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Humanity in the Age of Audiovisual Media

> But I once heard a story I believe, I replied: How Leontius son of Aglaion, coming from Piraeus under the outer north wall, perceived corpses laid out near the gallows. He wanted to look, and at the same time he was disgusted with himself and turned away; he fought with himself for awhile and covered his face, but, overcome by desire, he held his eyes wide open and ran up to the corpses and said "Look, damn you. Take your fill of the lovely sight!"[1]
>
> – Plato, *The Republic*, 439E–440A

Plato didn't like artists, but he truly *feared* actors. Why? Because their craft corrupts otherwise good people. Drama pretends to show us life in all its richness, and it succeeds so well that it can and does trick almost everyone. When viewers see an actor pretending to be in pain, they are likely to feel as if they are witnessing *actual* pain. The really frightening part, though, is that we *enjoy* sympathizing with dramatists pretending to weep and wail, snort and chortle, and behave in all kinds of undignified ways. Thus, we find ourselves delighting in actions that we would ordinarily condemn. Eventually, Plato predicts, drama will corrupt us: if we view enough of it we will begin to act like the actors, that is, badly. Our moral decline is inevitable so long as the actors remain in the city, for so long as they do, we will compulsively seek vicarious gratification in their productions. Drama appeals so mightily to our base instincts that we won't be able to help ourselves. Thus, almost all actors must be sent away if the city is to survive.

Most modern folks rightly find Plato's arguments against drama unconvincing. That said, Plato makes one very good point about drama: as an artistic medium, it is – or at least can be – extraordinarily compelling. We can put down a book when we don't want to read it. We

can tune out poetry or music when we don't want to listen. But when we hear or see people, particularly if they are saying or doing something odd, we feel we have to listen and look – just like Leontius in Plato's story. Leontius didn't want to look at the corpses, but he *had* to. Plato feared that if people were afforded the opportunity to see whatever they wanted, then they, like Leontius, would lose control of themselves. In this chapter, we will see that Plato's fears were not misplaced. By the mid-twentieth century, audiovisual media made it possible for anyone to see almost anything. The consequences were just as Plato predicted, for people did after a fashion lose control of themselves.

WHY WE WATCH AND LISTEN

To demonstrate that the "pull" theory of media evolution is valid in the case of audiovisual media, we need to establish two things. First, we must show that we knew how to "do" audiovisual media before we "did" them, at least very often or widely. If this was so, then we can confidently conclude that people could have employed audiovisual media but didn't because demand was too low. Second, we need to show that some significant historical disjuncture made existing media – talking, writing, and printing – insufficient for the purposes of some organized group or groups, and that this or these groups developed a preexisting technical capacity – in this case, audiovisual know-how – into a real medium.

What sorts of evidence, primary and secondary, bear on these two propositions? Since audiovisual media are both relatively new and by and large persistent, the sources available to study them are much greater than even those left to us by the Print Era, themselves very considerable. Thus, it comes as no surprise that the secondary literature treating the origins and progress of telegraphy,[2] photography,[3] telephony,[4] recorded sound,[5] radio,[6] motion pictures,[7] and television[8] is itself voluminous. That literature includes, fortunately, a number of excellent surveys of all the audiovisual media.[9] Moreover, and in contrast to the literature on the Talking Era, Manuscript Era, and Print Era, scholars have paid abundant attention to ways in which electronic media have shaped modern society. For the past half-century, it has been commonplace to say that the introduction of the "mass media" (sometimes including print, and sometimes not) brought on

a "communications revolution" (sometimes "information revolution") that created an "information society" (sometimes "information age").[10] Whether, how, and to what degree audiovisual media actually did change the patterns established during the Print Era is precisely the question we will try to answer. In so doing, we will depend on this prodigious body of scholarship.

