon programming.⁴⁷

The correlation between television's rise and radio's decline is striking. Television (as a commercial good) made its debut in 1948 and it very rapidly replaced radio at the center of the American home: by 1951 a fourth of U.S. homes owned television sets, by the mid-1950s about a half of Americans had a television set, and by 1960 televisions could be found in almost 90% of American homes.⁴⁸ In the late 1930s, the average American listened to radio for 5 hours and 14 minutes a day.⁴⁹ In 1948 radio witnessed the first slip in listenership – the average was down by 9 minutes, this became 36 minutes by 1951, in 1955 the average was already as low as 2 hours and

brought about an expanding U.S. economy and an affluent American society. This prosperity started a new era of consumption and accessibility to consumer goods (including radios, cars [with radios], transistors, records etc.). The post war era also witnessed a surge in births, more people graduating from formal education, and more women being a part of the workforce. These social and economic trends are undeniably strongly linked to the social and cultural shifts in the radio and music industries in the 1950s. In addition, starting in the late 1950s and through 1960s the U.S. and many other countries in the West witnessed substantial changes in social and cultural values and environments. These, naturally, had a considerable influence on cultural production in radio broadcast. While many such changes were among the catalysts to the rapid change in radio broadcast during that time, of particular note is the countercultural movement. Counter-culturalism meant that younger generations often contested and opposed traditional modes of authority, 'old' values, and had different interpretations of society. They held their rock stars in high esteem and distanced themselves from the cultural tastes and preferences of their parents' generation. This influenced patterns of both, radio consumption and cultural production in the music industry.

⁴⁴ Video Killed The Radio Star, The Buggles, Written by Geoffrey Downes, Trevor Charles Horn, Bruce Woolley. Copyright by Universal Music Publishing Group, Round Hill Music Big Loud Songs, Carlin America Inc. lyrics can be found on Google play, here: https://play.google.com/music/preview/Txketj5zv2wpehia2oomrrwiyya?lyrics=1&utm_source=google&utm_medium=search&utm_campaign=lyrics&pcampaignid=cp-songlyrics&u=0#.

⁴⁵ EDWARD PEASE & DENNIS EVERETTE, RADIO: THE FORGOTTEN MEDIUM 11 (1992); Alan Albarran, "What Happened to our Audience?" Radio and New Technology Uses and Gratifications Among Young Adult Users, 14 J. RADIO STUD. 92 (2007).

⁴⁶ Cited in Pease & Everette, *supra* note 45, at 11.

⁴⁷ *Id.*, 11; Cox, *supra* note 11, at 31-34.

⁴⁸ Cox, *supra* note 11, at 29-35. Balk, *supra* note 7, at 279-280.

⁴⁹ Paul Peter, *The American Listener in 1940*, 213 THE ANNALS OF THE AMERICAN ACADEMY OF POLITICAL AND SOCIAL SCIENCE 1 (1941).

25 minutes, and by 1960, on average, listeners spent just one hour and 40 minutes listening to their radios.⁵⁰ Radio ad sales sank to \$55 million in 1955 from \$133 million in 1948, the average station's revenue fell by almost 25% between 1947 and 1953.⁵¹

Television was not only an exciting new technology. It also provided an experience that was seemingly better suited to many of radio's narrated formats. Formats such as soap operas, crime dramas, comedy shows, Western adventures etc. have transformed from a mere audio experience to an audio-visual one.⁵² Unlike radio that demanded higher levels of imagination and concentration, television did not require similar audience imagination in order to provide effective entertainment.⁵³ There is little doubt that television is one of the core reasons that led to radio's demise.

Television, however, was not the only new technology that led to the shifts radio experienced in the 1950s and the demise of its golden age. Other technological advances contributed to the changing landscape as well. One notable example concerns the portability and ubiquity of radio. In the 1950s radio finally became portable. This is due to the commercial production of the transistor radio in 1954 and the introduction of the car radio as a standard in most automobiles in the 1950s.⁵⁴ This, *inter alia*, meant that the environment in which radio was consumed changed significantly.⁵⁵ Radio was no longer a device confined to the family living-room, around which all gathered to listen; but rather, it was to be found practically anywhere – from one's bedroom all the way to the beach. Radio changed from being a social experience to an (also) individual one. The change in the location and means by which people listened to radio, meant that the content had to change too, so that it could comfortably fit in the new environments. Arguably, listening to radio in one's living room, when the listeners are all concentrated only on the act of listening, there are minimal external distractions, and radio is the focus of the listeners'

⁵⁰ Cox, *supra* note 11, at 29-35. Balk, *supra* note 7, at 279-280.

⁵¹ Total network radio advertisement sales plummeted from a high of over \$133 million in 1948, to under \$55 million by 1955. The average station revenue fell from \$246,000 in 1947 to \$194,000 in 1953. (Rasmussen, *supra* note 16, at 48).

⁵² ELIJAH WALD, *HOW THE BEATLES DESTROYED ROCK N ROLL: AN ALTERNATIVE HISTORY OF AMERICAN POPULAR MUSIC*, 172 (2011).

⁵³ It is important to bear in mind, as Andrew Crisell notes, that "the distinctiveness of radio is not that it involves the imagination while the other media do not [as they do], but that it involves it to a different *extent*." (Andrew Crisell, *UNDERSTANDING RADIO 9* (2nd ed., 1994).

⁵⁴ Rasmussen, *supra* note 16, at 44; Regal, *supra* note 3, at 52-53. See also: Fornatale & Mills, *supra* note 28, at 17.

⁵⁵ MARK KATZ, *CAPTURING SOUND: HOW TECHNOLOGY HAS CHANGED MUSIC*, 21 (2010); see also: Keith, *supra* note 12 at 10.

attention, is very different than listening to the radio in one's car or at the park, where radio plays in the background, there are many distractions, and the level of the listeners' concentration is low. In addition, this portability (alongside other sociological changes, as will be described below), meant that listeners were less inclined to commit to a fixed programming schedule.

Broadcasters needed to start accommodating this new kind of listenership, which was constantly growing. Narrated radio shows that require greater attention from their audience were seemingly unfit to entertain those who listen to radio in the background. Music, however, was a perfect fit – it does not require high levels of attention, it does not require the listener to commit to a fixed broadcast time-slot, and is perfect as background entertainment.⁵⁶ Talk radio has similar characteristics – it does not require high levels of attention nor command strict adherence to a fixed schedule.

Another major technological advancement that took place in the 1950s and contributed to the transformations in radio broadcasting is the advancement of microwave transmission technology.⁵⁷ Microwave transmission provides higher frequency, wave length, and energy, which allow transmission over larger distances compared to radio.⁵⁸ This technology was demonstrated in the 1930s, but only in the 1950s long-distance (and even transcontinental) microwave relay networks were developed.⁵⁹ These networks transmit signals between two locations, forming fixed connections which allow the transformation of radio programs from one major syndication to local radio stations.⁶⁰ The local stations, in turn, broadcast these programs locally.

Alongside these changes in radio technology, the record industry saw substantial changes in recording technology, records' quality and consumption patterns as well. The most meaningful changes are seemingly improved capacities both in sound and record playing time. New recording technologies (audiotape and vinyl) meant substantial improvements in sound quality and

⁵⁶ See: Crisell, *supra* note 53, at 9.

⁵⁷ See: Bun-ichi Oguchi, *Microwave Radio System*, 45:6 TELECOMMUNICATION J. 323 (1978).

⁵⁸ *Id.*, at 324-328.

⁵⁹ See: *id.*; ANTON HUURDEMAN, *THE WORLDWIDE HISTORY OF TELECOMMUNICATIONS* 369-372 (2002).

⁶⁰ This technology was also used for telephony and television programs (See: Huurdeman, *id.*; SEAN STREET, *CROSSING THE ETHER* 29 (2006)). See also: Ariel Katz, *The Potential Demise of another Natural Monopoly: New Technologies and the Administration of Performing Rights* 2 J. Competition L. & Econ. 245, 284 (2006)). Nowadays, most transmission is based on optical fibers and satellites.

capabilities.⁶¹ In addition, the playing time of records increased from 4 minutes playing time per side to approximately 15 minutes playing time for each side of a record.⁶² The advancements in sound recording technology and the advent of microwave transmission contributed to the decline of live broadcasts and reliance on pre-recorded shows, as well as to central programming, syndication, etc. With these technologies, production of shows could achieve greater economies of scale.

