NORTHWESTERN UNIVERSITY

Captured Live: Cultures of Television Recording and Storage, 1945-1975

A DISSERTATION

SUBMITTED TO THE GRADUATE SCHOOL IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

for the degree

DOCTOR OF PHILOSOPHY

Field of Radio/Television/Film, Screen Cultures

By

Kate Newbold

EVANSTON, ILLINOIS

August 2015

ABSTRACT

Captured Live: Cultures of Television Recording and Storage, 1945-1975

Kate Newbold

This dissertation explores the variety of processes individuals adopted to capture and store television programming prior to the popular onset of domestic audiovisual tape recorders (VTRs) in America in the late 1970s. Operating devices like still photography cameras, wire and tape audio recorders, and audiovisual cameras, those who participated asserted a desire to engage television in its immediacy but beyond the rigors of scheduled one-way transmission. Recording and storing content developed as an integral part of domestic experiences with broadcasting in its earliest commercial decades: amateur photographers snapped images of TV screens to document favored moments, while their audiophile peers connected tape and wire recorders directly to transmitting sets for clear capture of material rarely recorded by industry personnel on tape or kinescope. Following this, several artists began experimenting with broadcast image and sound recording in long-term, deeply personal projects of television capture as art. They mined television to gather content reflective and/or constitutive of both society and the medium itself, in the process demonstrating television's ontological flexibility against critiques of rigid, oneway transmission. As these practices altered with the onset of domestic commercial devices for video recording in the 1970s, many have been forgotten or pushed aside to argue more aggressively for the significance of liveness and immediacy to television's early history. Yet such practices do not simply exist in the past or as curios of a bygone era. In contemporary contexts, these texts circulate widely, as physical and digital artifacts evidencing how storagebased engagements often complemented consumer's media routines rather than displaced them.

ACKNOWLEDGMENTS

In writing this dissertation, I was fortunate to receive an enormous amount of support, scholarly and otherwise, from many people. I am incredibly grateful to everyone who helped me along the way.

Those whom I interviewed as primary research subjects for this dissertation deserve special thanks, as they gave great amounts of their own time and dedication to this project. Phil Gries, J. David Goldin, and Jerry Immel deserve much of the credit for the success of Chapter Two; their work is invaluable to television scholars and the wider history of television in America. Thanks also goes out to John Miley, Pat Rispole, and Charlie Danrick, who were not interviewed for this project but contributed widely to the television and radio archives available today. I hope my analysis does justice to the painstaking craft of audio recording broadcasts they have honed and preserved over decades.

TABLE OF CONTENTS

Introduction	11
Chapter One "History As It's Made": The Popular Practice of TV Photography in the Postwar Era	32
Chapter Two Off Air, On Tape: Practices, Archives, and Historiographies of Domestic Audio Broadcast Recording in Postwar America	92
Chapter Three "A violent and persistent assault on the smooth flow of images": Television Capture as Art in the 1960s and 1970s	152
Epilogue	201
Endnotes	212
Primary Source Bibliography	240
Secondary Source Bibliography	248

Chapter Two investigates the technical and archival practice of recording radio and television audio from the home. During the 1950s and throughout the 1960s, armed with wire and reel-to-reel tape recorders purchased or handed down by family members, young male teenagers across the country captured direct line, off-air audio soundtracks of their favorite or rare programs for review. Decades later, such recordings have become key documents of the historical broadcast archive and a source of profit, philanthropy, study, and continued enjoyment for the individuals that made them. To best explore this practice, I interviewed a select group of men whose postwar broadcast recording activities have developed into archival resources over the past two decades. I delve into specifics about how they cleanly recorded broadcast audio, how they stored and reviewed their recordings, what equipment they used, and why they decided to audio record broadcast content in the first place. I supplement this discussion with a discursive analysis of advertisements for domestic audio recorders in the late 1940s through the early 1960s. Typically, such advertisements targeted young men and families and promised that their

technology could capture ephemeral moments "for posterity." Recording radio and television by placing a microphone to the speaker increasingly appeared as a sales point for many brands, but ads never encouraged direct line TV recording; as such, those who practiced direct line capture took part in a fringe activity that allowed them to negotiate broadcast liveness and scheduling in different ways than other consumers.

As television preservation became a focus of national concern in the 1980s and 1990s, these individuals sought to move their recordings from the private realm into public networks. I questioned my interview subjects on the movements of their collections and how they have become sources of archival knowledge and research in the twenty-first century. Some, like Phil Gries, chose to establish commercial libraries of recorded sound and sell access to their programs as "a partial connection and a precious link to early television broadcast history." Others opted instead to donate shows to various archives, museums, and in a few cases online nostalgia sites. And many decided to do both, forging connections among institutional, commercial, and unofficial archival domains in constructing the postwar history of American radio and television. These broadcast documents, their movements, and the individuals that recorded them, stand as significant systems of radio and television preservation that have gone largely unexamined in media history and historiography.

CHAPTER TWO

Off-Air, On Tape: Practices, Archives, and Historiographies of Domestic Audio Broadcast Recording in Postwar America

Introduction

On November 22, 1963, at approximately 1:45pm Eastern Standard Time, New York's WNBC television station initiated what would become over seventy hours of breaking news coverage on the assassination of President John F. Kennedy. Interrupting WNBC-TV's local rerun of Bachelor Father with a WNBC station ID slide and the network's color disclaimer, newscaster Don Pardo's voice sounded over the still image: "NBC Newsroom in New York: President Kennedy and Governor John Connolly of Texas have been cut down by assassin's bullets in downtown Dallas. Will repeat that: President Kennedy and Governor John Connolly of Texas have been cut down by assassin's bullets in downtown Dallas." For the next sixty-eight seconds, Pardo reported the scant details he had on the incident, and closed with, "Stay tuned to your NBC station for the later news." Pardo's voice interrupted the rerun mere seconds after the first bulletin to update the public on the Kennedy "incident," as they labeled it. Nearly seven minutes later, at 1:53:12pm Eastern time, NBC's national news team of Frank McGee, Chet Huntley and Bill Ryan assumed audio coverage for all NBC affiliates, this time voiced over an NBC network bumper slide; the bulky television cameras had yet to fully warm up and limited reporting to audio-only for all the major networks. At 1:57pm ET, NBC's cameras finally began recording full broadcast coverage of the John F. Kennedy shooting.¹

WNBC-TV's opening reportage on the assassination – the two bulletins voiced by Pardo, and the first three minutes and fifty-three seconds of NBC's national broadcast – remained lost to the network and the American public for well over three decades. The lack of available and rapid

recording systems for live, breaking news coverage meant that the network itself had no master audiovisual copies of *any* of its initial bulletins before 1:57pm.² But audio recordings of these local and national reports did exist in one private collection. Phil Gries, an avid recorder of off-the-air television content active in the 1950s and 1960s, happened to be, as he puts it, "in the right place at the right time," and switched on his Webcor reel-to-reel recorder to capture these historic television moments.³ To date, Gries's audio airchecks exist as the only known broadcast record of WNBC's coverage from 1:45pm to 1:57pm, and indeed the sole recording of live network and station television coverage of any kind prior to camera initialization near the turn of the hour. Copies of Gries's recordings, donated from his extensive TV soundtrack library, now live at the John F. Kennedy Presidential Library and Museum in Boston and the Library of Congress in Washington, D.C. Gries retains the originals, preserved in his home in Albertson, New York, from which he makes copies to sell via his Archival Television Audio, Inc. business.

This chapter explores practices of early broadcast preservation as initially enacted by individuals outside of institutionalized or industrial structures. During commercial radio's heyday, and as early as the late 1940s in television's infancy through the 1960s, individuals across the country, principally white male youths, engaged their wire recorders and captured audio content broadcasting over the airwaves. These adolescents recorded and stored a wide variety of early television and radio audio programming spanning many different genres, most prominently sports, variety programs, local news broadcasts, interview shows, network spectaculars, and breaking news events and specialty programming. The content they gathered, archived, historicized, and now donate or sell to interested patrons around the world indexes a specific history of mid-century broadcasting in America, one which, during the 1940s through the 1960s, could be found in the pages of hobby and trade magazines and in living rooms,

garages, and basements across the country. Yet such a history has only recently surfaced, in bits and pieces, within sanctioned and more informal online accounts of broadcasting history as individuals provide content long thought missing or unavailable from this period. Early pioneers of recording broadcasting, then, have become useful to History (with a capital H) to the extent that they "complete" the story of early television and radio with their rare captured content.

Phil Gries's story of being at the "right place at the right time" is but one tale reflecting the highly complex, multifarious dynamics at work when we consider non-professional attempts to record and preserve midcentury American broadcasting. For one, it's the sort of story most collectors dream of being able to tell: a mastery of skill, attentiveness, and sheer luck in acquisition over the transience and contingency that plagues nearly all collectors at some point in time. It's also a tale Gries himself has rehearsed many times in publications like the *New York Times* and the *New York Post*; in interviews on NPR and Bloomberg Radio; and in his own presentations before the Association for Recorded Sound Collections in recent years. This anecdote has, in many ways, come to define who Phil Gries is in relation to his collection as well as exemplify the payoff of collecting for many on the outside looking into this world. Others who privately recorded off-air at the time, including J. David Goldin and John Miley, herald their own "finds" by donating their materials to prominent archives and through news stories touting the significance of such recordings to American cultural history.

But Gries and his contemporaries' recording practices also illustrate a number of representational fictions that characterize such television and radio archives in the twenty-first century. One is the fantasy of complete control over broadcast ephemerality, both in historical and contemporary terms. If one individual, or several individuals acting of their own accord, managed to record such significant moments in live broadcasting, then odds are that other extant

copies of rare, live and/or "missing" segments must be out there somewhere; it's merely a matter of locating them. Moreover, such preservationist myths cast Gries and his ilk as key saviors and gatekeepers of a national televisual past seen as inherently inferior to the stored, secure present. Personal memories become strongly imbricated in this public discourse, given the lack of institutional preservation during television's first decades, and offer us personal entry into media histories an increasingly vast majority of us have never known. Indeed, the very slippage between the terms "archive" and "collection" that myself and others employ in describing the maturation of Gries's materials over time highlights the muddled authority we impart to television recorders like Gries as their compilations connote "television history" writ large.

This chapter opens up individual recorded histories of midcentury American broadcasting through a series of interviews I conducted over the phone and in person, and primary research culled from trade journals, newspapers, fan magazines, and websites run by the interview subjects themselves. Those who were available and consented to be interviewed for this project have generated a vast array of material on their recordings – conference presentations, documentaries, paper and digital catalogs, indexes, biographies of radio and TV stars, fan letters, articles and books on broadcast stars and programs – and have themselves been the subject of numerous profiles from trade magazines and popular news sources such as *The New York Times* and National Public Radio. I argue that such collections like the ones created by Phil Gries depict important histories of midcentury broadcasting not simply because they often contain rare or infrequently preserved content, but because they index a specific, widespread practice of recording broadcast programming that has gone unremarked in most academic and national histories of radio and television in America; and such collections, along with the stories that surround them and the circulations they make in public arenas, provide alternative interpretations

of television's liveness, preservation, and History as discursively constructed during the postwar era and into the present. While relatively few individuals recorded on a large scale as Gries and others did prior to the mass onset of audio-visual consumer recording devices in the late 1970s, the presence of articles and reports in local, national, and trade magazines and newspapers during the 1940s through the early 1960s indicate that recording broadcast audio content off the air was a well-known, and somewhat sanctioned, practice for many seeking to capture broadcasting in its immediacy. Interviewing those who recorded during the postwar period provides much insight into how this recording was actually done and why individuals wished to record and save a medium oft celebrated for its live expression and simultaneity in transmission. How specifically did these individuals record, catalogue, store, and archive their materials? Why did they choose to make them publicly and/or commercially available? And how does their practice of capturing radio and television, whether through personal recording or collecting others' off-air recordings, interrupt and reconfigure longstanding discourses of liveness, immediacy, preservation, and the archive for media studies? This chapter will address such questions and more by articulating these archivists' practical histories as they intersect temporally, geographically, and operationally from the earliest days of their recording – the immediate postwar period – into the present.