Audiovisual Media before Audiovisual Media

As we will point out in a moment, humans really like to watch and listen. They have a natural and ineradicable hunger to see and hear certain things. For most of human history – 140,000 years to be exact – this hunger seems to have been satisfied by simply watching and listening to what was naturally all around them, including each other. In this long era, there were no artificial visual or sonic media, at least as far as we know. That began to change about 40,000 years ago when our ancestors started to draw, paint, and sculpt things.[11] Judging by what they drew, painted, and sculpted, they were very interested in what we are still very interested in: sex, food, drink, power, wealth, conflict, and violence. One of the earliest pieces of statuary archeologists have uncovered, the 24,000-year-old Venus de Willendorf, is a straightforward depiction of a naked lady.[12] And that was only the beginning. Wherever representational art flourished in the Ancient World – Mesopotamia, Egypt, India, China – we find depictions of what might be called "racy things." The best known examples are doubtless the erotic murals of Pompeii and Herculaneum, both of which were buried and thereby preserved by the eruption of Mount Vesuvius in 79.[13] These depictions, often of sexual acts, were clearly meant to arouse and not for any "higher purpose." In addition to the visual arts, our ancestors also used the performing arts to represent this common set of racy things. Just when they began to do so we do not know, for nothing survives. But it stands to reason that prehistoric peoples performed rituals in which dramatic events were reenacted. Why wouldn't they? The same logic applies to early civilizations. We have scant evidence of Mesopotamian, Egyptian, Indian, or Chinese dramaturgy, but it would be surprising if none existed given the sophistication of these places. What we do know without doubt is that by the time of Plato – the fifth century BC – the dramatic arts were both highly developed and very popular in the Hellenic World.[14] They were

also controversial, as we can see in Plato's spirited condemnation of them.[15] Plato didn't like drama for a variety of reasons, but one of the most salient relates precisely to the playwright's favorite subject: people behaving badly. Arrogance, lust, greed, envy, hatred, spite, malice, and cruelty – these were the dramaturge's best friends. We know the reason: these were the things people wanted to see.

This was true in ancient Athens and after. Yet, for nearly 1,500 years, the technology designed to deliver representations of racy things remained unchanged. You could draw them. You could sculpt them. You could enact them. But that was all you could do. And actually "you" probably couldn't do any of these things, at least very well. The graphic, plastic, and dramatic arts are, well, arts. Performing them with any proficiency requires talent, training, and resources. Most common folk in the Manuscript Era didn't have any of these things. Thus they were consumers, not producers, of high-quality art. But high-quality art wasn't easy to come by for two reasons. The first was economic: really good representations – well-wrought paintings, sculpture, and drama – were going to be expensive. The elite could afford them, but most plebs couldn't. The second was logistical: even in the cases where good art was affordable, there were real limits on the size of the audiences that could view it. Stadia, hippodromes, amphitheaters, and circuses could only be so numerous and so big, a fact we will return to later.[16] These two considerations – scarcity and audience size – meant that many people in the Manuscript Era were not going to get to see or hear the things they wanted to see or hear. This was true in Plato's time and it remained true more than a millennium later in Shakespeare's day. To put the quandary in terms only an economist could love: by creating a limited and inelastic supply of stimulating fine arts, Manuscript- and Print-Era cultures systematically generated "excess demand" for them. The bright lights of Uruk, Athens, Rome, and London whetted appetites, but could not slake them.

Yet common people did not riot over the high cost of fine art or theater, at least the way they rioted over the cost of bread when it was dear. They made their own fun of the representational sort, most of which is lost to history. Throughout the Manuscript and Print Eras, the commoner's calendar was full of festivals, fairs, and games, all of which allowed ordinary folk both to let off steam and to see things represented that they could not in their daily lives.[17] This tradition still

survives in the form of the annual Purim celebrations in the Jewish world and Carnival celebrations in the Christian world. Your local county and state fairs might also be cited in this regard. These folk traditions went some way toward satisfying people's appetites for aural and visual stimulation, and thereby reduced social pressure. But just as important were the positive measures taken to reduce the appetite itself. From Plato to Shakespeare and even after, the authorities – especially literate princes and priests – told people that some representations could do tangible harm and should, therefore, be strenuously avoided.[18] Graven images, depictions of heaven, polyphonic music and such might offend the deities, which would naturally provoke their wrath. No one wanted that. Masques, mummers' plays, and political ditties might offend powerful persons, which would provoke their wrath. And no one wanted that. So it was more or less taken for granted in the Manuscript and Print Eras that there were certain things that one could not safely draw, sculpt, or play because they were "unholy" or "dishonorable."