Technology undeniably was a significant factor in prompting the changes in radio's broadcast landscape in the 1950s. However, there are also sociological and cultural trends that drove this remarkable transformation. Notable examples include: the growth of the suburbs, the 'birth' of the rock star, the initiation of the top-40 format, and changes in social values. We briefly touch on each.

In the latter part of the 1940s, the US, as well as many other countries, experienced a rapid expansion of the suburbs.⁶³ The 1960s witnessed the first time in which the number of people living in suburbs was greater than the number of people living in cities.⁶⁴ For radio broadcasters this meant that people spent less time listening to radio at home and more time spent listening to it while commuting. This, as mentioned, means that the level of attention that they devoted to radio was different as was their commitment to the broadcasting schedule. Yet, this also meant that these drivers were a 'captive audience'. While the audience at home had other entertainment alternatives, drivers typically only had radio to entertain them. Given this reality of a captive audience, broadcasters arguably needed very little to keep these listeners listening. Music and talk shows were sufficient (the alternative was, after all, silence).

Another important cultural development in the 1950s, which prompted the change in radio broadcast's landscape, was the 'birth' of the rock star. By the mid-1950s, classic pop, by far the most dominant music genre at the time, was replaced as the leading music genre by rock and roll

⁶¹ See MICHAEL KEITH, *RADIO CULTURES THE SOUND MEDIUM IN AMERICAN LIFE* 173 (2008); Street, *id.*, at 116 and at 133 (2006).

See also Part V(C).

⁶² See Part V(C).

⁶³ JON TEAFORD, *THE AMERICAN SUBURB* (2008) 30-31; ROBERT BEAUGARD *WHEN AMERICA BECAME SUBURBAN* (2006) xi, and at 5-6.

⁶⁴ Teaford, *id.*, at 31; Beaugard, *id.*, at 42.

music.⁶⁵ This created a change in the status and importance of the performer – up until then, by and large, the song was far more important than the performer.⁶⁶ In fact, throughout the early 1950s it remained standard for all major record labels to produce their own version of almost any major hit song.⁶⁷ Rock and roll changed this reality. With the advent of rock and roll songs started being linked to a particular performer, and music stardom became commonplace.⁶⁸ Elvis Presley, Ray Charles, and Chuck Berry became celebrities, the audience were interested in *their* performances of a particular song, not *a* performance of that song. The radio broadcasting industry had to react to this kind of demand. Thus, house bands – the lifeblood of radio music in the golden age – turned obsolete and records of particular performers became more important.⁶⁹

These developments might have also been related to collective licensing. During the 1930s and 1940s the American Society of Composers, Authors and Publishers [ASCAP], a CMO, was reluctant to admit new songwriters, especially African-American and other ‘indie’ artists (which then included rock and roll). To create an alternative for the ASCAP monopoly, several U.S. broadcasters founded a new CMO – Broadcast Music, Inc. [BMI]. BMI was much more open to accept the songwriters that ASCAP did not. Moreover, BMI often offered its music for free as a way of promotion. ASCAP, seemingly, had a built-in incentive to insist on the importance of the composition and not the performer. A popular song, performed many times by whomever means more revenue to ASCAP (and probably to some if its well-known composers), whereas in a world where cultural significance shifts to the performer (or the performer/songwriter), ASCAP could be less assured that it would get the revenue because those newcomers might not join it. It is possible

⁶⁵ See: Keith, *supra* note 55, at 10-11; Fornatale & Mills, *supra* note 28, at 37-38; Robert Hilliard, *supra* note 38, at 112.

⁶⁶ We are not suggesting that there were no music stars up until that point. There were. However, their importance and prominence was limited, especially compared to stardom as we know it since the advent of rock and roll stardom. See Wald, *supra* note 52, at 18.

⁶⁷ *Id.*, at 85, and at 88.

⁶⁸ *Id.*, at 88.

⁶⁹ There seemingly is a chicken and egg issue here: did broadcasters merely respond to changing audience tastes or did they promote the new cultural format and the supply changed the demand? One possible explanation as to why broadcasters might have begun to promote the performer is competition with ASCAP. But there might be another explanation—directly related to our main thesis: If all radio stations would rationally move to relying on pre-recorded music, then they might start resembling each other very much. Therefore, the competition between them might have caused them to innovate and experiment with new formats.

that BMI and the radio stations began promoting this new model as part of their competition with ASCAP.⁷⁰

The change in listening habits associated with the (then) new format – ‘top-40’ is yet another explanation pertaining some of the changes in cultural production in radio in the 1950s. The top-40 made its debut in the second half of the 1950s. The format is simple: a playlist consisting of the most popular songs being broadcast. The format is based on playing pre-recorded music, it was novel in that it challenged the orthodox view which music and live, face to face performance, were considered almost synonymous.⁷¹ It was also different in that it introduced broadcasters to a ‘low budget – high ratings’ format.⁷² The top-40 format encouraged Americans to view music as an individual, portable, and on-demand commodity, thus suppressing the notion of music as social experience and turning it to be seen as a mere sonic phenomenon.⁷³ This also resulted in, and is associated with, the rise of the music star. Unlike their parents’ generation, which associated music with live performance, the 1950s generation saw music as a listening experience that can be experienced in multiple ways; for them, live performances were a social musical event, but music was not synonymous with live performance.⁷⁴

While the above technological, social and cultural explanations indeed explain why changes occurred in the radio broadcast industry *in general*, their ability to explain the *particular* changes that we witness, is somewhat limited. Let us take television as an example – the fact that radio had to deal with a new competitor, does not mean that the necessary solution was to abandon

⁷⁰ These developments might have also been related to collective licensing. During the 1930s and 1940s the American Society of Composers, Authors and Publishers [ASCAP], a CMO, was reluctant to admit new songwriters, especially African-American and other ‘indie’ artists (which then included rock and roll). To create an alternative for the ASCAP monopoly, several U.S. broadcasters founded a new CMO – Broadcast Music, Inc. [BMI]. BMI was much more open to accept the songwriters that ASCAP did not. Moreover, BMI often offered its music for free as a way of promotion. ASCAP, seemingly, had a built-in incentive to insist on the importance of the composition and not the performer. A popular song, performed many times by whomever means more revenue to ASCAP (and probably to some of its well-known composers), whereas in a world where cultural significance shifts to the performer (or the performer/songwriter), ASCAP could be less assured that it would get the revenue because those newcomers might not join it. It is possible that BMI and the radio stations began promoting this new model as part of their competition with ASCAP. See: Ariel Katz, *The Potential Demise of Another Natural Monopoly: Rethinking the Collective Administration of Performing Rights*, 1 J. Comp. Law & Econ. 575, note 127 (2005); Regal, *supra* note 3, at 98; Hilliard, *supra* note 7, at 109.

⁷¹ Rasmussen, *supra* note 16, at 53.

⁷² *Id.*, at 52.

⁷³ *Id.*, at 53.

⁷⁴ *Id.*, at 3-4.

narrated content in favor of pre-recorded music and talk shows. Radio stations could have, for instance, maintained their competitiveness by investing in certain narrated formats that do not necessary benefit from visual stimulus—the apparent advantage of television. Certain types of drama, comedy, or documentaries, might fit this description. Opting for pre-recorded music was not an inevitable consequence of the advent of television, or any of the other changes described above, but rather more likely the consequence of the IP regime in the music and radio industries. We further discuss this point in part V(D).

V. Cultural Production in Radio and How it is Impacted by Blanket Licences

The different accounts explaining the dramatic change in cultural production in radio broadcasting after the golden age are most likely all correct. It seems that no one reason can in itself explain the changes, and the explanation, as is often the case, is most likely an amalgamation of all or most of these accounts. Notwithstanding, the literature has thus far failed to note the significant influence that the IP regime pertaining the radio industry had, and still has, in cultural production in radio broadcast. In this part we turn to examine the IP regime and its impacts on cultural production in radio broadcast.

A. The licensing regime

In the U.S., section 106 of the Copyright Act grants copyright holders several exclusive rights in their works.⁷⁵ Section 106(4) grants ‘public performance rights’, namely, the exclusive right to perform the copyrighted work publicly.⁷⁶ The first owner of the copyright in a song would typically be the songwriter, but in practice most songwriter assign their copyright to music publishers.⁷⁷ The copyright in a musical work should not be confused with the *separate* copyrights in the sound recordings that are (typically) owned by the record labels. U.S. terrestrial radio broadcasters are exempt from obtaining permission or paying a fee for the public performance of

⁷⁵ 17 U.S.C. §106 (2002).