Postwar Recorders, High Fidelity, and Stereophonic Sound

New recording techniques and products became available to American consumers immediately following World War II. As David Morton has documented, the War saw the development and use of many new recording technologies, most of which did not survive their limited military implementation. Two that did, however, were the magnetic wire recorder and tape recording. Initially used in combat by the Armed Forces Radio Service (AFRS) and chiefly

developed for the military by the Armour Research Foundation, wire recording had the benefit of portability and durability, a relatively lightweight technology thanks to its recording medium and its use of battery power. AFRS reporters used them in combat situations and "got back news reports that had an element of 'being there' not ordinarily possible even with live broadcasting"; demand so outstripped Armour's production capabilities that the company licensed with GE to meet demand.⁸ Edward R. Murrow narrated a bombing mission over Germany on an Armour wire recorder, and his exploits, along with repeated, publicized use by the AFRS, primed the American public to covet wire recording and opened the door for a consumer recording boom in the 1950s. Armour quickly put plans into motion to license wire technology with several companies (continuing their relationship with GE) and was already underway with widespread commercialization of the consumer wire recorder when the War ended in 1945.⁹

The wire recording boom lasted from roughly 1945 to 1952. Much of the initial activity stemmed from Armour's pioneering wartime work and the licensed community of firms interested in developing magnetic recording. Marvin Camras, the principal engineer of wire recording for Armour, envisioned that his device would be a complement to radios and phonographs during this time, in that it would allow users to capture life and create their own entertainment by documenting family history and making recordings from the radio. Another wartime manufacturing firm, Brush Development Company, likewise marketed one of their first home magnetic recorders as primarily for recording radio broadcasts, supposing frequent replay. While both Brush and Armour had initial sales success with these devices, premised as home radio recorders, the sprawling cadre of licensees and their lack of dedication to wire recording soon eroded the wire empire; the postwar popularity of new media such as the LP microgroove record, high fidelity technology, and emerging tape recording applications also took

Armour and Brush by surprise. This new complex consumer market and its expectations of greater sound fidelity would not tolerate a reduced-quality, relatively expensive format when cheaper tape systems would better complement the high-fidelity craze. By the early 1950s, record stores began to stock recorded content on tape and a much greater selection of blank tape, while no pre-recorded selections appeared on wire.¹²

I mention wire recording here because one of the individuals I encountered in my research used a wire recorder to capture favored broadcasts. Evansville, IN native John Miley received a copper wire recorder from his parents in 1947, when he was sixteen years old, and he used it to record sports broadcasts for a few years before switching to a reel-to-reel tape recorder in 1957. As Miley was the only person I found who recorded in the 1940s and early 1950s, he was the only one who would have really used a wire system given the industrial timeline sketched out above: though wire recorders eked out a marketplace presence into the 1960s, 14 tape became the highly dominant consumer format for home recording by the early-to-mid 1950s. Indeed, only a fraction of Miley's huge collection consists of his wire recordings or of others' personal phonograph recordings Miley amassed later in life. A majority of it is on tape, as is true for my other research subjects.

Consumer tape recording began in the America postwar period only slightly after wire recorders launched on the market. For the at-home crowd, tape was from the beginning positioned as a medium well-suited to record broadcast content, and was at times promoted as such in newspapers and magazines. The first consumer-grade tape recorders sold in the United States were actually manufactured by Brush in 1947, and took advantage of research into coating technology to provide an ostensibly more durable record of whatever one wished to capture. A series of ads in *The Saturday Evening Post* extolled Brush's Soundmirror "Magnetic Ribbon"

recorder as providing a permanent record of audio broadcast content. Users were encouraged to connect the Soundmirror directly to their radios, as the device recorded "entire radio programs! Forget needles, record changing, expensive collecting habits. [...] Keep forever your favorite radio entertainment and the happy voices of those dear to you." The suggestion of infallible storage for whole programs likely functioned to combat the ephemerality of "live" broadcasting on the consumer side, and to insert Brush and the recording industry into the postwar entertainment landscape by aligning it with a popular, well-known domestic media form and technology. Another Brush Soundmirror ad emphasized the inexpensive, easy, durable, and instantaneous nature of their home recording system as an alternative to other kinds of domestic entertainment forms such as radio and phonography, but one still reliant on these media for content and prior consumer knowledge. The Soundmirror, it is noted, makes "permanent recordings of symphonies, speeches, comedy ... exactly as your radio plays it [...] No needles to change ... no fuss ... merely flip the switch and relax." The Magnetic Recorders Company (MRC) out of California even advertised a radio-tape recorder combination unit for sale at their stores, which featured a radio linked to the "famous" Soundmirror tape recorder to "Keep forever great moments of radio [...] instantly, easily, economically."¹⁷

Other manufacturers quickly joined Brush in producing tape recorders for the consumer market. By the early 1950s, companies such as Revere, Eicor Telectrosonic, Ampro, Ferrograph, Magnecord, and Webster developed recorders to suit a wide variety of family needs, including recording both radio and television broadcasts for personal, educational, and historic value. Eicor in early 1949 promoted their "magic magnetic device" heavily in a series of national ads designed to look like newspaper copy. "New Tape Recorder-Player Livens Home Entertainment; It's Here in Chicago, Now!" screams a headline from a *Chicago Tribune* advertisement, buoyed

by various functions of the device highlighted in featured spread throughout the page. One feature, inset immediately below the headline, trumpets the device's ability to capture a half-hour of programs from the air at "1/4 the cost of records": "Night after night, day after day, the 'radio air' is filled with the best songs, the finest music, the funniest comics, most thrilling dramas, sports, and special events. Think of it! – your choice of all this feast of radio entertainment is yours to record and play over at will on the Eicor Home Tape Recorder and Player." Provided after this is a suggested list of "the best" or "leading" program genres listeners may want to record for their "priceless library" of audio content. The Eicor's archival function, however, while promoted elsewhere on the page, is constantly mediated by mention of the device's editing and re-recording functions to reveal a deep ambivalence about tape as a viable, long-term broadcast storage medium. 18 A 1949 Revere holiday ad improved on Eicor's tape length and promised a full hour's worth of recording on one reel, enough to capture four fifteen-minute radio and television programs with "marvelous fidelity." Two years later, Webster's first Webcor recorder promised customers two hours of recording time and advocated "preserv[ing] priceless moments of family life ... historic speeches and events from radio and TV ... favorite broadcasts of music, drama, comedy and sports ... on the remarkable new Webcor Tape Recorder." With this machine, Webster-Webcor continued the publicity trend of recording radio, and now television, exactly as heard during the moment of broadcast.²⁰

The Webcor and Revere ads also tapped into the growing technological movement of high fidelity among certain consumer groups. As Keir Keightley has discussed, the term "high fidelity" in the postwar period referred to a distinct quality of sound, any sound reproduction technologies that could achieve this high quality, and the "cult" of male hobbyists who played with such machines. High fidelity was often discussed in explicitly gendered and classed terms

as a technology for middle-to-upper class white males; women in particular, *Life* magazine commented in 1953, "seldom like[d] high fidelity."²¹ Oliver Read and Walter Welch find the beginnings of amateur hi-fi interest in radio and phonography experimentation of the 1920s and 1930s, when male DXers and phonograph enthusiasts would tinker with existing systems by upgrading them to improve sound quality or dissembling machines for parts to build new apparati from scratch.²² Those who tinkered to record audio also fit smoothly into this lineage. As dedicated enthusiasts looking to capture increasingly clearer and clearer transmitted audio as proof and (literal) record of reception, DX recorders manifested concern with strong audio fidelity that carried through to wire and tape recording in the postwar period. *TV Guide* offered a further line of connection in a story on television DXers in July 1959 who sought and documented TV signals from faraway places, albeit by taking snapshots of the television screen rather than audio broadcast tapes.²³

Pleas for clean broadcast recordings from fellow amateurs in the pages of high fidelity magazines reinforce the continued commitment to high fidelity and stereo, and their linked dedication to capturing unique, cultured, and clear radio and television programs off the air. Most readers positioned their requests as petitions to the fraternity of hi fi recorders, men who could be counted on to provide a clean tape of off-air content. One enthusiast put out a call for a recording of the January 23, 1957 NBC Arturo Toscanini commemorative broadcast after writing to local and national NBC departments "without success." When faced with a conflict between hobbies, another amateur, seeking a tape of the Metropolitan broadcast of *Das Rheingold* and the Eastern Ice Yachting Championships, "collared [his] mother, told her how to operate the recorder, and went off to sail. Well, she got the first two acts and part of the third, but that was all." He asks for a tape of the last act of the Met program as well as "the last two acts for

rerecording at 7 1/2," suggesting that the second act recording his mother made was inadequate in some way.²⁵ Ralph M. Ford, Jr., from Georgetown, S.C., made another entreaty to *High Fidelity* readers in July 1956 asking for a complete recording of a TV program from earlier in the year. "Sir," his letter begins,

Someone must have had a tape recorder going during TV's "Festival of Music" on January 30, 1956. I managed to tape most of it myself, but missed the Tebaldi-Bjoerling excerpts from *La Bohème*. I would like very much to have this portion of the program at either 3 ¾ or 7 ½ ips. I am equipped to re-record or will send blank tape to anyone who would be kind enough to help me complete the program. [...] Naturally I would be glad to take care of any expenses involved.²⁶

In a follow-up published in January 1957, Ford thanked the magazine for printing his call and remarked that his solicitation garnered "letters from all over the United States and parts of Canada making the tape available to me." Ford's missives not only illustrate hobbyists' dedication to recording broadcasts off-air, but also the existence of a vibrant tape exchange community whose members swapped at least some tapes of high-quality, high-culture radio and television content during the 1950s. Some of the hobbyists I interviewed were likewise aware of these communities during the late 1950s and early 1960s, though they did not actively participate in such activities at that time.

This was the atmosphere into which my research subjects entered when they began recording broadcast audio off the air in the postwar period. By the late 1950s, manufacturers like Webcor, Revere, Sterecorder, Voice of Music, and Roberts had firmly established their recorders as high quality products at mid-range prices; even Magnecord and Ampex, companies which had initially produced professional-grade recording equipment solely for the broadcast industries, had gotten in on the consumer game, though Ampex's high prices proved a strong barrier to many hobbyists. Some brands continued to explicitly name broadcast recording as a top feature

of their machines, in particular Ampex, Bell, Newcomb, Voice of Music, and Webcor, brands heavily advertised in both mainstream and hobby publications. One Bell ad recommended "mak[ing] your own stereo tape recordings off-the-air; In this way, build a permanent tape library of outstanding music." A Voice of Music promotion included an entire TV stage setup with "Tape Recorded Puppet Plays for Family Shows!" as well as a listing of television programs to record, all-inclusive in the Tape-O-Matic stereophonic "Family Pleasure Package." Webcor likewise pitched their recorders to enthusiasts-as-family-men, in the same breath telling audiophiles that they can "Record children's voices, or finest music from TV and radio!" While no one I have encountered so far actively recorded broadcast audio for family use, the suggestion that families could participate in this hobby cemented high fidelity, stereo off-air broadcast recording as a well-known, and somewhat sanctioned, practice for many seeking to capture radio and television audio for aural experiences beyond the immediate broadcast moment.

Early Individual Recording Practices

For those collectors and archivists examined in this study, the appearance of the reel-to-reel or wire recorder in their lives marked a significant turning point in their relationship with radio and/or television. Often, the recorder was a gift bought for or handed down to the young male enthusiast by a family member; this typically occurred when he was a teenager, and actual ownership of the reel-to-reel recorder initiated enduring practices of recording favored programs off the air. Phil Gries recalls the first reel-to-reel recorder to which he had access, a Webcor Stereophonic model 210-10 1/4", as a gift to the family from his Aunt Mildred in 1958. Gries, then fifteen years old, didn't do much but "fool around" with recording television audio until the next year. As Gries explains, "I didn't tape seriously until I received my own tape recorder as a

birthday present. My sixteenth birthday I received a Webcor Stereophonic tape recorder, and then during that year, that was '59, I then seriously started to do direct line recordings from my TV, and I really escalated that process through '60, '61, '62, '63, '64, '65." J. David Goldin began capturing radio sound even earlier, receiving his own Voice of Music brand recorder on his fourteenth birthday in 1956 – "one of the first commercial tape recorders on the market," he emphasized in his account. And John Miley predates both by a decade: his parents gave him a copper-wire recorder in 1947 when he was a junior at Bosse High School, quickly igniting his passion for recording sports broadcasts off the air. The act of receiving one's own recorder marked the first step in authorizing a heretofore unknown consumer power over the flow of broadcast programming, prompting these young men to experiment with tapping into transmissions and capturing "live" content for later reconsideration.