But the basic problem remained, an endemic characteristic of Manuscript and Print Cultures: too much demand for audiovisual stimulation and not enough supply. To right this imbalance, some means had to be found to lower the cost of producing representations of racy things. As we've seen, the purveyors of print – experts at lowering production costs – were the first to attempt a solution. From the earliest days of printing, publishers realized that pictures helped push their textual products.[19] Thus, they made sure to complement their printed texts with engravings, the more suggestive of immorality the better. They also pushed for ever more accurate pictures, but this almost always meant the employment of better etchers and etching techniques. Photography never occurred to them. Of course it never occurred to anyone, or almost anyone, before the early nineteenth century. The notion that you could mechanically capture what your eyes had seen was an odd one, as we don't experience anything like it in nature beyond shadows and reflections – and they disappear. Nonetheless, by the seventeenth century both of the ideas necessary to produce photographs – the pinhole camera effect and the photochemical effect – were floating around Europe, waiting for someone to put them together.[20] Nicéphore Niépce finally did in the 1830s.[21] Thereafter, there was a rush of activity aimed at bringing photography bearing racy things to market. Photos could be inexpensively reproduced as early as the 1840s and were. Photos

could be printed in newspapers, magazines, and books by the 1880s and were.[22]

But it still wasn't enough, and entrepreneurs knew that. Yet, much like the printers before photography, they opted for more of the same. Most historians recognize the nineteenth century as the moment at which leisure was commodified in the Western world, or at least became a lot more commodified than it had ever been.[23] Folk art, folk theater, and folk music had always existed in Europe. But generally speaking, these were not things people paid for, or paid very much for. The only form of "popular entertainment" that required the expenditure of brass was drinking, and it was the most popular entertainment of all. In the nineteenth century, though, entrepreneurs expanded the concept of entertainment for hire beyond its traditional boundaries. They did it by going down-market with up-market things, giving the rising middle classes – who had money to spare and time to spend it – what their betters had had all along, though at a cheaper price. These entrepreneurs opened opera houses, professional theaters, music halls, variety shows, seaside resorts, mountain retreats, and country reposes. It was all very respectable, indeed, a bit too respectable for the tastes of some (predominantly male) parts of the audience. They wanted to see and hear more, and the mavens of entertainment were only too glad to accommodate them if the censors would play along. In the end, they did, and so vaudeville, cabaret, burlesque, and striptease were born.[24]

With both prosperity and population on the rise, more of the same was not going to do the job. Entertainment entrepreneurs needed to find a way to supply large audiences with cheap audiovisual diversions. The technologies they needed to accomplish this feat were available, but they were generally buried too deeply in esoteric scientific discoveries and crude prototypes for anyone to realize it. This accounts for the lag between the discovery or invention of sound recording, movies, radio, and TV and their commercialization.[25] The first device capable of recording sound was Edouard-Leon Scott's "phonoautograph" in 1857. Sound recordings were not brought to market before Thomas Edison's phonograph cylinders in the 1880s and Emile Berliner's gramophone discs in the 1890s. The precursors to motion pictures – the flip book, the Zoetrope – were all in circulation decades before Eadweard Muybridge began his experiments with "serial photography" in the late 1870s. It wasn't until the late 1890s that Edison and the Lumière brothers

succeeded in commercializing film, and it was long after that before the movies assumed their modern form. It's impossible to tell who "discovered" radio, because bits and pieces of it were conceptualized or demonstrated by several scientists over a long period. David E. Hughes (1879), Heinrich Rudolf Hertz (1887), Nikola Tesla (1893), Oliver Lodge (1894), Jagdish Chandra Bose (1894), and Alexander Popov (1895) could all reasonably be called the "inventors" of wireless. After being granted a patent in 1896, Guglielmo Marconi began to sell the technology, primarily for ship-to-shore communications. The first recognizably commercial radio stations, however, were not organized until the 1920s. It's also hard to say who "discovered" television because so many people did. Paul Nipkow (1884), Vladimir Zworykin (1923), John Logie Baird (1925), and Philo Farnsworth (1927) are all good candidates for the honor – if such it be – of "Inventor of Television." The first commercial television broadcasts were not made until the 1930s, and the technology was not really widely adopted until the 1950s.