⁷⁶ *Id.*, We use the term ‘writer’ for the ease of reading, of course these rights can be held by others.

⁷⁷ See Katz, *supra* note 70 at 556.

the sound recordings, but they do need a license from the owners of the copyright in the song.⁷⁸ So, for example, if a U.S. radio station plays Adele’s “Hello” from her album “25”, which was produced by XL Recordings, it will have to get permission from, and typically pay a fee to, the owner of the copyright in the song, namely the songwriters (Adele and Greg Kurstin) or their assigns, but it will not have to get permission or pay a fee to the record label (XL Recordings).⁷⁹ While other countries make a similar distinction between copyrights in a musical work and copyrights in the sound recordings, an exemption to terrestrial radio broadcasters does not necessarily exist. For example, in Canada radio broadcasters must pay “equitable remuneration” to the maker of the sound recording and the performers of the particular performance to a CMO representing both constituencies.⁸⁰

Most copyrighted musical works are administered by CMOs. CMOs provide centralized administration of copyright management, that is, they act on behalf of the right-holders and license music users – radio broadcasters in our case – to use copyrighted works. In the U.S., there are three major CMOs: the American Society of Composers, Authors and Publishers [ASCAP], Broadcast Music, Inc. [BMI], and the smaller SESAC Society of European Stage Authors and Composers [SESAC]. This is the prevailing method of licensing all over the world.⁸¹ Currently, almost all music authors grant the CMOs a non-exclusive right to license users to perform their musical works.⁸² Each CMO administers a catalogue of works and saves the users and the right-holders the need to negotiate with each other directly.⁸³ CMOs negotiate licenses, collect fees and distribute the fees collected to the right-holders; the distribution of the royalties collected is proportional to

⁷⁸ 17 U.S.C. §114(d) (2010). The public performance rights should not be confused with the rights to reproduce, prepare derivatives of, or distribute works (§106(1), (2) and (3) respectively). See also: Kristelia Garcia, *Penalty Default Licenses: A Case for Uncertainty*, 89 NYU L. REV. 1119 (2014) (discussing how uncertainty regarding terrestrial radio performance rights may lead to greater efficiency by encouraging private ordering).

⁷⁹ For the sake of clarity, we assumed in this example that the creators of the songs (Adele and Greg Kurstin) are the sole copyright holders. Reality is more complex (see ASCAP’s website: <https://www.ascap.com/repertory#ace/search/title/hello/performer/adele>, and SESAC <https://www.sesac.com/Repertory/SongSearch.aspx?songNum=689770552>). We also do not discuss possibilities such as a contractual agreement between the radio station and the record label.

⁸⁰ Copyright Act, R.S.C., 1985, c. 19 (Can.). See also: DAVID VAVER, *INTELLECTUAL PROPERTY LAW*, 97, and at 110 (2nd ed., 2011).

⁸¹ Stanley Besen, Sheila Kirby & Steven Salop, *An Economic Analysis of Copyright Collectives* 78 VA. L. REV. 383, 398 (1992); Katz, *supra* note 70 **Error! Bookmark not defined.**, at 542.

⁸² Ivan Reidel, *The Taylor Swift Paradox: Superstardom, Excessive Advertising and Blanket Licenses*, N.Y.U. J.L. & BUS. 731, 743 (2010).

⁸³ Michael Einhorn, *Intellectual Property and Antitrust: Music Performing Rights in Broadcasting*, 24 COLUM-VLA J.L. & ARTS 349, 350 (2000).

each song's actual airtime.⁸⁴ In the U.S., ASCAP and BMI account for approximately 93% of all performance right income, and royalties paid by radio and television broadcasters alone represent 80% of ASCAP and BMI's total revenues.⁸⁵

There is vast literature discussing the advantages and disadvantages of collective rights management.⁸⁶ In a nut shell, CMOs are often credited as allowing lower collection costs as well as more transactions to take place, and their economics of scale improve efficiency, monitoring and enforcement. At the same time, this structure also leads to the elimination of price competition and to the creation of potential anticompetitive arrangements and monopolies.⁸⁷

In the case of radio broadcast, CMOs and broadcasters typically use a blanket licensing regime. Blanket licenses allow the broadcasters to use any work in the CMO's repertoire. The license fee is usually fixed at an (inflation-adjusted) flat fee or as a percentage of the station's advertising revenue.⁸⁸ The license fee is independent of the number of works actually used, the number of times each work is played, or the song's popularity.⁸⁹ Blanket licenses are often credited with providing several advantages – they economize on transaction costs, they provide users with certainty from involuntary infringement, and they effectively price each additional performance of a work at its effective marginal cost (of zero).⁹⁰ However, blanket licenses involve several disadvantages as well. For example, the all-or-nothing regime forces most users to buy more units than they wish at a higher price than they would otherwise pay.⁹¹ Blanket licenses, as this paper

⁸⁴ The royalties' distribution is proportional to the amount of times a song is played. So regardless the size of the royalties' pie those that are played more often will receive more royalties (Reidel notes that this is a global phenomenon (*supra* note 82, at 740).

⁸⁵ Einhorn, *supra* note 83, at 745;

⁸⁶ See, for example: Katz, *supra* note 70; Glynn Lunney, *Copyright Collectives and Collecting Societies: The United States Experience*, in COLLECTIVE MANAGEMENT OF COPYRIGHT AND RELATED RIGHTS, 339, 340 (Daniel Gervais ed., 2010); Christian Handke & Ruth Towse, *Economics of Copyright Collecting Societies* 38 INTL. REV. INTEL. PROP. & COMP. LAW 937 (2007).

⁸⁷ Katz, *supra* note 70 at 543; Besen, Kirby & Salop, *supra* note 81, at 390; Lunney, *supra* note 86, at 340; Denis De Freitas, *Copyright and Music*, 114 J. ROYAL MUSICAL ASSOC. 69, 75 (1989).

⁸⁸ Einhorn, *supra* note 83, at 350, and at 353.

⁸⁹ Besen, Kirby & Salop, *supra* note 81, at 388; Einhorn, *supra* note 83, at 350; Reidel, *supra* note 82, at 743 (Reidel also notes that: blanket licenses "price fame no differently than obscurity" (at 733)). For the sake of this article we do not analyse the option of acquiring a "per program" license (which exists), as it is rarely used in practice in the radio broadcast industry.

⁹⁰ Einhorn, *supra* note 83, at 350; WILLIAM LANDES & RICHARD POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW, 386 (2003); Michael Heller, The Tragedy of the Anticommons: Property in the Transition from Marx to Markets, 111 HARV. L. REV. 621 (1998).

⁹¹ Katz, *supra* note 70 at 551.

claims, also distort cultural production in radio broadcast. This claim will be discussed in length in part V(B) below.

Due to the anticompetitive potential of CMOs, they, and the blanket licenses that they provide, are subject to regulatory and legal scrutiny.⁹² In the U.S. antitrust law has provided the dominant instrument of regulatory oversight of CMOs.⁹³ This oversight is carried out through the use of judicially enforced consent decrees.⁹⁴ In essence, the consent decrees between the CMOs and the Department of Justice are an agreement pertaining the terms and conditions of the blanket licenses and their tariffs; these, if need be, are overseen by the judiciary. Other countries sometimes use other models. In Canada, for example, sections 67-68 of the Copyright Act empower the Copyright Board to oversee the tariffs proposed by CMOs and their related terms and conditions.⁹⁵

B. How blanket licenses distort the production of creative content

Broadcasters attempt to create an optimal mix of content units that appeals to the tastes of their audience. A broadcaster can choose between music and spoken-word; between pre-recorded content, or live content; between original content produced in-house or commissioned from other producers.⁹⁶ In order to maximize profit, commercial broadcasters wish to broadcast the content that will attract the highest net revenue (gross revenue minus the cost of producing or procuring the content). Radio broadcasters make almost all their revenue from selling ad time. Ads are priced according to ratings – the higher the ratings, the more expensive the air-time price. So, a station will play the cheapest content it can as long as the other content does not generate higher net revenue. If other content generates higher net revenue (due to higher ratings that attract higher revenue from ads which compensate for the gap in the investment needed to level up), the broadcaster will level up, and so forth.

⁹² Besen, Kirby & Salop, *supra* note 81, at 387; Einhorn, *supra* note 83, at 351.

⁹³ Katz, *supra* note 70, at 546.

⁹⁴ Besen, Kirby & Salop, *supra* note 81, at 396 n. 48, and at 405. The United States District Court for the Southern District of New York is charged with enforcing this mandate. Also see: Einhorn, *supra* note 83, at 354-356 (providing a detailed history of the consent decrees and the judicial oversight).