This process of recording relied on direct access to broadcast signals sent from radio and television stations. My subjects' recorders had input jacks into which you could plug various lines, though their express purpose as domestic "toys" was simply to record one's voice using a small microphone plugged into the system, which typically came with the recording system.³⁴

Though many users simply held up a microphone to their receivers' speakers to log fuzzy transmissions – confirmed by both Gries and Jerry Immel, who both admit to using the microphone to record their first few audio transmissions³⁵ – those who wished to store sound in earnest sought to plug their recorders directly into the source of the received broadcast signals. For Goldin, "it wasn't that hard," he shrugs, explaining that his radio had an input he could easily see and access with his Voice of Music machine. Gries had a more difficult time with his family's 1949 sixteen and a half inch Andrea television. As he explains, after a brief attempt at

poorly microphoning television audio, he realized he needed access to the concealed network of wires behind the TV screen:

I took the back off the TV, which you were not supposed to do. In fear of electrocution. [...] And I took two alligator clips and put those on the lead to the speaker. The speaker wires were exposed. You take two alligator clips, attach them onto the speaker wire leads, and then let that cable go to a phono jack that goes right into the input of your tape recorder. One can get a pristine, direct line soundtrack. And that's the way I did it.³⁶

Immel, for his part, used a similar setup on his grandmother's TV set; but his first foray into direct line recording came when he asked his parents to have a visiting TV repairman install a line input into his family's combination Admiral radio/TV/phonograph unit, which to him proved a "more ideal" recording setup than alligator clips to wire leads. Regardless of the varying levels of effort, the idea to physically connect a television or radio set to a recording device distinguishes these collectors from mere dabblers at the time, and locates them as sound fidelity enthusiasts, much like those who wrote in to high fidelity hobby magazines seeking clean recordings of prized radio and television broadcasts. It also indicates a profound desire to somehow overcome the barriers of perpetual broadcast flow by directly branching it off and mineralizing it into stored, reviewable audio records.

Accessing and reconfiguring the temporality of radio and television via at-home recording often proved the whole reason why these individuals wanted to record broadcasting in the first place. John Miley explains, "I started collecting broadcasts with the idea that I would have something to do when I retired, and that would be to listen to the tons of audio that I would end up recording down through the years. It didn't take long for me to realize that others wanted to hear this too."³⁸ When asked why he recorded radio programming when he was younger, Goldin responded, "I enjoyed listening to the radio, I enjoyed making recordings, and it seemed

like the natural thing to do together." Here, dual pleasures in experiencing radio broadcasting, composed by distinct perceptions of what each experience would ultimately yield for the listener/ recorder, come together to produce excessive return: as the recorded object mineralizes liveness, it also stores the memory of both watching and capturing the program, an act which itself has potential to alter over time in a way the immediate transmission of the program cannot. What's more, the "natural" combination of these activities places storage and recording on a more even keel with contemporary discourses of liveness for these practitioners at the time. Indeed, the notion of liveness seems to bleed into at-home recording practice as individuals not only merged the pleasures of listening with recording, but also mandated physical presence for all recording sessions. Like Goldin, Phil Gries was present for nearly every program he captured. For those few times he had to miss a favorite show or network special, he enlisted his father to operate his Webcor with strict instructions to keep vigil over his technology. 40 John Miley and Jerry Immel, too, combined listening and recording with physical and temporal notions of presence in their early collecting efforts. 41 Part of the need to be with one's equipment when recording certainly pertains to accuracy and troubleshooting, but experiencing both the "live" program and the actual recording of the "live" program become part of the overall instantaneous experience of broadcasting for these individuals. Recording cannot be separated from their initial experiences of immediate transmission in radio and television broadcasting.

These early days of capturing radio and television audio proved a mostly solitary pursuit for those looking to make recording a priority in their lives. "Some of my friends teased me about it," recalls John Miley, "but I went on with it." At the time he was most active, from the end of the 1950s through half of the 1960s, Gries knew of few others who were recording television audio. "People did do some of this in the mid-fifties before me," he notes. "I have

some collections, audio airchecks, predating what I did. [... But] I have only found a handful of people in my twenty-five years, thirty-five years of searching, and it's a rare commodity." Goldin recalls buying 16" transcriptions of radio programs from an older gentleman named Alan Eichler, who ran a used record shop on 12th Street and Broadway in New York in the early 1960s. Those transcriptions, however, came from Charles Michelson, a syndicator of radio programs including *The Shadow*, who had them professionally transcribed and who only sold them to Eichler after deciding to switch to tape for distribution of his broadcasts. Wapping tapes with nearby friends and family was not a significant part of their early audio recording experiences, at least for those consulted in this chapter.

Yet tape exchange communities did form during the 1950s and 1960s in America, as evidenced by the letters sent to *High Fidelity* and tape recording magazines mentioned above; and a few of my research subjects did run across or swap through such groups during the early years of their practice. Goldin remembers the formation of a radio recording enthusiasts' club that formed in early 1963 called the Dramatic Radio Tape Exchange (DRTE). Though never a member of DRTE due to lack of desire, Goldin received a copy of their only published newsletter from acquaintances who thought his recording interests might align nicely with the group's expressed goals. The group only consisted of about twenty people, and disbanded shortly after the newsletter publication for unknown reasons. ⁴⁵ Jerry Immel joined a tape exchange club called World Tape Pals (WTP) when he was fifteen, with the hopes of receiving some audio airchecks from a few of its members. WTP was profiled in many newspapers and magazines during the 1950s and boasted more than four thousand members in sixty countries by 1959; it essentially functioned as a pen pal system that substituted tapes for letters, and members chose tape "pals" based on mutual interest as advertised in the monthly newsletter *Tape Topics*. As

Immel notes, however, TV and radio recording was something of a "specialty" that few aside from him sought or advertised for exchange.⁴⁶

While such clubs often did not serve the direct needs of those who captured off-air audio content, the mere existence of these clubs likely indicates the fleeting presence of other such bands of recorders, active in both radio and/or television recording, in different parts of the country. It also marks out shifting patterns in how individuals recorded and came together in some capacity to reflect on, exchange, and compose histories prescribed most prominently by the geography of the participants and the genres of programs recorded from radio, among many other factors. The transitoriness of such groups additionally reflects both the ephemerality of the programs they sought to capture and an inability to track broader movements of records, individual off-air recorders, and their collections at each stage of the recording and circulation process. Programs recorded on tape offered early hobbyists and collectors frozen moments of "live" broadcasting, understood here as instantaneous reception on the moment of transmission, and thus they had the ability to exchange personal moments of unique temporal co-presence with one another. What club members effectively sought was time, mineralized on tape and made available via the spatial co-presence of club meetings – themselves fleeting, impermanent moments of temporal connection. In addition, geographic location made broadcasting time potentially unexampled among exchange partners. Programming one participant had captured and made available for swapping might only have broadcast in his or her area or via local syndication, and shows that broadcast live in studios or recording booths for both coasts present the opportunity for multiple live variations of an episode to exist. In this, club members captured, reworked, and sold liveness as the basis for their program transactions during this time. While the catalog or mail-order business would alter some of these spatial dynamics, the idea of

essentially swapping frozen moments in broadcast time, and assessing rarity based on temporal conditions, would maintain across exchange platforms.

It's also worth noting that these individuals rarely trusted others to help with their recording enterprises. To the extent that they did, as Gries mentions above, generally a male family member or friend was allowed to participate. And even as Moms and Grandmas often bought or handed down their recording devices, radios, and TV sets to budding enthusiasts, women were often barred from the recording or storage area or partaking in recording activities. Gries never had his mother record anything for him. 47 Goldin recalls an even more restrictive environment around his recordings: "Back when I was fourteen, of course I lived with my folks. [...] And I had my room, which I was fortunate to have, and kept all my stuff in my room, with strict instructions to my mother: keep out. Which is a tradition that still carries on today."48 Goldin's "tradition" follows from larger social conceptions of maintaining a separate space for technological activities that often drew exclusionary boundaries within the home defined by gender. As Lynn Spigel, Keir Keightley, and others have discussed, placing new devices such as televisions and recorders in the postwar home involved a negotiation of space that reformulated domesticity around terms like "immersion" and "togetherness," competing concepts shot through with prescribed social roles and gendered values for men, women, and children alike. The notion of immersion in particular put forth home audio as a distinctly masculine realm: via immersion, technologies like hi-fi recorders and stereophonic sound systems helped boys and men develop a domestic space gendered as masculine that fought against discourses of "entrapment" produced in the wake of discussions around togetherness within the home. 49 Intriguingly, hi-fi and audio hobbies were often proposed as a way to escape the "feminine mass mediocrity" that television brought into the home. 50 Those who recorded audio off-air would seem to flaunt such neat

distinctions, but Goldin, Gries, and others set up active divisions on alternate scales of gender, space, and technology that were still used to define masculine space within the family home.

Moreover, many ads for tape recorders that showed products in use depicted primarily Caucasian families and male youths, or else referred to potential buyers with masculine pronouns and imagery, as seen in the ads discussed earlier in this chapter. The convention of a white male seated next to his reel-to-reel recorder with the latter centered or enlarged in (and beyond) the domestic space permeated advertisements from Bell and Ampex in high fidelity magazines at the time. These ads often drew associations between the aspiring male hi-fi user and elevated musical cultures quite literally, via rendered drawings of orchestras or individual musicians looming larger over the musical enthusiast. One such ad from Roberts in HiFi Review claimed the "highest standards or professional performance" for its depicted user. 51 Another, from Webster, chose a trendier route in illustrations of youthful jazz musicians surrounding a happy adolescent hobbyist. The listener is positioned below the players but is also integrated into their performance circle, a visual representation of aural immersion designed to make the music "come alive" as the enthusiast records it on tape. 52 Other times, only musicians and conductors appeared, providing an even more overt claim of aesthetic immersion directly to the reader; the Sterecorder from Sony urged readers to "Re-live Your Symphony Under the Stars" and "[j]oin the trend and discover this new world of living sound that goes beyond high fidelity [... a] fun filled way to build a fabulous stereophonic library of the worlds [sic] greatest music."53

That being said, however, we should not take this to mean that only white, middle-class aspirant males used such technologies for capturing broadcast programming at home, or even at all. Many advertisements countered such claims by depicting the "family circle" of Mother, Father, and children seated around the recorder, a position clearly evocative of togetherness

discourses advertisers used to promote household products as far back as the 1920s. Spigel has shown how this iconography permeated television print ads during the 1950s to suggest a "democratic model of family life, one in which all members shared in consumer decisions." While the father often retained a dominant position in the image composition, subtly indicating his power within the household and his control over the domestic device, ⁵⁴ many ads for audio recorders showed women interacting with the machine by loading tape onto the reels, pushing buttons, and even donning headphones to listen in a typical audiophile image. In addition, the gap between any postwar domestic technology's prescribed use and its place within various individual's lives is complicated by racial and class lines, as Shelley Nickles has explored in her study of working-class women's identity and then-prevailing notions linking economic mobility with cultural uplift. How marketers imagined their clients' products used within the postwar home as time-saving devices of "domestic elegance" – and how consumers actually utilized these products on a day-to-day basis – differed wildly and challenged the popular assumption that mass consumption and modernization naturally coincided with social assimilation. ⁵⁵

With recorders, the possibility to hand down or pawn older versions grew immensely as the wire recording market gave way to reel-to-reel recorders and as reel-to-reel technology improved over the course of the 1950s and 1960s. Thus, owning one was not necessarily a significant barrier for those with lower economic mobility or salary. The cost of buying tape, however, was fairly prohibitive: tape cartridges often ranged from \$2.10 up to \$5 for a tape with two hours of recording capacity on each side. Dave Goldin admits to re-using tape to record interviews and musical guests on late-night talk shows, not without a hint of resignation. John Miley also initially recorded sports events merely for his personal pleasure, with little thought to saving tapes for the long run. It was only when he was older, after acquiring his first reel-to-

reel recorder in 1957 and then finishing school, that he had the income and drive to become a serious collector. ⁵⁸ One possible explanation, then, for a lack of socioeconomic diversity among those who recorded broadcast programming now publicly and commercially available is the necessity of reusing tape, a practice which would have immediately shut down the possibility of preserving one's full collection of off-air recordings and made such recordings more fragile, fragmentary, and thus less desirable within contemporary institutional and commercial contexts.