Although it took some time for corporations to see the potential of audiovisual technologies and to organize the industry, when they did, audiovisual media spread at a rate faster than any medium in history. By the 1920s, both gramophones and records were common items in middle-class households in the industrialized world.[26] The music industry stagnated during the Great Depression and World War II, but by the late 1960s, it had recovered to the point that "stereos" and "LPs" were ubiquitous. So they remain today, though both the playback devices and recordings are digital. The story is much the same for film.[27] By 1930, some 80 million Americans, or 65 percent of the total population, were going to the movies once a week.[28] Attendance rates dipped during the Great Depression, rose again beginning in 1933, and then started to fall after World War II with the proliferation of television. Of course, in that same postwar period, the consumption of movies in all formats (film, video, DVD) increased and the habit of movie-watching spread all over the world. According to one estimate, in excess of 9.6 billion movie tickets are sold worldwide each year.[29] And the tale is similar for radio and TV.[30] In the United Kingdom, where we can track diffusion with reasonable accuracy thanks to state regulation, 125,000 radio reception licenses were issued in 1923. Twenty years later, around 10 million were being issued annually. In 1947, 15,000 TV licenses were given out in Great Britain. Twenty years later, over 14 million were

issued.[31] Today, nearly every household in the developed world has at least one radio and TV, and most have more than one. According to an estimate in the *CIA World Factbook*, there were over 2.5 billion radios and 1.4 billion televisions in the world in 1997, the last date for which data are available.[32] One imagines that there are many, many more today.

"Pulling" the Audiovisual Media into Existence

Beyond the fact that people are genetically predisposed to enjoy listening and watching, and beyond the fact that the technology to make listening and watching easy was available, why did audiovisual media take off with such rapidity in the twentieth century? According to our "pull" theory of media adoption, the answer should be that newly evolved organized interests, having found existing media insufficient for their purposes, began to forcefully seek out – indeed create – new media, in this case of the audiovisual variety. It's not at all difficult to demonstrate that this was the case. Print was "pulled" into being by the advent of mercantile capitalists, state administrators, and pastors – all of whom found the new medium very useful. By the late eighteenth century, it was evident that all three of these organized interests were undergoing significant change: mercantile capitalism was becoming industrial capitalism, the bureaucratic state was becoming the welfare state, and reading religion was becoming cultural liberalism. It is in these transformations that we will look for – and find – the increase in demand that "pulled" audiovisual media into widespread use.

First, consider industrial capitalism.[33] The essence of mercantile capitalism was trade, the movement of goods from a place where they could be purchased for a low price to another place where they could be sold for a higher price. Buy spices here cheaply; transport them there and sell them dearly. Mercantile capitalism required a lot of paperwork, and therefore those who practiced it had to have some facility with reading and writing. The essence of industrial capitalism was production, the organized manufacture of goods to be sold in a market. Make widgets and sell them to people who need widgets. This practice, too, required literacy. But it required other skills as well. The most important of these for our purpose was what we might call "market creation." Unlike the mercantile capitalist who connected existing supply

and demand – spices and a hunger for spices – the industrial capitalist actively looked for new supplies to fulfill as yet unrecognized demands. The merchant capitalists asks, "What do people want, and how can I find it and bring it to them?" The industrial capitalist asks, "What use might there be for this thing, and how do I convince people that they need it?" To put this difference in mentality and practice in the shortest possible terms: the mercantile capitalist transports, while the industrial capitalist makes and sells.