⁹⁵ Copyright Act, R.S.C., 1985, (Can.). These specific provisions conceivably leave CMOs outside the ambit of competition law in Canada, for an account of the legal situation in other countries, see Katz, *supra* note 70 at 547. See also: Randolph Beard, George Ford & Michael Stern, *Value Based Pricing of Music*, 12 REV. ECON. RES. COPYRIGHT ISSUES 16-19 (2015).

⁹⁶ We do not consider advertisements as content in the context of cultural production. Therefore, we do not discuss them here, though they are indeed a broadcast output (for a detailed discussion of advertisements in this context see: Reidel, *supra* note 82).

For simplicity, let's consider only two types of content: "music", by which we mean pre-recorded and ready-made music (i.e., sound recordings produced by record labels and intended for mass distribution), and "other", by which we mean any other content – including spoken word and potentially also originally produced or commissioned music. Under the blanket licensing regime, the broadcaster pays the same flat fee regardless of how much music from the CMOs catalogue is played. This means that in practice, the marginal price of each broadcast of a song is virtually zero. A broadcaster that chooses to broadcast content not covered by the blanket license will have to incur additional costs in producing or procuring such content, without achieving any cost savings in the price of the music that is under the blanket license.⁹⁷ The point where despite their marginal cost being zero a broadcaster will no longer play blanket-licensed music is when the net revenue from the other content exceeds the net revenue from music [hereinafter: the saturation point]. This typically happens at the stage where a substantial enough amount of listeners is fed-up with the pre-recorded music and prefers to hear other content.

The saturation point reflects the relative prices of music and other content and the respective size of music and other content in the broadcaster's programming mix. Therefore, the saturation point will be different if the music being broadcast is blanket licensed or purchased in a competitive market.⁹⁸ In a blanket license regime, the saturation point will arrive at a higher proportion of music to other content. The explanation is quite simple: the marginal price of zero for music widens the price gap between music and other content. An illustration can be useful: Under a blanket license (BL) the cost of broadcasting a song is zero;⁹⁹ without a blanket license, in a free market (FM), the cost is greater than zero, for the sake of the example let's call it X.¹⁰⁰ The price of other content (T) remains the same regardless of the price of the songs, for the sake of the example let us assume it is 5X per unit. The literature and charts tell us that after a certain point ('the peak'), for each additional song a broadcaster plays she starts losing audience that want other content and are turning elsewhere to find it, accordingly, she is losing advertisers. For the

⁹⁷ This holds true for both, spoken-word content as well as music not under the blanket license.

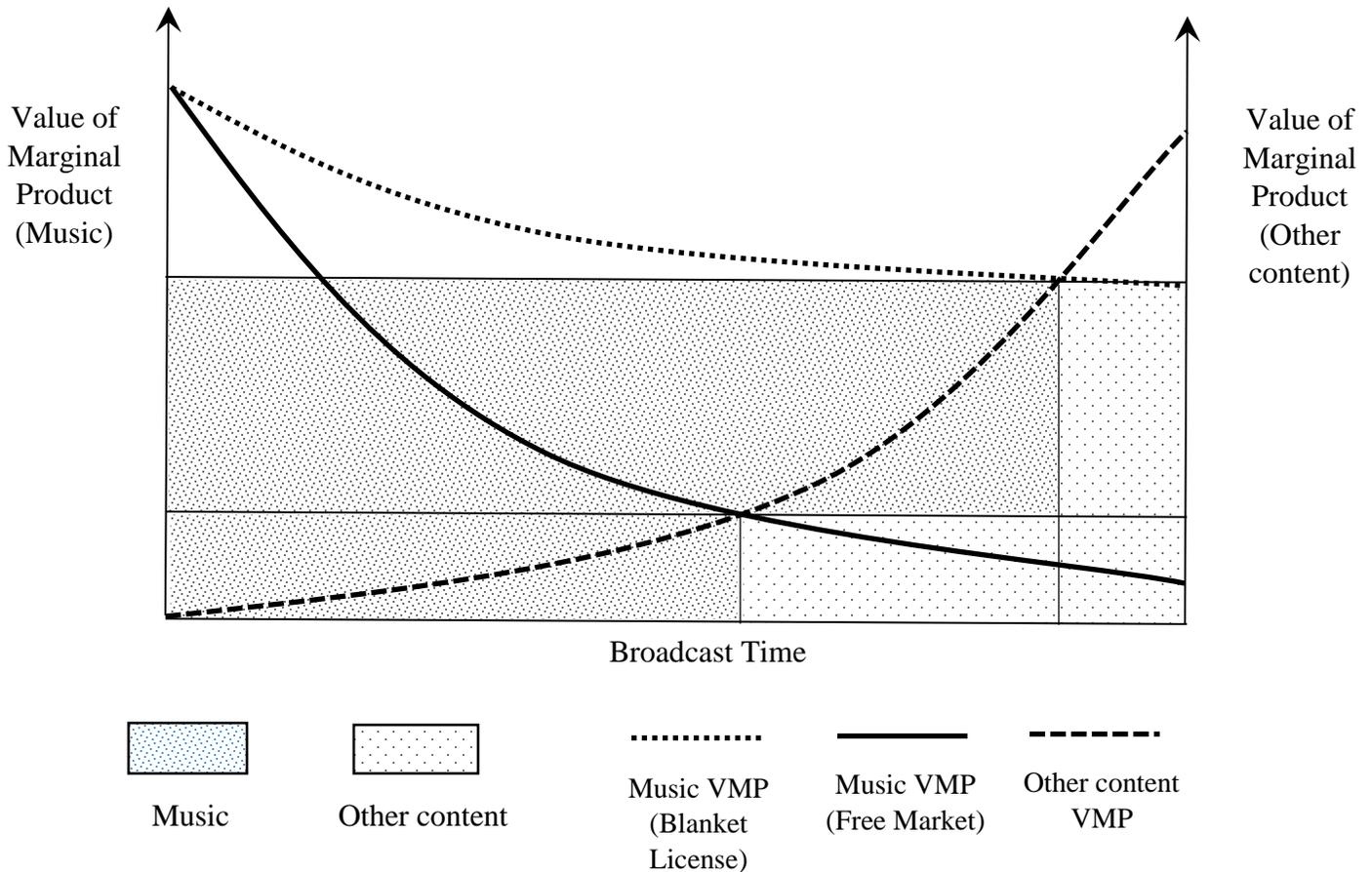
⁹⁸ By 'competitive market' we do not mean a market without copyright, but a market in which copyright owners compete among themselves rather than offer a blanket license through a CMO.

⁹⁹ We use the term 'song' for ease of reading. We refer, of course, only to songs licensed under a blanket license.

¹⁰⁰ Unfortunately, there is no competitive market for music broadcast. However, we know that in a free market music will necessarily cost more than zero. Hence the validity of this assumption. Of course the price can also be negative if we were to consider the possibility of Payola but given that the practice of payola is illegal, we do not include it in our consideration.

sake of the example let us assume that at the peak the broadcaster earns Z dollars and that the said decrease in rating translates to a loss of Y income for each additional song being broadcast (Y being negative, of course). The audience, however, will continue listening if other content is provided. Thus, the turning point is when: $5X < Z+Y(n)$. In a free market this will happen after five songs as $5FM = 5X$. Under a blanket license this will happen later in time given that $0 < X$. As a result, the blanket license encourages the broadcasting of pre-recorded blanket-licensed music and discourages the broadcasting and production of other content. In short, cultural production of non-pre-recorded licensed material on the radio is delayed due to the blanket license scheme. As *Figure 1* demonstrates.¹⁰¹

Figure 1



¹⁰¹ C.f., Paul Audley and Marcel Boyer, *The "Competitive" Value of Music to Commercial Radio Stations*, 4 REV. ECON. RES. COPYRIGHT ISSUES 29, 36 (2007). Our figure is based on their original figure.