Paired with this interpretation is the question of what programming has been saved or lost in off-air recording during the postwar period. Overwhelmingly, the individuals I encountered in my research were young Caucasian men, generally located on the East Coast and the Midwest; and while I don't wish to automatically ascribe certain kinds of programming to this particular group, their shows of choice and their systems for storing and organizing their collections do index certain viewing patterns along socioeconomic and gender lines. Probing these links allows us as scholars to theorize dynamic, pervasive engagements with radio and television in the postwar domestic sphere. More specifically, representations and idealized images of whiteness and masculinity present through much postwar broadcast programming likely provided comforting metaphors of stability and class mobility to those who fervently recorded audio from such shows. Sports programming in particular offered recorders the chance to capture both live moments and white masculinity in play, thereby interlinking control over broadcast liveness with established power dynamics of whiteness and maleness in the home via the reel-to-reel recorder.

What Did They Record, and How Did They Store It?

According to the Library of Congress in 2011, John Miley's off-air recordings archive represents the largest and most significant collection of sports broadcasts in America. It is "an

unparalleled body of sound," and contains, among many other thousands of recordings: all seven games of the Brooklyn Dodgers' only 1955 World Series championship; basketball player Wilt Chamberlain's one hundred-point game for Philadelphia against the Knicks in 1962; myriad calls by legendary sports broadcasters, including Red Barber, Mel Allen, Harry Caray and Marty Glickman; the two 1940s heavyweight championship fights between Billy Conn and Joe Louis; Arnold Palmer's first professional golf victory in 1955; and Sandy Koufax's first no-hitter in 1962. While Miley did not record all of these himself, he knows the men who did; their desire early on in life to capture important sports moments, and Miley's move to catalogue the presence of less-popular sports like auto racing, thoroughbred racing, hockey and tennis on radio and television and to listen to all of the recordings he made and acquired⁵⁹ indicates the significant place sports and broadcast recording held in these men's early lives.

In a great many of the sporting moments and sports genres recorded by Miley and his peers, oft-idealized depictions of masculinity – particularly white masculinity – abounded. The white male boxer, for instance, has long held a special place in public and media conversations, often constructed as heroes on the very basis of their whiteness as well as their success in transcending working-class backgrounds while maintaining their blue-collar identities. ⁶⁰

Baseball, too, especially from the segregated 1930s into the 1950s, became a site for celebrating social advancement correlated to white masculinity. As Ursula McTaggart explains, "Baseball has traditionally been linked to the 'American dream' of individual virtue, nationalism, and upward mobility. Even today, baseball lore frequently recalls the segregated era as a golden age in which Lou Gehrig, Babe Ruth, and Cy Young modeled white manhood on the field."

Baseball, whether in the Major leagues or the Negro leagues that emerged prior to integration in the 1950s, became subject to a white gaze that conditioned its presentation, style, and depiction

in the popular press – though the Negro leagues offered the opportunity to challenge, rewrite, or otherwise manipulate this gaze, ⁶¹ "there was no such thing as a radio broadcast of a black game". ⁶² While clear examples of alternate discourses of gender, race, and identity in these sports existed, as McTaggart and many others have recently brought to light, ⁶³ the presence of so many recordings in Miley's collection of historic moments in "white" sports prompts inquiry into how these recordings represent history indexed to race, class, and personal memory and power in relation to postwar broadcasting in America.

Miley's early sports recording and acquisition practice also exhibit a related desire to capture the most rare, potentially significant, and/or most "live" sports moments out of the broadcast flow for future review and preservation. The way he frames this ambition comes at the expense of prevailing discourses of liveness for postwar radio and television. As he noted in a 2006 interview, "The beauty of it is, forget about getting them now, it's listening to it tomorrow. Okay, if there wasn't a record set in the National Hockey League, I won't go get it. If there wasn't a triple overtime won on a 70-foot shot in basketball, I won't go get it. I don't waste my time taping something that I don't want." Listening to recordings again becomes an active element of the collecting and storage routine; the "now" of the broadcast moment takes a backseat to future replay and value in repeated screenings or reproductions. But worth in preservation still comes via the very condition of their initial liveness and extraordinary circumstances, captured within the stored recording and mineralized for circulation in new contexts.

John Miley was not the only research subject I found who fervently recorded sports "moments" in the 1940s, 1950s and 1960s. Far from it, in fact: almost every individual I researched or spoke with recorded sports at some point in their lives, and many bought or amassed significant sports recording collections to supplement their broadcast archives. Phil

Gries currently holds over one hundred and twenty different recordings of television audio sports broadcasts, a collection within his commercial library that focuses almost exclusively on baseball and boxing from the 1950s and 1960s. The jewel of Gries's sports collection is a recording he made of Red Barber's TV call of Roger Maris's 61st home run in 1961. Gries explains its historic value: "Everyone is aware of, and has in their collections the Phil Risutto radio call. But no one really preserved the TV call by Barber. And I just happened to be at home, and my interest was not to really look at value here – it was my own nostalgia, it was the only way to really relive these moments."65 J. David Goldin's attempts to index his off-air and transcribed recordings of radio programs from the 1920s through the 1960s contains a number of interviews, round tables, historical programs, and sports headline programs along with full sporting events, and he, like Gries and Miley, prized recordings of well-known announcers such as Bill Stern, Red Barber, and Mel Allen – the latter of whom was also valued in Goldin's collection for his work in musical programs like Benny Goodman and His Orchestra and The Saturday Night Swing Club. And Pat Rispole, a recording enthusiast out of Schenectady, New York, amassed one of the largest collections of off-air baseball audio content ever created from the years 1957-1979, principally Mets, Yankee, and Brooklyn Dodgers games.⁶⁶

Other typical genres or content recorded by those I researched include interviews and "talk" programs, musical shows and segments, awards shows, documentaries and biographies, specials, and of course breaking news content, if they were lucky enough to be by their television or radio sets to initiate recording. Some, like Miley, Wolff, and voiceover artist Jerry Immel, focused almost exclusively in one genre or category of content: Immel centered most of his activities on recording television station identification audio and sign-ons and sign-offs from stations around the country, primarily because they gave all the information about a particular

station and thus provided Immel with a way to practice DXing through television. ⁶⁷ As a DXer, Immel "listened in" and recorded stations in New York City, Boston, and Virginia, among others, from his location in Philadelphia. His reel-to-reel recordings captured the station name and call letters, its operating frequency, the announcer name, and the authorization to broadcast from the FCC, all highly ephemeral television content rendered archivable through Immel's marriage of DXing with tape recording in the postwar period. ⁶⁸ Rispole focused his attention principally on baseball and recruited people across the country to record games for him. In exchange, however, he passed along reel-to-reel tapes he had made of non-baseball and non-sports programming, often recorded at request and for the express purpose of trading. ⁶⁹

Some individuals aimed to collect and archive as much different kinds of programming as they could, keeping personal preferences attuned to unique programs, regularly scheduled content, and shows with future review and resale value. For Gries, his archive reflects his varied taste in programs he wanted to experience both "now" and afterward: "I just did it so I could listen to what I liked. That was the inspiration. So what I have is an eclectic collection of Phil Gries." Early on, J. David Goldin was partial to recording the radio science-fiction program *X Minus One*, and the children's show *Big John and Sparky* over WJZ (as he fondly notes, he has had four generations of cocker spaniel "Sparkys"), as well as political coverage of conventions and elections. But music was his first love, and he sought to extensively record radio musical programs as he listened to and integrated music appreciation into his other main hobby, collecting 78rpm records of baroque, medieval, jazz, and "race" music from the 1920s. In recording television audio, Goldin shifted his attentions slightly: he still sought Benny Goodman and other musicians in performance and interviews, but also recorded special event television and late night programs, including select episodes of both Jack Paar's and Johnny Carson's

Tonight Show engagements. He taped over the monologues from the Carson *Tonight Show*, however, and only kept the "interesting" interviews because he couldn't afford more tape to record more favored programming.⁷¹

All told, these preferences and practices illuminate personal collections formed with an express purpose of actually listening to these recordings in the future. The variety of programs captured reflects the diversity of then-current individual desires linked to intuition regarding what might be "important" to them nostalgically, historically, and politically down the line, and they generally align to dominant network and regional programming trends for these young white men growing up in the 1950s and 1960s. Yet outliers trace rich alternate paths that incite new historical insight and provide potentially powerful opportunities to open up incomplete or lost intersecting narratives within midcentury broadcast history as we currently understand it. Jerry Immel's audio sign-offs, for instance, compiled as a self-contained collection, denote a specific and exceptionally ephemeral type of content that held several important roles in early broadcasting: station identification, network and local advertising, announcer recognition, the "hook" into or out of discrete program episodes, etc. But integrated into distinct regional contexts - exemplified through Immel's donation of audio recordings to the Cleveland Classic Media website, or even when considering Immel's own collection practice in Philadelphia in the late 1950 and early 1960s – these airchecks become more firmly rooted to regional history. They mark out localized memories linked to broader imperatives of heritage preservation for areas, media, and technology regularly bypassed in official or national accounts.

Neither of these categories is mutually exclusive and should not be considered as such.

Their paths and ultimate goals, however, can deviate significantly, and attending to historical specificity in both as they converge and diverge becomes critical to the historiographer's work.

Moreover, such narratives become decidedly more complex when we consider that almost all of these collectors would go on to work in the radio and television industries as or after they recorded programs off the air. Enlisted as performers, announcers, technicians, directors of photography, engineers, and/or station managers, these individuals sought to understand the industry that had presented them with role models and motivated them to record thousands of broadcast minutes in their creation of personal collections. Their work within the radio and television industries shades another dimension to their recording activities, one that puts into sharp relief the vested interests, desires, and resources these individuals developed for their recordings as "lost" documents of a significant media era in American history.

Links to Broadcasting Industries and Early Conceptions of Preservation

Jerry Immel's collection of television audio consists of television and radio content based on the figure of the announcer and his role in communicating with the audience. Aside from his TV station sign-on and sign-off tapes, Immel personally recorded the first national telecast of the Emmy Awards in 1955 on NBC and the January 25, 1957 edition of *The Tonight Show* with Steve Allen – a rarity sought by Allen himself for his personal collection – along with a few local shows and personalities in the Philadelphia and later Cleveland areas. Most everything he captured sharply underscored the male host or telecaster's role in conveying information or guiding the action of a particular program. The ninety-minute Emmy telecast, for example, featured a six-minute introduction by a male announcer espousing the importance of television as a medium of instantaneous communication, as well as several extended comedy bits and announcements from celebrated performers George Burns, Jack Benny, and Ralph Edwards.