Engineering and marketing are the handmaidens of industrial capitalism. We can see how they worked together in the nineteenth and twentieth centuries to stimulate demand for audiovisual media. By the mid-nineteenth century, European cities were filling up with people who had both the means and desire to be entertained. Entrepreneurs met this demand by building more theaters, music halls, and resorts. But, as we've seen, it wasn't enough. By the last quarter of the nineteenth century, it was clear to forward-looking engineer-entrepreneurs such as Edison, Berliner, and Marconi that a technical "fix" to the problem was within reach. They went about implementing it in the way that had become customary in industrial economies: they filed patents, held exhibitions of their "inventions," sought financial backing, formed public companies, and hired publicists to convince politicians that their products would serve the national interest and convince consumers that they could not really do without them. They succeeded beyond their wildest dreams. Why? Because there was immense latent demand for the products they wanted to bring to market. That hidden hunger, however, had existed unfulfilled for a very long time. We can be pretty sure that Plato would have listened to records, gone to the movies, tuned into the radio, and watched TV had he the chance. He never did, and neither did anyone else in the Talking, Manuscript, or Print Eras. The explanation for this, we like to say, is that the technical capacity to build audiovisual technologies didn't exist then. That's true. But it is also – and perhaps more importantly – because nothing like industrial capitalism existed then. Industrial capitalism gave men like Edison, Berliner, and Marconi a reason to create marketable new technologies and a means to build companies to produce and sell them. Industrial capitalism worked a kind of magic: it transformed hazy mass desire into effective demand.

Second, consider the welfare state.[34] The early modern European state was dedicated to two activities: making war and collecting taxes so it could make war. The princes knew more or less how to fight battles, as that was really all their forbearers, the medieval aristocracy, did. But collecting taxes, especially the very large amounts of revenue that early modern armies required, took them into new administrative territory. They found that in order to ensure a sizeable and steady flow of cash, they needed to field large bureaucracies. Large bureaucracies, in turn, meant increased demand for literate bureaucrats; hence, demand for the skills of reading and writing. The literate bureaucrats were still there when the European states took on a new mission in the late nineteenth century. That mission was public welfare. In medieval and early modern Europe, most princes ruled by some sort of divine right. They did God's will first and the people's will second. If the two coincided, good. If not, then you just had to put up with it. The American and French Revolutions marked the beginning of the end of all that. After these epochal events, only governments "of the people, by the people, for the people" (in Lincoln's memorable phrase) would be deemed truly legitimate.[35] There had been murmurs and more of this new mission before 1776 and 1789. The eighteenth-century Prussian absolutist Fredrick the Great, for example, reportedly proclaimed that he was merely "first servant of the state."[36] He apparently thought that serving the state meant making war as often and as violently as he could, for that is what he did. His late nineteenth-century successors had different ideas of state service. Otto von Bismarck was no lover of liberalism or socialism, yet he found it expedient to create national labor laws, health insurance, disability insurance, and pensions for masses of Germans.[37] He found it expedient exactly because he feared the liberals and socialists were winning popular support by advocating these paternalistic policies. That was something to be avoided, so he stole their thunder. He was hardly alone. By the end of World War I, the entire Western political spectrum was shifting toward soft or hard socialism. Both liberal and conservative regimes answered the popular call for the creation of a social safety net.

The newly powerful masses also clamored, however, for "modern" conveniences. Among these we find audiovisual media, and particularly the telephone, radio, and television. People saw these things and

they wanted them. Politicians saw that there was political hay to be made by helping constituents get them.[38] Moreover, there were compelling economic reasons for some sort of central coordination of these emerging networks. Combine these two reasons with the fact that European regimes already controlled telegraphy – the first electronic network – and you have a compelling case for state support and control of the new audiovisual media. So it happened that European countries generally opted for state-run telephone networks, as well as taxpayer-subsidized national radio and television broadcasting services, the BBC being the most familiar example. The film industry was also heavily subsidized in Europe, and is to this day. The United States took a different path, electing for predominately private telegraphy, telephony, film making, radio, and TV. Yet, even in the land of free enterprise, government regulation was extensive, as evidenced by the formation of the Federal Radio Commission in 1927 and its powerful successor, the Federal Communications Commission in 1934. And outright federal support of broadcasting is hardly unknown in the United States, as can be seen in the examples of National Public Radio and the Public Broadcasting Service. Modern states are welfare states, and welfare states make sure their citizens have things to listen to and watch.