Blanket licenses impact cultural production in radio broadcast also in that they alter the *kind* of spoken-word being produced on the radio, not just the quantity. It creates a distortion by widening the gap between the different kinds of spoken content, thus rendering the possibility of production of narrated content less likely than in similar circumstances in a free market.¹⁰² This, again, is a result of the fact that under a blanket license the price of playing an additional song is zero. Zero marginal cost for music lowers the amount of investment in all other content, as broadcasters always have the option of zero cost content and will be willing to invest in other content so long that the net revenue from other content exceeds that of pre-recorded music. As pre-recorded music is at virtually zero cost, only very cheap alternative content can at times beat its net revenue. Had music not been offered on a blanket license terms, then the gap in the investment between it and other content would have been narrower, and accordingly the net revenue from narrated content could have exceeded it, resulting in more narrated content on the radio (*vis-à-vis* talk shows). Put simply, the zero-dollar price-tag on blanket-licensed music widens the gap between music and the different kinds of spoken-word, delaying the point in time in which narrated content becomes more profitable than talk shows, so that point in time more rarely occurs.¹⁰³

An example can help demonstrate this point: Generally speaking, and roughly categorizing, there are three types of content that radio broadcasters can broadcast: music, talk shows [TS], and narrated content [NC].¹⁰⁴ Let's assume that the cost of producing or procuring a time-unit of a talk show is lower than that of narrated content ($C_{TS} < C_{NC}$). In a blanket-licensed regime, the cost of broadcasting a song covered by the blanket-licensed music [C_{SBL}] is zero, while in a free-market

¹⁰² When we speak of the 'distortion' of the market, this is in comparison to the (perceived) 'free' market. Namely, the market as it would have been had pre-recorded music not been blanket licensed. A free market, as mentioned, does not exist; thus, we can only compare the current market to a perceived free one. Because we know that in a free market the marginal price of such music will necessarily be greater than zero we can confidently say that a distortion exists. Nonetheless, we cannot truly know the *extent* of the distortion as no alternative (free) market exists. In short: there surely is a distortion, its extent is not known.

¹⁰³ Stephen Perry provides empirical data as to the influence the use of pre-recorded music had with regards to local radio broadcasters. He highlights yet another distortion in cultural production due to the use of pre-recorded music – the demise of local talents. He notes: “The decline in local performance is important from a cultural standpoint. People of various regional affiliations tended to reflect different styles of music performance. Stations reflected unique forms of cultural expression appropriate for the native audience they served due to the natural availability of local and regional talent” (Perry, *supra* note 16, at 136).

¹⁰⁴ Of course there are other options too, such as non-licensed music, creative commons music, public domain music etc. The above classification is used to clarify the claim made above (which holds true even if we were to consider these other options).

regime, the broadcaster will have to incur additional cost in order to obtain a license to broadcast another song ($C_{SFM} > 0$). Thus, $C_{SFM} > C_{SBL}$.

In a free market, all content types potentially compete with each other, be they songs, talk-shows, or narrated content. To maximize profit, the broadcast will first choose whatever content that generates the highest marginal product (ad revenue minus the cost of producing or procuring the content) and then proceed to broadcast other content units. Assuming decreasing marginal product, the broadcaster will procure additional content units up to the point where the marginal product of the last content unit is zero.

Under blanket licenses for music, however, the marginal cost of playing another song is zero, and as a result the marginal product of a song under the blanket license is higher than that of any equally attractive other unit of content (whether a song not covered by the blanket license, a talk show, or narrated content). In other words, all things equal, a rational profit-maximizing broadcaster will always prefer broadcasting another song from the CMO's repertoire over any other type of content. It will increase the broadcasting time of music covered by the blanket license up to the point where the marginal product of such music is zero, at which point it will substitute it with other content.

Put differently, since the marginal cost of content not covered by the blanket license is increasing while the marginal cost of playing another song is constant and zero, the marginal product of broadcasting content outside the blanket license decreases much faster compared to the decline in marginal product of songs. Moreover, assuming correlation between the quality (however defined) and the cost of producing or procuring such content, the marginal product of broadcasting high quality content will be smaller relative to the marginal product of broadcasting low-quality content that generates equal ratings. As a result, at the saturation point, broadcasting low-cost spoken content (such as talk shows) will be more profitable than broadcasting higher-cost spoken content, such as narrated content.

In sum, the blanket license distorts broadcasters' demand for creative content and drives them rationally to prefer broadcasting more music and less other content than they otherwise would in a free market.

The blanket licensing scheme distorts cultural production in radio broadcasting in yet another way – it even drives-out music that could be broadcast royalty-free such as public domain music and music offered under a creative commons license.

The pooling together of all the different right-holders' rights in the hands of one CMO and then licensing them as a bundle, provide radio broadcasters with a high degree of confidence from unintentional infringement. This, however, has an undesirable effect – radio broadcasters do not bother themselves with playing other music, even when that music being offered for free. This is very logical from their point of view: why go through the trouble of reading the fine print in a creative commons license or making sure that a certain work is indeed in the public domain when they have at their disposal a catalogue with thousands of already-paid-for songs whose fine print or legal status they do not need to figure out. From a cultural production point of view, however, this creates a distortion because non-blanket licensed music is eliminated or substantially diminished.¹⁰⁵ In a free market all songs would compete one against the other and against talk content, and the market would dictate their price and their dominance on the playlist. Moreover, public domain and creative commons would actually have enjoyed the competitive advantage of offering a very-low price.¹⁰⁶

This is not just mere speculation as the case of the Canadian Broadcast Company (CBC) – a public broadcaster, it should be noted – demonstrates: the producers of a popular CBC show called *Spark* revealed that CBC forbade programs from using creative commons licensed music on CBC podcasts.¹⁰⁷ *Sparks* had previously used creative commons licensed music.¹⁰⁸ The Director of Programming for CBC Radio explained that creative commons licensed music was banned because some creative commons licenses carry restrictions on commercial use and so “[i]n order to ensure that we continue to be in line with current Canadian copyright laws, and given the

¹⁰⁵ It should be noted that our claim is restricted to distortions in cultural production. We do not claim that blanket licenses change the utility of pre-recorded (or other) music to users (though this is indeed very much possible in our view); we merely focus our claim on demonstrating possible distortions in cultural production in radio broadcast.

¹⁰⁶ we are not saying ‘free’ as we assume that broadcasters would still go through the trouble of reading the terms and conditions or finding out if the piece is in the public domain – processes that require some resources.

¹⁰⁷ Michael Geist, *CBC Bans Use of Creative Commons Music on Podcasts*, MICHAEL GEIST (8 Oct., 2010), <http://www.michaelgeist.ca/2010/10/cbc-cc-ban/>. See also Matthew Lasar, Why the CBC banned Creative Commons music from its shows | Ars Technica, <https://arstechnica.com/business/2010/10/cbc-radio-fans-crabby-over-creative-commons-snub/>.

¹⁰⁸ Mike, On CBC podcasts and CC-licensed music available for commercial use, CREATIVE COMMONS (10 Oct., 2010), <https://creativecommons.org/2010/10/10/on-cbc-podcasts-and-cc-licensed-music-available-for-commercial-use/>.

lack of a wide range of music that has a Creative Commons license allowing for commercial use, *we made a decision to use music from our production library* in our podcasts as this music has the proper usage rights attached”.¹⁰⁹ The CBC chose a complete ban on creative commons licensed music and allowed only use of music from the CMO’s catalogue. But ‘in order to ensure’ adherence to copyright law, the CBC could have allowed the use of *any* music that has appropriate rights (such as creative commons licensed music that does not include the non-commercial use provision), but they opted not to. This creates the kind of distortion in cultural production that we discuss: creative common licensed music is crowded out of the pool of creative material used to produce a radio show, despite being licensed free of charge, due to broadcasters having another free alternative – blanket licensed music.¹¹⁰

C. Why Blanket Licenses Started Impacting Cultural Production only in the 1950s?

Blanket licensing existed in the 1920s when radio broadcasting made its debut, and sound recordings existed then as well.¹¹¹ This, naturally, raises the following question: if blanket licensing is responsible for the transformation of radio programming as described above, then why did it take almost three decades for this impact to be felt? Arguably, if our economic explanation is correct, we should have seen use of pre-recorded blanket licensed music as the primary source of content much earlier in time. However, a combination of several factors explains why the effect of the blanket license was not felt in earnest until the 1950s. These include the limitations of sound recording technology, regulatory opposition to the use of sound recordings, industry wariness, and consumer preferences at the time. Also, until the late 1950s pre-recorded music was technologically inferior, entailed high costs, and did not quite respond to musical preferences.

¹⁰⁹ *Id.*, (emphasis added).

¹¹⁰ A similar problem exists with regards to orphaned works. Due to uncertainties regarding copyrights, broadcasters refrain from using them. Thus, yet again another body of musical works does not get any exposure in the radio, affecting cultural production. See also: Robert Kirk Walker, *Negotiating the Unknown: A Compulsory Licensing Solution to the Orphan Works Problem*, 35 CARDOZO L. REV. 983 (2014) (suggesting that a compulsory license for orphan works would help minimize costs for users, thus incentivizing investment in them).