Much like sports players, these figures represented a path to importance and self-worth for

Immel, as they provided him with a "positive male presence" enacted through their regulation of televisual information and immediacy. In his words, "the announcers I used to sit with, they were almost like uncles. [...] And I guess I wanted to be like them." Recording their signature signoffs and hosting stints gave Immel a way to re-experience and manage the appearance of male role models in his life. It also allowed him a level of control over televisual liveness and ephemerality that peaked with his decision to pursue a career as a television announcer and voiceover artist in the 1960s through the present day. Recording postwar television audio and pursuing a career in television voice work were thus "definitely connected" in Immel's mind. 72

While Immel's story is unique in its details of seeking announcers as male role models, his pursuit of a career in television as borne from at-home broadcast recording echoes in many of the stories I heard from those who taped postwar television audio. For these individuals, capturing television audio provided a way for them to engage with television differently than most people early on in their lives. They thought of television as a medium to be studied, captured, managed, controlled, and preserved, rather than simply watched; and they did so primarily through its audio component, arguably the less revolutionary aspect of postwar television when compared to discussions surrounding visual transmission. Their initial recording activities effectively manifested desires that would soon find fulfillment in industry careers and, later, active archival practices such as digitization and donation to museums and libraries across the country. Although not all worked in sound production areas, audio engineering and performing remained a central interest for many: J. David Goldin held multiple jobs as a radio DJ, sound engineer and editor, John Miley worked briefly for KCEK radio as a play-by-play announcer for high school basketball games, and both Immel and Bob Wolff continue to pursue work as a voiceover artist and local sportscaster, respectively. Working from within the industry

opened alternate paths for recording aficionados to hone their views on audio capture as a critical preservation practice, in strong contrast to public and industrial discussions emerging around videotape in the 1960s as a medium for reuse rather than long-term program retention.⁷³

Intriguingly, the period of recording broadcast audio and the onset of a career in broadcasting often existed as two separate moments in time, even as both clearly influenced or drew from each other. Both Phil Gries and Jerry Immel stopped recording once their careers took off – Gries in the late 1960s, Immel around 1959 – but kept their tapes and their original equipment as both a reminder and promise of the hobby that had tied them to their work interests in the first place. Immel explains that he stopped recording and exchanging tapes "because I began my own career in the 1960s and then, you know, then I went to college and so I didn't really have time for that kind of thing anymore." Yet working at WEWS in Cleveland as a TV booth announcer during the summers of 1966 and 1967 put Immel side by side with the people he had grown up idolizing and taping on his Webcor and Ampro recorders. As he puts it, this job made him "like them now" as he got to know them in "a certain professional way," and reinforced his original dedication to capturing their sign-offs over the air.⁷⁴

For Gries, the combination of school, work, and the disappearance of program genres he enjoyed watching made the prospect of recording audio off-air less appealing and stimulating to him. "I recorded primarily late fifties, through 1968," Gries recalls, "A big gap after I went to UCLA; I stopped recording from approximately '66 through the beginning of '68, middle of '68. Then I continued for a couple of years and then I basically stopped, for all intents and purposes." Shortly thereafter, Gries went on to start a career in cinematography and did not really have time to record television audio with the same "selective" commitment he had given to his collection up to this point. Moreover, certain kinds of programs he particularly enjoyed recording, such as

live variety and interview programs like the *Bell Telephone Hour* and *DuPont Show of the Week*, no longer regularly featured on network schedules by the late 1960s. Gries explains of his predilection for television from the late 1950s through the mid-1960s: "There were great writers in those days, you had live presentations. It was more raw, it was more of an experimental time. It was less formula, it was less of a restrictive media, and I really look back with great fondness to early television [...]." Gries' characterization of television at this time as "raw" and "experimental" clearly marks out a specific sense of nostalgia tied to his recording practice as a youth enterprise. Echoing the common refrain of the nostalgic, i.e. "things were better then," Gries ties this logic and depiction of early television to his adolescent dedication to taping broadcast audio, in the process setting up his recording period as special and distinct from both his work and most television programming that would follow.

For others, recording broadcast audio surfaced as an alternative to a desired but unattainable career path in the television and radio industries. John Miley "secretly always wanted to be the guy talking into the mike, not the guy listening" to sports broadcasts. After spending most of the 1950s recording sports events for "personal pleasure, with no thought to saving the tapes" – and with little time to record while attending school at West Point and the University of Oklahoma – Miley finally commenced recording in earnest after a particularly successful acquisition of a college football game from a local radio station in Baton Rouge. Around the same time, Miley began to experiment with broadcast announcing, voluntarily calling play-by-play for Permian High School's basketball and football teams in Odessa, Texas, and hosting a nightly radio program of sports commentary and game highlights. Miley did not seriously pursue sports announcing as a career or volunteer job after his Odessa run; while

to the top" of the sports announcing profession.⁷⁹ By the mid-1960s Miley had definitively made a choice to separate his recording hobby from his career in business and petroleum engineering. This split lasted at least until 1990, when he began The Miley Collection as a side business to license and sell sports recordings to interested parties via catalogue.⁸⁰

Through recording and collecting, Miley found a different way to express his passion for sports broadcasting that, like Immel's station sign-off archive, idealized the announcer's role in structuring and guiding the live broadcast event. The Miley Collection as a whole represents a specific, extended mode of active participation in live sports telecasts to capture live "moments" with potential historical value as taped documents. Though Miley did not immediately anticipate archiving his recordings – as he says, "I began recording things not with the idea that I was going to save them. [...] I thought I might just want to listen to them again tomorrow or the next day."

- the initial move to record programming predicated so heavily on liveness for its relative effect made Miley's recording hobby a unique yet prescient complement to dominant industrial discourses on sports as a live TV genre, or using tape simply for time shifting to the West Coast. Miley's work thus anticipated an industrial research-archive function that would later become standard for sports networks and would allow Miley a second career as a sports historian and broadcast archivist in the later decades of his life.

Though often enacted separately from their recording activities, these individuals still viewed their media careers and jobs as part of a larger desire to engage with broadcasting beyond the moment of scheduled transmission. Both at-home recording and industrial production offered distinct outlets for managing content that invited recognition of television and radio as more than simply live, ephemeral media taken on its own terms; in engineering and performing, as in recording, broadcasting became more attainable, malleable, pushing sole focus away from its

present-ness yet also underscoring that sense of immediacy as the purpose which all of this work served and the center around which all these activities operated. Working within the industry realized these alternate perceptions of "live" broadcasting in different ways, depending on the position and the type of content created and performed over the air.

But for most of these hobbyists, the allure of experiencing broadcasts beyond terms of immediacy and ephemerality started and ended with capturing audio off the air. What began as a simple exercise to listen to content shortly after transmission developed over time as a full-blown conservancy project, with hobbyists becoming archivists over collections initially defined by their rogue, amateur origins as personal documents of a highly transient media form. These practitioners led the way in rewriting broadcast history and historiography not only through their early recording activities, but also in their later efforts to include amateur audio recordings as indispensable documents of the television and radio archive. In this, the contemporary preservative ethos of Immel, Gries, Miley, and others positions them as active agents in the continual construction of the historical record. Their recent acquisitions of other amateur broadcast recordings, creation of licensing businesses to sell captured audio, and donation of sound files to national libraries and museums have turned such recordings into sanctioned evidence of American Cultural History and of spirited broadcast experiences that question assumed boundaries in critical hierarchies of aurality/visuality and live/"canned" content.

Networks of Collection and Exchange

As noted above, by the late 1960s, most enthusiasts had stopped recording audio content off-air to pursue careers and other interests. The slow rise of consumer videotape recording technologies and, later, the rise of commercial home video also pushed their interest away from

recording as a unique hobby vis-à-vis broadcasting. Though domestic audiovisual recording devices were available to Americans as early as 1963, with the introduction of Ampex's \$30,000, nine-foot-long, nine-hundred pound *Signature V* home entertainment center in Neiman-Marcus's 1963 Christmas catalogue, the concept of at-home AV recording did not take off until Sony's massively successful introduction of the Betamax videocassette recorder (VCR) system in 1975. Prior to the Betamax, manufacturers and critics initially imagined home video technologies as useful for recording television off the air for home playback, much like audio recording enthusiasts; the first goal was time-shifting rather than archival preservation of television's "best" content. Audiophiles' deep concern with fidelity, however, did not appear to figure in to early conceptions of personal audiovisual recording at all.

Many audiophiles did not view their recordings as archival documents until after they stopped recording and once they began actively seeking other high-quality, rare, off-air recordings to add to their collections (generally in the late 1970s). This later period roughly coincides with the mass commercial acceptance of audiovisual recording devices in consumer homes, promoted as technologies allowing users to manage television according to their own schedules rather than resign themselves to the dictates of televisual flow. Such systems were not initially promoted for their ability to archive or preserve programs according to strong standards of precision or clarity. In fact, Sony Betamax's main competitor and the ultimate victor in the AV format wars came from the Japan Victor Company's Video Home System (VHS), a magnetic tape format that could not record as clearly or cleanly as Betamax but boasted twice as much recording time from their cartridges. Though Sony tried to introduce a two-hour "Betastack" tape changer in 1977, RCA's adoption of VHS and their implementation of a half-speed recorder that could capture up to four hours of content made the device more appealing for

consumers looking to get their money's worth from these new technologies. Early videophile communities did have some appreciation of quality in tape recording, but according to Joshua Greenberg, their idea of a "clean" copy often spoke to prowess in editing out commercials and other unwanted interstitial material rather than signal clarity and fidelity. Those who did record for archival purposes generally included commercials as markers of originality and temporal authenticity, though this was evidently not the norm for most collectors during this period. Sa

Both audio recorders and videophiles began to form social connections in the 1970s and 1980s that strongly validated an individual's work in recording content off the air. For videophiles, tinkering with or "hacking" their video systems and sharing the results with fellow enthusiasts altered both the technical and sociocultural basis of video recording during this time.⁸⁴ In the pages of tape exchange pamphlets like *The Videophile's Newsletter*, for example, members debated over the best ways to bypass certain locked features of the Betamax recorder to better access and monitor television content; their discussions demonstrated sophisticated knowledge of both early recording systems and television networks, as well as the sociotechnical context underlying normative experiences of television broadcasting and how to subvert it in small but meaningful ways.85 Those who audio recorded broadcasting formed a slightly different sense of community then seen in this "hacktivist" culture. For them, an appreciation of the work involved in capturing audio off-air came years or even decades later than the initial recording act, as hobbyists know of few others at the time who might acknowledge or even understand their personal labor and dedication to this practice. Jerry Immel never considered his tape exchanges with members of World Tape Pals a community-forming experience, and indeed only kept in contact with one member beyond his early recording days due to that member's ability to exchange with him off-air high-quality audio recordings. 86 Phil Gries notes that he met a

"handful" of people who audio recorded television only in the years after he stopped taping. It was a "rare commodity" for him to find *anyone* who directly recorded postwar television audio and actually held onto the tapes. ⁸⁷ Undoubtedly, there were some networks of individuals who audio recorded broadcast content, as evidenced by reader responses to letters of inquiry printed in audio enthusiast magazines mentioned earlier in this chapter. But they did not, at this early stage, constitute communities in the same sense as DX-ers or early videophile groups: to follow Anthony Cohen's logic, as few enthusiasts seemed to consider themselves part of any larger group or collective of broadcast audio recorders, the use of the word "community" is not here occasioned by any desire or need to express such a distinction. ⁸⁸

The networks of exchange that would follow, however, helped shift the terms of these recordings away from personal, amateur associations and towards their potential value in commercial and archival markets. In locating others who had recorded off-air and saved their tapes, collectors began to understand their materials as consequential beyond individual nostalgia and solitary listening experiences. Tape dubbing became a vital part of this mental and social adjustment: though the potential for reproducing these recordings had always existed, most recorders did not begin to actually dub tapes until they found others looking to physically own copies of broadcasts. Recordings most likely unique in their documentation of singular broadcast audio moments became essentially reproducible, and exponentially repeatable, as owners copied them for exchange across the country. Reproducibility enabled a sense of community to begin forming among these collectors as they sought, sold, and swapped programming, and individuals could own a slice of televisual liveness signifying an entire broadcast history and production practice long thought lost to the ether – though materialized only in part via sound recording. In acquiring these captured moments of live or immediate transmission, buyers tied a vital angle of

sonic remediation to developing television and radio historiographies, whereby the desire to multiply these moments for others to experience *and* keep them unique in their evocation of televisual or radio liveness marked out crucial limits of these histories as they materialized in the late 1970s and 1980s.⁸⁹

One of the first stories published on John Miley and his affinity for recording sports programs inadvertently rewrote the ambition and direction of Miley's practice from personal use to national exchange and archival development. In a 1977 issue of *The Sporting News*, distributed nationally and one of the major news outlets at the time for baseball enthusiasts, a profile of Miley's collection concluded by providing interested readers with contact information to join the "John Miley tape network" to obtain and exchange recordings of sports broadcasts among fellow enthusiasts. This was welcome news to sports fans, many of whom offered their services and their broadcasts in exchange for recordings from Miley's collection. Amusingly, it was also news to John Miley. "I didn't know I had a tape network," he confessed in a later piece in the Library of Congress Gazette. Yet he quickly realized the potential of such an arrangement when he began receiving as many as a dozen boxes of cassettes each week. Miley began soliciting sports broadcasts from these newfound colleagues in different markets and time zones, passing along tapes, envelopes and postage to develop his collection geographically as well as materially. Miley's network and collection grew significantly into the 1980s, aided by Miley's own desire to purchase other collections without homes or any substantial claims of ownership. One acquisition in particular, a collection of 2,500 7-inch boxes of tape from Schenectady, NY, part of Pat Rispole's extensive sports audio library, provided an abundance of sports history's greatest moments preserved on tape, including every World Series game from 1957 to 1979 and Jim Bunning's perfect game on June 21, 1964. It also yielded discoveries that wouldn't become

York Mets in 1966 featured Nolan Ryan's first major league strikeout, a pitcher not well-known at the time but who would go on to throw more no-hitters and more strikeouts than any one else in major league history. According to Miley, "there was nothing in the game I would have thought to save" at the time, but the tape remained with all the others in his basement, storing live sports moments with ever-changing potential for "reactivation" when revisited later for contemporary historical value.⁹⁰

Miley was hardly alone in his desire to buy from and exchange materials with fellow audio recorders. Both J. David Goldin and Phil Gries credit acquisition of other collections with enlarging their repositories immensely, in Gries' case expanding his library from his original nine hundred or so titles to the fifteen or twenty thousand currently comprising his archive.