¹¹¹ Records, cylinders, and wires had been in existence for nearly 5 decades before radio became a common household item (Rasmussen, *supra* note 16, at 17).

Up until the late 1950s, music records were relatively unimportant in the music industry.¹¹² They were considered faint and scratchy items, were deemed a ‘generic’ means to carry existing sounds around, and were described as “brief, fuzzy snapshots of popular music, not the thing itself”.¹¹³ The music they produced sounded rough and inferior in sound quality to that produced and broadcast live. Radio broadcasters regarded records as “canned” music.¹¹⁴ In fact, they considered the quality of records at the time so poor, that until the late 1940s the major national broadcasters in the U.S. banned the playing of pre-recorded music.¹¹⁵ As a result, pre-recorded music accounted for less than 8% of all music being played across the radio.¹¹⁶ Only in the mid-late 1950s technological improvements upgraded the sound quality of records so that the use of pre-recorded material could be considered a viable option for radio broadcasters.¹¹⁷

U.S. federal regulation was yet another reason why pre-recorded music was seldom used despite being blanket-licensed, at least until well into the 1940s. The Federal Radio Commission and later its successor, the Federal Communications Commission, were in the position that broadcasting recorded music was not in the public interest.¹¹⁸ In fact, in 1922 the U.S. Commerce Secretary Herbert Hoover sought to limit use of pre-recorded materials in favor of live performances.¹¹⁹ U.S. agency regulations dictated that new stations had to accept not to perform pre-recorded music, or to be subject to licensing scrutiny once their initial three-year license expired. Moreover, regulation required that broadcasters that played pre-recorded music warn listeners that the music they are about to hear was not live.¹²⁰ In 1940 the Federal Communications Commission reduced the warning requirement from prior to every song, to once every 30 minutes, by the end of WWII it relinquished this requirement completely.¹²¹ Namely, well into the mid-

¹¹² Wald, *supra* note 52, at 14.

¹¹³ *Id.*, at 14, and at 86-87.

¹¹⁴ Rasmussen, *supra* note 16, at 24

¹¹⁵ See *supra* note 18.

¹¹⁶ Rasmussen, *supra* note 16, at 24.

¹¹⁷ Also worth noting is that the material the records were made from – shellac, was not very durable and often records mailed to the stations were received broken. Only with the advent of vinyl in the late 1940s–early-1950s was this problem properly solved. The shellac 78 RPM records also had a short life span of 75-125 plays, which meant expenses to buy new ones (Rasmussen, *supra* note 16, at 46, and at 58; see also: ANDRE MILLARD, *AMERICA ON RECORD: A HISTORY OF RECORDED SOUND*, 202 (2nd ed., 2006); Regal, *supra* note 3, at 100.

¹¹⁸ Rasmussen, *supra* note 16, at 24.

¹¹⁹ Perry, *supra* note 16, at 134.

¹²⁰ Rasmussen, *supra* note 16, at 24.

¹²¹ *Id.*

1940s, federal regulations implied that recorded music was not the ‘real thing’ and reinforced the networks’ perception of recorded music as an inferior product.¹²²

The playing time of records was yet another reason why radio broadcasters refrained from using pre-recorded content until the late 1950s. A record’s playing time is contingent on the record’s turntable speed and groove spacing. The record’s playing speed is dictated by its rotational speed (which is measured in revolutions per minute, RPM). Until the late 1950s, the standard record was 10 inches in diameter and had a 78 RPM speed, meaning that the standard record could hold up to about three minutes.¹²³ Even the bigger 12 inch records could hold up to no more than 5 minutes.¹²⁴ After a few short minutes of music play, one would have to get up and flip side or change the record. Many musical works had to be recorded on multiple records. This made the operation of playing pre-recorded material a cumbersome venture. Just imagine, for example, the resources and logistics involved in playing Beethoven’s Fifth Symphony: the playing time totals around 33 minutes. This means 11 changes (flipping over 11 times and changing 6 records); just the first movement - *Allegro Con Brio*, measures about 8 minutes (2 flips plus 1 change). The station would have to purchase 6 records, flip or change record every three minutes, while creating a pause and distraction or having to use 2 phonographs and timing the shift between them perfectly. Naturally, broadcasters preferred to avoid this burdensome, clumsy and costly operation, so they refrained from using pre-recorded material until the advent of the long-playing record technology in the late 1950s. Long-playing technology allowed for high fidelity and longer recordings.¹²⁵

Musical preferences too, are a reason why broadcasters refrained from using pre-recorded music until the late 1950s. As mentioned, until the advent of rock and roll stardom and the creation

¹²² Interestingly, the record companies themselves also contributed to broadcasters’ anti-pre-recorded music attitude. Believing that radio play will result in loss of record sales, record companies in the 1930s stamped their products with “not licenced for radio broadcast” (Rasmussen, *supra* note 16, at 25). Regulation, not just that of copyright, but also of other fields of law and especially antitrust, unsurprisingly, strongly impacts cultural production in radio broadcast. For example, in 1996 Congress increased the limits on the number of radio stations a firm can own within a single radio market. Empirical research conducted by Peter DiCola found, *inter alia*, that the concentration in the U.S. radio industry resulting from that decision had a positive effect on the variety of programming formats (Peter DiCola, *FCC Regulation and Increased Ownership Concentration in the Radio Industry* (July 16, 2010), available at SSRN: <https://ssrn.com/abstract=1553483>).

¹²³ Wald, *supra* note 52, at 92.

¹²⁴ Katz, *supra* note 55, at 36. Scholars have noted that these technological constraints are part of the reason why many songs up to today are less than 5 minutes long (see: Peter Yu, *How Copyright Law May Affect Pop Music Without Our Knowing It*, 83 UMKC L. REV. 363, 369-371 (2014) (suggesting that there is an IP explanation as well – playing longer than 5:12 means record label will have to pay a higher statutory rate)).

¹²⁵ Rasmussen, *supra* note 16, at 46.

of the top-40 format, the identity of the performer of a song was of lesser importance to the audience.¹²⁶ This means that the audience did not care much whether it was a house band or a record being played, and given that most major record labels had their own version of almost any major hit song, the audience also did not care much which of these versions was played as well.¹²⁷ House bands and orchestras were in most cases, and definitely in the case of the bigger broadcasters, on the broadcasters' salary roll, making fixed salaries (regardless of the amount of music played in practice).¹²⁸ This means that from the broadcaster's point of view, there was no incentive to prefer pre-recorded music. In fact, the broadcasters' house-bands can be described as providing broadcasters with music at the marginal cost of zero, at least in the short term. Given that the audience did not care whether it was a particular singer or the house band, and given that both were provided at zero marginal cost, it came down to the question of which of the options was easier to use. For the reasons mentioned above, house bands were the likely answer.

But what about the choice between music and spoken word? As noted earlier, until the 1950s, technological limitations required broadcasters to focus on live productions. As a result, whether the broadcaster chose to broadcast music or narrated content such as drama or comedy, it would have to hire professional musicians and actors and pay for their labour. Therefore, even though the blanket license created a cost advantage for music relative to spoken word, this cost advantage affected only one component of the cost of content production and its impact on marginal product was not as pronounced as it would become later. Improvements in recording technologies and the advent of long-range broadcasting changed the calculus. They allowed broadcasters to rely on pre-recorded programming and for the full impact of the blanket license to take effect.

Other explanations that we previously discussed as reasons to the transitions in cultural production on radio in the 1950s, also suggest why despite their existence, blanket licenses were negligible until the 1950s. These include the advances in portability and ubiquity of radio and the change in cultural and social landscapes. In short, the new technologies (e.g., car radios, transistors) and the changing social landscape (e.g., the rise of suburban America) changed the

¹²⁶ See Part IV above.

¹²⁷ See *supra* note 67.

¹²⁸ See: James Kraft, *Musicians in Hollywood: Work and Technological Change in Entertainment Industries, 1926-1940*, 35 *TECH. & CUL.* 289, 305 (1994); Perry, *supra* note 16, at 134 (2013).

way radio is consumed – from a social experience to a mere sonic one, and from the focus of attention to an adjunct activity. This too, allowed radio broadcasters to abandon live music in favor of pre-recorded music and talk shows, but only in the 1950s.

D. Blanket Licenses as an Explanation to the Post Golden Age Changes

The 1950s saw significant changes in technology, social and cultural environments, and musical preferences. These changes were suggested as reasons for the dramatic shift in cultural production in radio broadcast in the 1950 and the demise of radio's golden age. Each of these explanations individually, and certainly the accumulation of them all together, undeniably explain why we witness shifts in cultural production in radio broadcast in general. However, they do not fully explain why we witness the *particular* changes that occurred (change in spoken-word/music ratio, use of pre-recorded music, etc.). The IP regime pertaining cultural production in radio broadcast, i.e., blanket licences, on the other hand, does.

The fact that television provides narrated content does not at all mean that radio cannot compete with it in providing narrated content. Conceivably, television is better suited for many narrated formats such as adventure shows and soap operas; but radio is perhaps better suited for other narrated formats such as storytelling, documentaries, and in-depth political discussions.¹²⁹ In the 1950s radio broadcasters could have adjusted their narrated content to successfully face television's narrated content. Moreover, they could have exploited radio's relative advantages over television (portability, for example) as a competitive advantage. However, they did not, and opted for pre-recorded music. Opting for pre-recorded music is not, essentially, due to the advent of television, but rather due to the existence of much cheaper content.

Similarly, the fact that radio became portable does not explain why it was pre-recorded music that was preferred over other content such as in-house produced music or spoken-word. Again, broadcasters could have provided content befitting this new reality that is not necessarily

¹²⁹ For example, Chignell notes that radio has certain advantages when it comes to documentaries (Chignell, *supra* note 16, at 22) or drama (at 28). David Hendy suggests that while high quality programmes indeed necessitate high costs, the cost per listener can still be very low, provided that the show is able to attract large audiences. The trouble is, he claims, is that within the market, there is no incentive to recognise this. David Hendy, *A Political Economy of Radio in the Digital Age*, 7 J. RADIO STUD. 230 (2000).

pre-recorded music. However, the fact that pre-recorded music was at their disposal at no cost explains why they opted for it.

Likewise, changes in music preferences conceivably explain why pre-recorded music was preferred over in-house produced music, but it does not explain why music content was preferred over spoken-word content. Even before the rock and roll and top-40 era, people liked music, nevertheless spoken-word was the preferred content.¹³⁰ There is no indication that after the 1950 people all of a sudden preferred music to spoken-word. Therefore, the explanatory power of changes in musical preferences is limited unless we also consider how cheap it was to provide music rather than invest in talk.

Imagine that we are in the 1950s. We are witnessing many different changes – new technologies kick-in, as do social and cultural changes – however, pre-recorded music is not licensed under blanket licensing, but rather in a competitive market. Broadcasters need to cope with these new realities and provide audience-attracting content that will maximize their profit. They have two options: they can invest resources in creating music or narrated content that attracts listenership (option A) or they can negotiate with creators of pre-recorded music to use their materials (option B).¹³¹ As we discuss earlier, both options entail investment. The closer option A is to option B in regards to investment, the greater the possibility that option A will be more profitable and therefore employed. Blanket licenses, if used for music content, widen the gap between A and B. The reality of blanket licenses in the 1950s created this big gap and explains why pre-recorded music was preferred. Thus, it likely explains why we see the *particular* changes of more pre-recorded music content, in addition to the other explanations that explain why we see changes more generally.

In essence, technology and social and cultural changes very well explain why changes in cultural production in radio broadcast happened. Economics, which are dictated by the IP regime pertaining radio music broadcast, i.e., blanket licenses, explain why the *particular* changes happened. Marilyn Matelski notes that:

¹³⁰ See: Lenthall, *supra* note 29 at 61.

¹³¹ There is the option of using in-house production, but the rock and roll stardom phenomenon make it less viable. Similarly, there is the option of using public domain music, but this too is less desirable due to popularity of current music vis-à-vis older music (which is often the only music in the public domain).

“[s]tation owners redefined the medium to fit the new pragmatics – lower budgets, less live talent, smaller audience ... Clearly, the most serious threat was economic... the financial landscape was not entirely bleak; despite lower station revenues, manufacturers and owners still had a vested interest in radio’s solvency... Without network programming, most local stations could not afford to underwrite large variety shows or dramas, so they turned instead to prerecorded music with [DJs] as hosts... Finally, radio visionaries recognized that the notion of programming to mass audience – or “broadcasting” – was no longer a reality for the medium; instead, station began to identify target audiences and create formats to “narrowcast” to those listeners”.¹³²

E. Current Patterns of Cultural Production in Public and Commercial Radio

A notable exception to many of the trends discussed above is public radio. The term “public radio” covers a wide variety of activities by different broadcast organizations. It is typically characterized by non-profit objectives, often publicly mandated and its primary mission is providing public service.¹³³ As mentioned, for the sake of this paper we generally consider ‘public radio’ to mean non-commercial, not-for-profit broadcasters whose primary mission is public service.¹³⁴ Public radio’s mission, generally defined, is to serve the public by fostering a marketplace of ideas and information.¹³⁵ Some also suggest that public radio is a means by which

¹³² Pease & Everette, *supra* note 45, at 12

¹³³ There are several models of public radio funding: direct governmental funding, license fees that are tied to radio (or television) set being purchased (these two are the popular funding scheme in Europe), funding by selling advertisements (this, along with some governmental funding is the Canadian model), or fundraising (as is in the U.S.). See also, Michael McCauley, *NPR – THE TRIALS AND TRIUMPHS OF NATIONAL PUBLIC RADIO* 4-5 (2005); Robert Armstrong, *BROADCASTING POLICY IN CANADA* 117-118 (2nd ed., 2016); Alan Albarran & Gregory Pitts, *THE RADIO BROADCASTING INDUSTRY* 134 (2001).

¹³⁴ See *supra* note 5.

¹³⁵ See: street *supra* note 60, at 10. See also, e.g., NPR’s “Mission and Vision”: “The mission of NPR is to work in partnership with Member Stations to create a more informed public — one challenged and invigorated by a deeper understanding and appreciation of events, ideas and cultures.”, at: <http://www.npr.org/about-npr/178659563/our-mission-and-vision>. The BBC’s “Mission and Values”: “To enrich people’s lives with programmes and services that inform, educate and entertain.”, at: http://www.bbc.co.uk/aboutthebbc/insidethebbc/whoweare/mission_and_values. The CBC’s “Vision”: “focus on [Canadian] citizens and creators, reflect Canadian identity and promote democracy, and support social and economic innovation”, at: <http://www.cbc.radio-canada.ca/en/explore/who-we-are-what-we-do/ourvision/>.

governments wish to correct market failures caused by the primary reliance on commercial providers.¹³⁶

Compared to commercial radio, public radio contains substantially more spoken word. The spoken word includes more high-investment narrated content (such as documentaries and radio drama) rather than low-investment talk radio that often characterizes commercial radio, as well as more in-house produced content. Many of the popular formats of radio's golden age survived, and are even flourishing, on public radio.

In 2013 approximately 35% of the available content in public radio in the U.S. was spoken word content,¹³⁷ whereas in commercial radio the available spoken word content amounted to approximately 15%.¹³⁸ These figures are telling: There is about 2.5 times more spoken content available in public radio versus commercial radio. But spoken radio in public radio also presents a different kind of quality.¹³⁹ As mentioned, spoken-word in commercial radio tends to be mainly dedicated to talk shows. Whereas spoken-word in public radio tends to be in-depth, high-investment and rich in content: investigative journalism, narrated programs (such as radio dramas, documentaries), in-depth news analysis, etc.¹⁴⁰ Spoken-word programs on public radio have been revered for their thoroughness of coverage and breadth of subjects, in a way that “no commercial network comes close to replicating”.¹⁴¹

Another important difference when it comes to spoken word is that public radio includes substantially more in-house and local productions vis-à-vis commercial radio. Commercial radio stations tend to opt for syndicated out-sourced programmes, while public radio stations produce

¹³⁶ Armstrong, *supra* note 133, at 117.

¹³⁷ All figures are taken from Arbitron's *Public Radio Today 2013, How America Listens to Radio*. These, to the best of our knowledge, the latest publicly available data figures available. See: http://www.arbitron.com/downloads/PublicRadioToday2013_ExecutiveSummary.pdf. Moreover, when it comes to actual listenership (“audience share among all Public Radio listening”), the numbers are even more striking: narrated shows (categorized as “News/Talk/Information”) amount to 51.7% of total listenership. See: http://www.arbitron.com/downloads/PublicRadioToday2013_ExecutiveSummary.pdf.