Unlike Miley, who sought recordings of sports programming from early and current decades, Gries primarily chased down recordings from the fifties and sixties, or even earlier if available. He procured titles by trade and/or sale, as the handful of broadcast audio enthusiasts he encountered in later decades found themselves unable or unwilling to continue managing their materials. In a few cases, says Gries, "I've purchased some archives in the tens of thousands of dollars in order for it to be in my collection." J. David Goldin estimates he's spent in the neighborhood of "hundreds of thousands of dollars obtaining and archiving broadcasts." He was able to make some recordings while working as an engineer at CBS and NBC in the 1960s and 1970s, but acquired the bulk of his 95,000 radio programs and television sound recordings from the 1970s on through exchange and purchase with fellow enthusiasts and professionals.

Over time, acquisition through second- or third-party interests became more common and more fruitful, as the original practitioner passed away and potentially valuable recordings

changed hands in estate sales or rare record shops. Both Gries and Goldin recount definitive tales of locating and buying collections that yielded rare treasures not available elsewhere. Gries's purchase of a huge crate of materials out of Los Angeles in the 1990s revealed several television airchecks from 1956 to 1979, as well as a nearly complete series of the live KFI-Los Angeles jazz radio series Scott's Place (1970-1972) inaccessible beyond its initial run; his research into this live series and its incredible range of famous guest stars in jazz and broadcasting, including Dave Garroway, Woody Herman, Stan Kenton, Vic Damone, and Duke Ellington, led Gries to realize that "there was great value and historic importance to these shows" that had not been historically excavated up to that point in time. Gries would go on to present his research on this material at the Association of Recorded Sound Collections national conference in 2011. 93 Goldin procured a rather large set of sixteen-inch black-glass disk recordings from a dealer in 1992 that turned out to contain the first radio bulletins of the attack on Pearl Harbor. The initial practitioner, a man named Robert Dixon, mainly recorded national network broadcasts during the 1930s and 1940s from his home, an incredibly rare pastime given that most stations and the networks did not then record and preserve their programming as it aired. Goldin suspects that Dixon was in all likelihood "a professional [engineer]. He knew what he was doing. And if he was an amateur, he never would have used 16-inch discs. He was an audiophile way before his time." Goldin's attempts to characterize or "read" Dixon through his collection suggests a desire to connect with fellow enthusiasts in a way he had not been able to in his prime recording days. "Whoever Robert Dixon was," he muses, "gee, I'd love to know. Who was he and why in heck did he record these things? God bless him."94

All of these examples evidence a second phase for these individuals and their materials: they represent a shift into a mode of accumulation and preservation, largely initiated after the

first round of off-air recording enacted in the 1950s and 1960s. Though some, like Goldin and Miley, continued to capture broadcast audio in later decades – and Goldin sought to buy or exchange for master copies of radio and television programs as early as the first years of the 1960s⁹⁵ – nearly all who had recorded began to seriously consider the historical and future value of their tapes around the last quarter of the century. What follows is a general move away from active negotiation with "live" broadcasts and into maintenance of stored televisual liveness through proper preservation techniques. No more stacking tapes haphazardly in the basement or stashing them underneath a bed, away from prying eyes; through networks of exchange and purchase, recordings became properly archival, as practitioners increasingly pursued them for their rarity, scope, and worth in commercial and nonprofit markets. In turn, Gries, Goldin, and others began positioning themselves as broadcast historians and vital contributors to the historiographical and memorial narrative of America radio and television. Goldin's selfappointed nickname, "The Man Who Saved Radio," indexes a particular desire for his recordings and his story to be linked to the recovered history of radio's early decades, as does John Miley labeling his sports broadcasting library The Miley Collection. In order to achieve this, these individuals first had to develop public awareness of their archives and their dedication to broadcast preservation. This represents a third phase in the history of these historians and their materials in which individuals seek to enact public presences for their recordings and for their stories in capturing, gathering, and preserving them through commercial and donation activities.

Public Presences I: Commercial Archives

J. David Goldin began perhaps earlier than anyone to make his recordings known to the public at large. As a radio DJ on the college station WNYU in the early 1960s, Goldin hosted an

evening program called "Radio Yesteryear" devoted to playing recordings from his small but growing library. He jokes that his audience rarely broke into the double digits, but shows that he had recorded or acquired were nonetheless broadcast every week, re-launched and curated as curious fragments of nostalgia stitched into the flow of NYU's burgeoning experimental music and protest community. ⁹⁶ Though the program did not last long, as Goldin soon pursued hosting and engineer opportunities in Alaska, his interest in making his recordings and collected radio transcriptions public led him to develop a mail order version of Radio Yesteryear a few years later. Goldin claims no knowledge of anyone else selling radio programs to the public at the time; media historian Marvin R. Bensman has labeled him "the first aggressively marketed private seller of radio programs" in the country. 97 Goldin initially focused his inventory on the popular series he himself had recorded, which included nearly two thousand programs out of the three-to-four thousand radio programs and segments he had captured off-air up to that time. He advertised his business in hi-fi magazines and in *Popular Mechanics* before developing a catalogue around 1965-1967 to send out via his mailing list. He eventually amassed between one and two thousand names on the list and incorporated the company in 1967. At the same time, Goldin started producing record albums of old radio shows with labels like Dot-Decca, Viva, and Columbia. His second project, a compilation of theme songs from ninety famous programs called "Themes Like Old Times" (1969), rose to #23 on Variety's LP record sales chart. Subsequent projects helmed by Goldin garnered him a series of Grammy nominations in the 1970s and one win in 1981. He moved these projects to his own record label in 1970 after threatening litigation over unpaid royalties from his first few releases: Radiola Records produced nearly two hundred LPs of vintage radio programs over the next fifteen years before ceasing operations in 1985.98

Goldin's exhaustive commercial activities in the 1960s and 1970s align with a move around this time to assess and codify preceding decades, particularly the postwar era, as meaningful in the then-contemporary moment. Broadcasting and especially television became a key part of this project: as "cultural critics and the culture industries plumbed the recent past for significance," notes Derek Kompare, "television – so emblematic of the American century – was a potentially fertile source for reflection on the post-Second World War era. Accordingly, the stars, characters, and programmes of past television were legitimated at this time into the television heritage, the connection of television and American cultural memory." He argues that the industrial rise of syndicated reruns of older programs on local and national stations made the televisual past both "highly visible" and "highly profitable," conferring value on certain shows as they aged into a landscape that commodified them in a multitude of ways. 99 Baby boomers' strong consuming impulses led this charge into the 1980s, when they accounted for more than twenty-eight percent of the population and were responsible for half of all U.S. personal income. 100 Their desire to see beloved television shows of their youth led them to spend money on a variety of television products and tune in to the channels and new nostalgia networks like Nick at Nite airing themed flows of postwar broadcast programming. At the same time, personal modes of collecting and commodifying television, particularly those captivated by the desire to possess or capture "live" programs from this early period, led more and more Boomers to seek out others who could sell them shows of their past unsuitable, incomplete, or simply unavailable in reruns or on home video. As Lynn Spigel argues, the mainstreaming of VCR and cassette formats by the mid-1980s contributed to an increase of people "arrang[ing] their own TV archives in what might be called a new practice of 'Do-It-Yourself' TV history." ¹⁰¹

Both Phil Gries and John Miley initiated commercial endeavors with their off-air television audio recordings at this time. In 1987, after visiting The Museum of Broadcasting in New York (now the Paley Center for Media) for what he thought would be purely recreational reasons, Gries realized that hundreds of represented soundtracks in his collection were described by the museum as "lost" to American television history. He quickly developed plans to donate materials to media archives, museums, and universities, and also initiated research protocols collating information on his airchecks for the development of a commercial audio library. Gries formally incorporated his business in 1989 as Collector's Choice Archival Television Audio and made his first sale in 1990. 102 That same year, Miley founded a company to sell compact discs (CDs) of his sports tapes to interested clients and named it, simply, The Miley Collection. Intriguingly, prior to this Miley would not accept money from those who solicited materials from his highly organized library; those patrons generally consisted of national sports commentators looking for clips to include on highlight reels. Miley's development of a formal business out of his recordings sought to identify a wider audience for his materials, demanding more time and resources from him and thus mandating a stronger pay structure. 103

The use of terms like "collection" and "archive" in these names reflects another attempt to woo mainstream customers to businesses established on materials at once exponentially valuable and strikingly obscure. Recordings like the first network Kennedy assassination bulletin or early "lost" episodes of *The Tonight Show Starring Steve Allen* hold a fairly high valuation in rarity alone, but in what contexts are they financially profitable for their owners, and to whom? Moreover, for how many patrons are tapes of 1950s local children's shows, community college sporting events, announcer sign-offs, awards shows, and other programming that often comprise personal collections actually worth procuring for money? Many, many recordings in libraries

like Gries's hold little distinction or desirability beyond a tight group of aficionados; figuring out what to include in business catalogs and mailing lists could help present the business as a more coherent, focused entity geared towards specific needs, as Goldin did in paring down his early Radio Yesteryear indexes and Miley also did in crafting a separate mailing list and register for his baseball recordings. This is also one main reason why, according to Gries, he has not more recently digitized all of his titles onto his online database. As he explains, "Everything that I recorded, that I have wanted to let the public know, is online. [...] The goal is to digitize as the requests come in. It's too much of an effort and task to do everything, and why do everything if some of these things will never be of interest to anyone? So that would be the criterion, and then be able to put *everything* online [after...]." Using monikers that confer prominence, authority, and professionalism to a body of personal materials and a practice often decried as "irrational" further enabled these custodians to begin delimiting and identifying a wider base for sale of their tapes to the general public.

These archives also relied on authorship as financial and cultural currency in other ways. As businesses, they were all built around the story – elemental to preservationist discourses surrounding television in the 1980s and 1990s – of the individual who had the foresight to record and save ephemeral broadcast programming for posterity. This mythology flourished when news features on these unique businesses began to circulate, putting Gries, Goldin, Miley, and others at the epicenter of the narrative on why such commercial endeavors were worthwhile decades removed from the broadcast eras they represented. Indeed, in most cases these individuals *were* the story and defined the basis on which recording sales from entities beyond the networks and Hollywood could be justified. In one story on Gries from the *New York Daily News*, his business is not even mentioned until the final paragraph of the story. The first several praise Gries's

sagacity in audio recording television programs that would otherwise be lost to time, erosion, and/or erasure, and even detail the history of his recording practice along with titles culled from his vast collection. When the business is discussed, the journalist carefully emphasizes the personal labor involved in its creation and maintenance, and closes with a quote from Gries that implicitly endorses its commercialism as borne of passion over financial gain: "My main interest [in making the tapes] was that I had no other way of watching these shows [again]. I loved watching them and I wanted to be able to listen again. I did it out of love." ¹⁰⁶ Another feature, this one on John Miley, crafts a Derridean narrative of archival pursuit and destruction in which the intrepid collector continually fights to accumulate "as many (audio) records as possible" – "Every night there are more games. Every day, more tapes." – weighed against the impossibility of total and complete preservation. Miley's impressive method of capture has fifteen reel-to-reel variable-speed recorders tuned to as many games as possible for his customers, but his efforts will never yield a complete record. "How many games am I discarding today that sometime in the future will be something I'll be sorry that I discarded?" Miley laments. "But I can't keep everything. I don't have the room." The heavy undercurrent of this story is that buying Miley's CDs endorses this kind of preservation and validates his ongoing creation of a sports broadcast audio archive he will regularly cycle back into the commercial market.

These news stories played a key role in shaping the early development of these businesses as sole creations of the individuals who recorded their earliest holdings. Prior to widespread Internet use, these features, along with print advertisements, newsletter and catalogue circulation, and word-of-mouth, remained the primary means of promoting these uncommon operations to the general public. Reports in bigger publications like *USA Today* or *New York Daily News* could open this work to potentially hundreds of thousands of new customers, even if

realistically only a handful ever queried about or purchased something. News articles also had the latent benefit of providing evidence of a business's longevity and success in consumer sales. Nearly every individual I spoke to had collected and preserved newspaper and magazine clippings of their commercial efforts; later, some would place story headlines prominently on company websites or link to them as unwavering testimony to the commercial library's (and the individual's) earned place in both business and preservation circles. Such efforts indexed a strong desire to enmesh personal recordings with, or mark them as always already, professional archives in the sense that they did a job our post-1970s heritage-obsessed society actively sought and constructed for cultural validation. Where public or sanctioned institutions had failed, the tale goes, these people succeeded, bringing us "lost" television and radio against dreadful odds and previous social stigma. This is a powerful narrative of personal triumph and one that undoubtedly captured the attention and (financial) support of many for whom broadcast history organized and powered their ideal nostalgic construct.

The use of digitization tools has enhanced the strength and visibility of this narrative for some off-air audio broadcast businesses, even as their archives and practices have become more collaborative by necessity. Gries's website design for Archival Television Audio relies heavily on the figure of Gries as authority over an unparalleled body of work he created and nurtured. Links touting personal interviews via Bloomberg Radio, profiles on NPR, national newspaper articles, conference presentations, and Guinness World Record accreditation crowd the sides; almost every interview featured on the homepage profiles Gries, and they all start with the phrase "Hear Phil Gries on..." These headings immediately signal decisive support for the Gries business from fairly influential cultural and media sources. Such a design actively reinforces the credibility of the archive while still allowing for a moderately low-budget aesthetic connoting the

homemade origins of these recordings. Moreover, these still images and transcriptions partially construct some of the missing visuality of the audio archive, set according to highly prescribed categories and narratives of celebrity status, taste, preservation, and scale. The ATA website, then, imparts to Gries archival authority in a number of ways and strongly identifies it as a unique product of Phil Gries, by Phil Gries, now available for public purchase in convenient digital form – even as persistent references to "we" throughout the site, and a closer look at the company's timeline, reveal the work of several individuals over many years rather than just one lone recorder/ collector/archivist doing it all. ¹⁰⁸ Though all of this information is readily available on the website, the story of the archive is not in its collaborative business efforts. Gries reveals as much when he calls his operation "primarily a one-man band" and reveals plans over the next few years to put his full time into the company when he retires. ¹⁰⁹ This narrative also partly defines Miley's work in his sports collection; though his website is sparse, Miley is listed as the main contact point and the site links to two features about the Collection, both of which focus on Miley's role in recording, preserving, and selling it. ¹¹⁰

The flip side of this prominence is the near-complete erasure of the individual recording enthusiast's contribution to a commercial archive. J. David Goldin sold many of his master tapes of off-air radio programs to a company called Radio Spirits, which operates primarily online and through mail-order catalogs. Billed as "the leading publisher and marketer of classic 'old time' radio programs," their mission is "to preserve and popularize radio entertainment, from every era, keeping it alive and available to audiences today." Their commercial angle on enacting a living history of radio omits completely the contributions of countless individuals who recorded, collected, and preserved their tapes so that this history could "live again" in the present. Neither the website nor any of the catalogs I was sent over a year-long period reference Goldin's

contribution to their holdings. Indeed, their entire history of content acquisition is unavailable except by personal inquiry, which may or may not yield any substantive or accurate information. The provenance of these recordings seems only important for identifying a program as of the Golden Age of radio, established on their site as the 1930s to the 1960s. Any other sense of a recording's origin is irrelevant since it provides no distinct commercial value for these retailers given their professed objective. A similar situation befell off-air recording enthusiast Charlie Danrick, who recorded numerous baseball games from radio from the 1950s on but ran afoul of the Major League Baseball organization when he sought to sell copies of his recordings in the 1980s. 112 Danrick obtained licensing permission from the MLB to sell through a variety of bigger online retailers and MLB.com in the early-to-mid 2000s, operating through their protocols of sales and commercial exchange before finally gaining control from the MLB to peddle his recordings through his own online business Danrick Enterprises in 2008. 113

The cases of Gries, Goldin, and Danrick represent different ends in a deep spectrum of visibility and utility for personal archives when incorporated into larger institutions of public commerce. These individual records and the media histories they chronicle have the ability to become valuable through the personality of the creator, but at times a collection's idiosyncrasy requires subsumption in favor of adherence to dominant sociocultural discourses of American commercialism, temporal provenance, and institutionality in the archive. Personal holdings also become useful as a sellable product of public history through their digitization into such discourses: as Marlene Manoff argues, "Digital technology creates an appetite as well as a market for the historical objects it delivers and recontextualizes. [... It] provides access to selected artifacts of the past, both scholarly and popular, ordered and contextualized by producers and distributors." The sheer accumulation of materials allowed by the mass onset of

digital storage alone has encouraged transfers and sales of media across many registers of desirability and need. Yet Manoff notes that "Digitization does not lead in any simple or straightforward way to the democratization of knowledge," as these cases illustrate.¹¹⁴

This becomes especially evident when examining recording enthusiasts' donations to libraries, national and regional archives, and museums across the country. While similar queries of historiographical power and authorship arise when these registers become "officially" archival via institutions like The Library of Congress and university annals, the narratives of personal achievement, ephemerality, and "living history" made for sale in purely commercial realms become somewhat differently oriented in beneficence contexts. Such voluntary and solicited donations reveal the growing acceptance of amateur recording as vital to histories of highly ephemeral media at both national and local levels – but with important caveats regarding how they are narratively positioned within official institutional contexts of preservation, access, and historiography. That these histories are themselves strongly ephemeral underscores the relative rarity and importance of such collections to fostering more complex understandings of midcentury broadcast culture that typify and scale contemporary media historiography and television and radio archival history in America.

Public Presences II: Donations

By the mid-2000s, John Miley had seriously started to consider the future of his rare sports recordings collection. He had taped and accumulated thousands upon thousands of hours of live programming, sought by many across the country, but his children didn't seem interested in running The Miley Collection or maintaining its records at all. "Before I pass away," he told the *New York Times* in 2006, "I need to find the proper home for my collection." Miley's

statement caught the attention of the Head of Library Services for the Library of Congress,

Deanna Marcum, who initiated acquisition protocols resulting in the 2011 donation of more than
6,000 recordings from Miley's vast archive – at the time one of the largest donations of sports

materials ever gifted to the Library. For Miley, the Library of Congress presented the ideal home
for his recordings because they could ostensibly preserve them "forever" and fully open them to
public access, devoid of any commercial strings. Unfettered entrée to history via his tapes, he
explains, was "the main reason I like that the collection is going to the Library of Congress.

Someday all of my stuff will be accessible on the Internet, and that just thrills me to death. Not
only do I have a place for it forever, but I also have the ability to share it with other people." 116

Though Miley's characterization of his collection as eternally preservable and always available via the Internet rings fairly utopian, his statement – and the Library's patient wooing of the well-stored collection over a four-plus-year period – reveal a mutual understanding of the Library's commitment to personal off-air broadcast recordings as sanctioned evidence of American Cultural History. Indeed, many state and national repositories have eagerly accepted or solicited such materials to supplement broadcast archives perpetually thin on audio/visual pre-and postwar documents. Gries has generously given copies of his most famous and rarest recordings to archives since the 1980s, including the Library of Congress, the Paley Center, UCLA Film and Television Archive, Museum of Broadcast Communications, Library of American Broadcasting, National Public Broadcasting Archives, and the Center for American History at The University of Texas at Austin.¹¹⁷ Goldin passed along several of his original recordings to the National Archives and Records Administration (NARA) in the 1970s; since 1994, Goldin has also donated over ten thousand original transcription discs to the Marr Sound Archives in the Miller Nichols Library at the University of Missouri-Kansas City.¹¹⁸ The

increasing acceptance of such materials within institutions sanctioned to preserve History suggests that these personal recordings have recently become authoritative in new ways, legitimated as authentic, accredited *sources* for television heritage as well as articulations of that heritage in our post-1970s preservationist culture. Inducted into modern archival systems, off-air broadcast recordings reflect changing power dynamics and political aims revolving around technologies of filing and the apparatus of the broadcast archive itself as it struggles to accommodate for a history that it earlier failed to document or had little interest in saving. ¹¹⁹

How these institutions use and present personal off-air recordings as evidence of American Broadcasting History invites reflection on the complex grids of inclusion, availability, scope, and jurisdiction that traverse preservation at all levels of the archival apparatus. Most document an individual's contribution by naming the collection or a subset of it after him, as in The J. David Goldin Collection at the Marr Sound Archives at the University of Missouri-Kansas City. News stories or press releases announcing the acquisition follow, incorporating a biography of the donor and a brief discussion of their unusual practice of capturing audio off-air. Miley's donation of materials to the Library of Congress was superseded by a lengthy piece in the Library's *Gazette*, a weekly publication for staff, in which the writer details Miley's early years of wire recording and the development of his vast tape network in the 1980s and 1990s; the author also emphasizes why the Library was the right place for this particular collection when noting that even those not interested in sports "sensed the significance of Miley's collection," implying that the only appropriate place for this impressive assemblage was an institution like the Library equipped to house, preserve, and share it with the world. 120 Boundless storage facilities and easy public access also frequently emerge in such accounts as the inevitable payoff of a large institution's procurement of personal audio recordings. While a small operation like

Gries's Archival Television Audio struggles to copy and digitize even half of its holdings, it's assumed that the Paley Center or National Public Broadcasting Archives have resources that will both protect and make publicly available such records for all time.

In many cases, however, larger institutions face their own barriers in preserving and making publicly accessible personal collections, and fail to deliver on these counts as emphatically as promised. The "dozen or so" large museums to which Gries has donated house labyrinthine cataloguing systems and face huge backlogs of filing and digitization projects, making reservation tasks and release times increasingly difficult to guarantee with any certainty. It's hardly surprising, then, that the recordings he donated to the Library of Congress and to the UCLA Film and Television Archive, among other places, do not appear in their online catalog, and only some are accessible to patrons for on-site research. A highly egregious example of mismanagement around J. David Goldin's donations occurred in September 2010, when Goldin found a series of transcription disks that he had donated to NARA in the 1970s available for sale on eBay. Goldin himself tracked the down the offender; it turned out to be the very same Archives official who had initially accepted the recordings on behalf of the institution. ¹²¹ As these materials manifest online, then, they enter new contexts of distribution and historical orientation that may or may not come with approval from the original recorder – though he himself has already radically destabilized their initial broadcast framework, most notably by capturing and storing the audio signal separately from its video counterpart.

Jerry Immel's audio airchecks present an interesting case in point here. Primarily interested in DXing through television and studying the announcer's role in broadcasting, Immel audio recorded station sign-ons and sign-offs, as these heavily featured the announcer and gave all of the pertinent information about a station for future reference. He built up a vast collection

of tapes that catalogued station identifications, each of which could be used as a sophisticated. aural OSL card of sorts to mark individual moments of reception. 122 Yet Immel's recordings did not accrue the same kind of value as Miley's recordings of classic Super Bowl games, Goldin's tapes of the Jack Paar Tonight Show and special event programming, or Gries's capture of the Pardo bulletins. Station sign-offs do not represent "television" in the same way classic programs or broadcast events do, often marginalized as ephemera at best or forgotten completely at worst. As the canon around television and radio began to develop in the 1970s cultural heritage movement, archivists sought complete shows and series runs alongside breaking news bulletins, sports moments, political coverage, and news reports; little space was reserved for station ID markers or audio announcing the date, time, and frequency of a particular transmission. The broad omission of this content from conventional archival institutions reflects what William Uricchio has labeled "the historical filtration of evidence," a process whereby a situated culture's dominant social formations strongly frame archival access to the past and readily play into or obscure historiographic approaches. Marginalized social formations such as commercials or sign-offs – ironically some of the most viewed or heard texts that played over the airwaves in the midcentury period – are invisible to many archivists due to longstanding canonical groupings that overwhelmingly structure the broadcast archive. As Uricchio notes, such marginalization appears rather shortsighted given the varied historical development of aesthetic oeuvres. "If the 11th century's devotional objects are the art treasures of today," he queries, "who can predict whether or not the late 20th century's advertising will be the art treasures of the future?" ¹²³

Jerry Immel's station sign-off collection still remains somewhat embedded in this vast peripheral landscape of ephemeral broadcast content. The form of the sign-off and sign-on in particular represent a historical genre of programming rarely in use anymore beyond certain NPR

blocks and perhaps rural or very localized radio channels. Though his material is singular, and thus potentially valuable for that reason alone among postwar off-air audio recording enthusiasts (not to mention among individual broadcast collections in general), no federal, national, or university-based archival institutions have approached Immel to solicit donations of his rare holdings. Instead, certain ones have found their way online, into regional archives that use digital audio and visuals to recreate local broadcast history on the web for free public consumption. Over the past several years, Immel has donated material to place-based online archives including Cleveland Classic Media (CCM) and the Broadcast Pioneers of Philadelphia, as well as to sites organized by genre, most prominently J. Alan Wall's TV Signoffs page. Immel's hobby of DXing through television enabled him to reach locations like Cleveland and the surrounding area from his Philadelphia home, and thus he taped several instances of sign-ons and sign-offs not only from Cleveland, but from all over Ohio and the Pittsburgh and Wheeling areas.