¹³⁸ All figures are taken from Arbitron's *Radio Today 2013, How America Listens to Radio*. These, to the best of our knowledge, the latest publicly available data figures available. See: http://www.arbitron.com/downloads/Radio_Today_2013_execsum.pdf. In fact, if we deduct the 3.1% (all sports channels) the numbers are even lower.

¹³⁹ We wish to note that we are not casting a judgment on the question of the quality of the content, but merely pointing out it is different.

¹⁴⁰ See e.g., Keith, *supra* note 61, at 172; Albarran & Pitts, *supra* note 133 at 147.

¹⁴¹ Keith, *supra* note 12 at 15; see also: Albarran & Pitts, *supra* note 133 at 147.

considerably more in-house.¹⁴² Moreover, in the U.S., even in syndicated out-sourced programming in public radio – significant segments are left for local stations to fill with local in-house content: NPR, for example, intentionally leaves large segments in its popular *The Morning Edition* program for local stations’ self-produced content.¹⁴³

Local public radio broadcasters also influence cultural production by supporting related cultural production products such as their own orchestras,¹⁴⁴ or in that they frequently sponsor local concerts (and town meetings on public affairs).¹⁴⁵ Moreover, public radio also has an important role in cultural *participation*. Public radio broadcasts certain musical contents that otherwise would not reach all publics. Berry & Waldfogel, for example, maintain that “in the absence of public broadcasting, persons living outside the largest markets would receive very little classical music or jazz programming”.¹⁴⁶

It is interesting to note that in terms of ratings public radio is experiencing substantial success.¹⁴⁷ In fact, NPR’s spoken word programs *The Morning Edition* and *All Things Considered* enjoy an extremely high weekly listenership in the U.S.¹⁴⁸ But commercial broadcasters do not find it commercially sensible to invest in creating similar spoken word content given that producing an original newscast is expensive whereas playing pre-recorded music (or airing syndicated talk radio shows) is cheap.¹⁴⁹ So long that commercial broadcasters have the option of

¹⁴² See: PUBLIC SERVICE BROADCASTING IN TRANSITION (Monroe Price & Marc Raboy eds., 2003); RALPH ENGELMAN, PUBLIC RADIO AND TELEVISION IN AMERICA 23 (1996).

¹⁴³ *About Morning Edition*, NPR, <http://www.npr.org/templates/story/story.php?storyId=5003> (last visited May 3, 2017).

¹⁴⁴ See *supra* notes 20 and 21 and accompanying text.

¹⁴⁵ Keith, *supra* note 12 at 15.

¹⁴⁶ Steven Berry & Joel Waldfogel, *Public Radio in the United States: Does it Correct Market Failures or Cannibalize Commercial Stations* 71 J. PUBLIC ECON. 189, 208 (1999). We do acknowledge that some, if not most, of this content is possibly pre-recorded.

¹⁴⁷ Keith, *supra* note 61, at 172.

¹⁴⁸ Each show enjoys about 14.5 million listeners weekly. See: *NPR Ratings at All-Time High*, NPR PRESS ROOM, <http://www.npr.org/about-npr/520273005/npr-ratings-at-all-time-high> (last visited May 3, 2017); *NPR Shatters Its Ratings Record*, INSIDE RADIO, Mar. 16, 2017, http://www.insideradio.com/free/npr-shatters-its-ratings-record/article_1ac83616-0a10-11e7-a460-4b24c0471d8b.html; NPR Touts Highest Ratings Ever, RADIO INK, Mar. 15, 2017, <http://radioink.com/2017/03/15/npr-touts-highest-ratings-ever/>. See also: Albarran & Pitts, *supra* note 133 at 147.

¹⁴⁹ See Paul Farhi, *Good News for NPR: Its Most Listeners Ever*, WASHINGTON POST, Mar. 24, 2009, <http://www.washingtonpost.com/wp-dyn/content/article/2009/03/23/AR2009032302972.html>. We are not suggesting that public radio is what commercial radio would have been without blanket licenses, nor are we saying that without blanket licenses commercial radio would be producing the same kind and quality of content that public radio is. There are many ways in which a not-for-profit organization is different from a commercial one. Our point is to demonstrate how blanket licenses distort the market in commercial broadcast. A point, we believe, this comparison helps validate.

broadcasting content at the marginal cost of zero, opting for any other content does not make any commercial sense, up to the point that enough consumers tune-out, and then they air talk shows, not narrated content.

VI. Conclusion

In its golden age, radio provided listeners with rich, diverse, original and high-investment content. Technological, social and cultural changes in the 1950s led to major transformations in radio broadcasting's landscape. Along these, the IP regime pertaining radio broadcast – blanket licensing of pre-recorded music – created a reality in which pre-recorded music is priced at virtually zero, resulting in distortions in cultural production in radio broadcast. Blanket licenses do not only explain why specific changes (such as changes in the ratios of music and spoken content or the diminishing quality of the little spoken content that remained) occurred, but also why cultural production in radio broadcast currently looks the way it does.

Our discussion illuminates yet another important issue – the calculation of fair compensation for playing music over the radio. As mentioned, in the U.S. these are currently based on consent decrees. These consent decrees overlook several crucial factors. For example, they overlook the point that radio is a three-sided market;¹⁵⁰ likewise, they consider (and try to balance) the interests of broadcasters and right-holders of pre-recorded music, but not those of creators of spoken content or public domain or creative commons licensed music. Surprisingly, despite the fact that this licensing structure has been practiced for almost a century, and license fees have been regulated for the better part of that century, the issue of how to calculate the price of the blanket licenses for music has rarely been discussed in academic literature nor has it been comprehensively addressed by the competent regulators.¹⁵¹ While our current article does not purport to answer this crucial question (we hope to get to that in a separate piece), it does illustrate that while the current

¹⁵⁰ Music broadcast benefits broadcasters as they sell advertisements and make money, it benefits consumers who do not need to pay to listen to radio (if we consider that listening to commercials is not [out-of-pocket] payment), and it acts as an advertisement platform for the songs themselves (as the history of Payola clearly demonstrates).

¹⁵¹ See: David Strickler, *Royalty Rate Setting for Sound Recordings by the United States Copyright Royalty Board: The Judicial Need for Independent Scholarly Economic Analysis*, 12 REV. ECON. RES. COPYRIGHT ISSUES 1 (2015) (noting the need of the U.S. Copyright Royalty Board for solid findings regarding fair royalty rates for sound recordings).

IP regime might benefit one class of copyright owners, it does so not only at the expense of users, but also at the expense of creators of other types of creative content.

Lessons from the radio broadcast industry can and should inform current policy making in other IP industries that employ or consider blanket licensing. For example, proponents of rights in many newfound internet-related industries (e.g., news aggregation, and text & data mining) often tout collective administration as a good mechanism for administering these newly-proposed rights. We must strongly consider possible distorting effects similar to those that we have identified in radio broadcasts, when deliberating the rights regimes for these industries.

Video, changing technology and society, and the IP regime might have killed the radio star, but radio itself is still very much alive, with more than 15,000 licensed stations, over 90% exposure, an average listenership of about 18 hours weekly, and a total annual revenue of more than \$20 billion.¹⁵² These numbers do not only demonstrate the centrality and relevancy of radio in American life at present, they also indicate the potential magnitude of the distortions in cultural production in radio broadcast caused by blanket licensing. Just imagine how cultural production in radio and related creative industries would look like if this wealth was distributed differently. Thus, it is time to consider not only the static harms of blanket licensing in creative markets, such as higher prices and monopolies, but also their potential dynamic harm over time – alteration of cultural production.

¹⁵² According to the U.S. Federal Communications Committee, in 2013 (the last year in which official data was released) there were 4,728 AM Stations, 6,613 FM Commercial Stations, and 3,989 FM Educational Stations; Totaling 15,330 Stations in the US. See: Federal Communications Committee, *Broadcast Station Totals as of September 30, 2013*, (Oct. 24, 2013) https://apps.fcc.gov/edocs_public/attachmatch/DOC-323674A1.txt; *New Radio Ratings Say Younger Generations Still Listen*, NIELSEN, SEP. 23, 2009: <http://www.nielsen.com/content/dam/corporate/us/en/newswire/uploads/2009/09/Radio-Ratings-Press-Release.PDF>; Cox, *supra* note 11, at 207; Radio industry revenue in the United States from 2011 to 2020 (in billion U.S. dollars), STATISTA (2016) <https://www.statista.com/statistics/259981/radio-industry-revenue-in-the-us/> (last visited May 3, 2017).