Many of his recordings now litter the Cleveland Classic Media website, located at http://clevelandclassicmedia.blogspot.com/ with the tagline, "History and Memories of Cleveland and Northeast Ohio Television and Radio from the 1940's-1980's.. Dedicated to preserving the Broadcast Heritage of Northeast Ohio.." Created by Tim Lones out of Canton, Ohio, and organized as a blog updated at the owner's whim, Immel's contributions first appear in a February 14, 2011 blog post in which Lones shares donations Immel had given him three years prior on CD. These include 1950s Cleveland radio station IDs and signoffs, 1950s and 1960s Akron-Canton and Pittsburgh-Wheeling area IDs from both radio and television, and a number of recordings from much smaller stations within Ohio. Lones also shares these and many other Immel contributions on the CCM's Facebook page, always listing Immel as the source when necessary and noting important Ohio announcers and performers on the recordings. While the

blog provides more contextual written detail regarding these and other documents of Cleveland media history, Lones has organized content on the Facebook page into albums divided by media type (video, cover and timeline photos) and specific station or period (WGAR 1940s). Immel himself regularly comments on postings of his material, providing tidbits on his recording practice or the particular announcers delivering the station information. ¹²⁴ In addition to this, station sign-offs recorded by Immel from the Philadelphia area appear in the audio section of the Broadcast Pioneers of Philadelphia website. Each relevant listing credits Immel as the original donor and cites the recording as "From the official archives of the Broadcast Pioneers of Philadelphia" available via a link, titled by announcer and station under the appropriate year, set against a white background. Generally, the link provides written biographical statements on the announcers as well as photos alongside the audio (and at times visual) recording. ¹²⁵

Both of these regional history sites, as well as Wall's TV Signoffs page, emphasize direct, instantaneous access and education as the primary directive of the localized archive. Classical archival formations, Rick Prelinger notes, operate under a dual mission of preservation and access: theoretically, these objectives are indivisible in sanctioned institutions, but most archives tend to privilege preservation of physical objects for a number of logical reasons. While preservation is clearly important to the CCM and its peers as a way to keep history in existence (i.e., "living") via these sound clips – and Lones and the Broadcast Pioneer webmasters both note the significant financial, technical, and labor difficulties in encoding higher quality audio files to store content online – simply posting the material alongside supporting visuals for immediate public use remains the top priority of these archives. The relatively amateur aesthetic of all three websites reinforces this dedication to direct access. Either extremely cluttered or very plain, the designers build each page around the continual dissemination of information or

documents; less attention is paid to presenting content via a highly organized system that protects and safeguards archival holdings from "misuse," a common euphemism for improper contextualization beyond sanctioned archival applications, Prelinger explains.¹²⁷ The whole point of placing digital copies of these recordings online is for people to easily access them, enjoy them, and discuss them with fellow enthusiasts in ways they see fit, under potentially less-restrictive institutional conditions. Immel himself views these discussions as a form of preservation for his content and for the very practice of off-air audio recording. As he explained in our interview, talking with me and others about his hobby and placing audio online made it "eternal as anything can be," implicitly casting the recirculation of his materials as a form of preservation and drawing from oral tradition and the rhetoric of "intangible heritage" to do so. ¹²⁸

Jerry Immel is the one individual I interviewed who actively donated sound recordings to regional or genre-based online archives. The others only contributed materials to national or accredited archives, typically institutions that solicited or paid for copies or masters and that could guarantee preservation of the physical tapes as well as provide the public with access to them. Access, of course, is a highly variable concept, offering a "spectrum of possible use" from scholarly pursuits to unlimited public mobilization; yet larger institutions still tend to define archival access in rather reductive terms, as an academic resource and sacred physical object to selectively screen behind closed doors both physical and digital. While every one of my research subjects expressed a desire to see their recordings made widely available to the public in the near future, most chose systems whereby access to their materials would play a more limited role as compared to preservation. Undoubtedly, the financial resources and labor pools available through such institutions made them more attractive options for individuals who had long struggled with the burden of maintaining older recordings on near-extinct formats. But these

choices also index deep-seated cultural beliefs in the sanctity of the archival apparatus as properly realized only through certain types of institutions deemed official bearers of American Cultural History. Investing in these physical heritage sites can bestow a significant degree of cultural prestige on the individual donors, their materials, and their practice of off-air broadcast recording as venerated institutions like the Library of Congress ostensibly preserve recordings "for all time" in their hallowed repositories. Internet sites like Cleveland Classic Media, on the other hand, attempt to store and present scattered slices of American broadcasting history via immediate accessibility on the web. They activate new strains of radio and televisual liveness through streaming formats and the "flow" of historic content organized by interlinked logics of web design, acquisition, and browsing – the latter a direct correlate of channel switching and surfing, longstanding conventions in the domestic broadcast experience. Thus, online regional history pages operate under much more flexible perceptions of what a broadcast archive can be, as they encourage participants to enact preservation through access and vice versa.

As these discussions make clear, the digital presence of freely available materials from off-air recording enthusiasts opens highly complex and vastly differing views regarding contemporary protocols of preservation and access within the broadcast archive. Often, those who initially made the recordings back in the midcentury period do not get to decide where their materials end up online; those who do must still contend with amateur web designs that obscure or bury their materials, unless the visitor already knows what he or she is looking for on the site. Institutional donations do not fare much better when considering that it can take years of bureaucratic wrangling and grant writing to even allocate funds for tape digitization. The appearance of these recordings online itself results from a burdened archival decision at once hopeful and deceitful. Digitality ostensibly improves both access and preservation of a sound

recording, says common belief, but no institution or site can guarantee eternal conservation, and online accessibility depends a great deal on a variety of contingent factors including compatible file systems, continual maintenance, and faith that a user or organization will keep the content uploaded for all time. Yet personal analog recordings made digital and placed online, and the faith placed in web digitality as an ideal dialectic of archival preservation and access, index deep desires to position off-air television and radio as a relevant, even necessary part of the contemporary broadcast archive. Internet heritage sites, digitized interviews, Google searches, YouTube clips, electronic institutional holdings: these technical structures of the *archiving* archive, to use Derrida's term, help delimit the structure of archivable content in present and future iterations. "The archivization," he explains, "produces as much as it records the event." In this, the digital footprints of midcentury off-air broadcast audio continually constitute the very archive they also deny and destroy through false promises of eternal preservation and access to broadcasting history.

Conclusion

Many of those individuals whose work I have explored in this chapter continue to devote considerable time to their audio recordings in both commercial and not-for-profit contexts. Phil Gries has recently licensed some of his sports recording to ESPN for use in their 30 for 30 documentary series, and also contracted with AMC to provide 1960s audio footage for the network's popular *Mad Men* period drama. J. David Goldin regularly updates his free online informational directory RadioGOLDINdex, billed as "The Definitive Database of Old Time Radio Programs," with current research on radio's early commercial history through its Golden Age of programming; his most recent update came on April 20 of this year. And Jerry Immel has

emailed me a few times post-interview with several websites that he has found useful in his personal research, including links to American Radio History and aggregate wikis constituting more than two million pages on broadcasting history. Their activities demonstrate perpetual dedication to the libraries and histories they have built up over decades, marking their stories as still (always already) incomplete and still (always already) ongoing into ever-new directions and archival formations. Additionally, I find I am now a part of this history of off-air audio recording in multiple ways, most visibly in my discussions and recorded interviews with these individuals, my online engagements with their materials, and my writing on this topic. These interventions become part of the "living discourse" of off-air audio recording history and bring with them certain unique issues for scholarly research.

Both Jonathan Sterne and Janice Radway have discussed how their inquiries into recent historical phenomena, as constructed by the upper echelons of these cultures, have influenced representations of such histories and disrupted notions of power, authority, and knowledge in who gets to speak for a particular cultural phenomenon. Radway's discussion of Book of the Month clubs and their "elite informants" of publishers and editors invites much reflection on how the scholar and her subjects share "commensurate," preformulated representational fictions; indeed, "it is quite literally possible and highly likely that the ethnographer will encounter his or her academic self as a character in the other's discourse without being physically present as an individual to whom that informant would want to be polite." While my project is not as strictly ethnographic as Radway's – and my interviewees represent a different population of "elites" in the sense that they have become experts on early broadcasting history and off-air audio recording over time, authorized through interviews and solicited donations to speak for this radio and television archive in certain contexts – my interview subjects have often asked probing, involved

questions about my dissertation project and have eagerly provided their thoughts and potential sources. Many also self-identify as historians of radio or television rather than collectors or amateur recorders, which they substantiate through their many years as engineers, DPs, announcers, etc. and/or their longtime research into broadcast history to bolster claims regarding the authenticity of their recordings. Sterne encountered similar behavior with his interview subjects for his mp3 history project, many of whom continually inquired about his project and sent him information "meant to expand their role in [Sterne's] history." While I would not say that my informants have maintained contact solely to ensure that their work is front and center in my dissertation, I do believe their persistence indicates some desire to control the narrative around midcentury broadcasting history and off-air audio broadcast recording as a historical practice – impulses that, in turn, demand their own interpretations as I think transversally about my role in crafting and classifying the traces of history I have accumulated for this project. ¹³³

The creation off-air audio recordings and their circulations as Broadcast History represent important sources of data that have intertwined deeply with official and national cultural histories since the development of consumer sound recording devices in the immediate pre- and postwar period. As these recordings become increasingly public and digital through donations to institutional archives, emplacement in online history websites, and licensing to media outlets for inclusion in historical projects, they will exercise a more visible impression on longstanding notions of liveness, preservation, storage, immediacy, and access in media historiography. They also prompt reconsideration of binaries that have long structured broadcast histories and their archives: as this chapter has demonstrated, inner and outer circles of archival authority show ever-increasing levels of dependency on one another, audio recordings at times index a preferred method of engaging with television over its visual components, and many

individuals considered storage of programming just as important (if not more so) than the live or immediate experience. Working with some of the individuals who have made these recordings and circulated them among various factions opens critical angles to media historiography that cannot be activated any other way.

Yet the further we get from this midcentury era of direct-line audio recording, the more difficult it is to obtain these personal accounts and to engage in a critical media ethnography that yields unique insights on a practice increasingly obscured or distorted by the contemporary media landscape. Such recordings are generally becoming consolidated into the hands of fewer and fewer repositories and, with a few exceptions noted herein, find their histories manipulated to fit an archive's narrative or mission statement of preservation and public access. Tracing these circulations can be a difficult prospect if an archive or individual cannot recall, is unwilling to divulge, or simply never accounted for, the early provenance of these recordings. The scholar's job then becomes even more integrally interpretive and creative as we seek traces that represent multiple histories beyond the connections existing in any one source, history, or approach. "In the act of interpretation," Sterne argues of media historians, "we think transversally." This idea is not simply an assertion: it is a necessity for any scholars working within media historiography and among its most dominant paradigms. In doing so, we help create conditions to keep these histories "alive" and wonderfully composite as they continue to emerge and circulate in the twenty-first century broadcast archive.