Finally, consider cultural liberalism.[39] The pastors of early modern Europe generally wanted their flocks to be able to read and write. They made efforts to see that they learned, and were generally supported in their pro-literacy activities by princes. Literacy rates rose. But it certainly was not the case that princes and pastors wanted their subjects to write and read *anything*. On the contrary, they had reasonably serious – and by our standards very restrictive – notions of what was proper and improper written material. Every early modern European regime and faith practiced censorship. So too did they regulate, or attempt to regulate, what could be heard and viewed.[40] Theaters were licensed, popular entertainments monitored, and even dress was regulated by "sumptuary laws." As we've pointed out, restrictions on what could be written, read, heard, and seen began to fall away with the rise of the idea of the free press in the early modern period. In hindsight, we can see that if ever there was a conceptual and legal slippery slope, the notion of the free press was it. For once it was conceded that (a) the government's power to censor representations could be abridged

and (b) representations have no obvious corrupting effect, so then (c) it became very difficult to halt the expansion of the "freedom of expression." The first threshold was crossed in the seventeenth century when political speech was granted as a right, at least to some and in some circumstances.[41] This act opened the door for formerly outré expressions by giving them legal cover. Thus, obscene political cartoons came to be seen as less obscene and more political. What might be called the "sticks-and-stones" doctrine ("Sticks and stones may break my bones, but words will never hurt me"), however, was not fully articulated until the later nineteenth or even early twentieth centuries, though it was not fully accepted even then. Members of the Free Speech League (1902) in the United States, for example, argued that "obscenity" was a matter of taste, that it was not at all obvious that "obscene" material harmed its consumers, and that it seemed certain that it didn't harm anyone else if consumed privately.[42] These were good arguments, and they were hard to rebut in the progressive legal climate of the day. But they were not found persuasive by the self-appointed guardians of public morality or the courts.[43]

They were, however, found compelling by most people, at least those who flocked to the movies to see every manner of impropriety. Even in the beginning of cinema sex and violence sold. Despite the fact that the people had voted with their feet, however, neither the government nor the wardens of propriety had given up the battle against "obscenity."[44] In the United States, for instance, the states could and did censor films well into the twentieth century. American secular and religious groups mounted sustained attacks on what they deemed "immoral" films. In order to protect their booming industry, then, the movie moguls needed to do something to appease the censors and critics. This gesture took the form of the famous Hay's Code of 1930, under which the studios agreed to censor themselves. What needs to be recognized, however, is that although we look back on the Hay's Code as outright censorship, it permitted a lot more than it banned. You could go to the movies in the 1930s, 1940s, and 1950s and see all the sex, violence, and illicit behavior you wanted, though everyone kept their clothes on and refrained from cursing. It wasn't propriety, but the veneer of propriety. And that's just the way everyone wanted it, from the guardians of morality to the Supreme Court to the average moviegoer.

Audiovisual Media and Human Nature

Audiovisual media, once properly engineered for mass consumption, took off very quickly. There was, as we expected, a lag between the capacity to "do" audiovisual things and the creation of full-fledged audiovisual media. But it was comparatively short. It took about 175,000 years for manuscript-writing to become established, and even then its penetration was low. It took roughly 1,000 years for printing to become established, and even today its coverage is not complete. But it took only a few decades for audiovisual media to cover the world and saturate all the populations in it. A significant number of people today cannot read or write. A significant number of people today do not read or write though they can. But virtually everyone alive, if they are healthy, can watch and listen to audiovisual media – and they do, a lot. Part of the reason for the rapid spread and remarkable penetration of audiovisual media no doubt has to do with the power of modern states and enterprises to provide them cheaply to the masses. But obviously this is not the whole story. If it were, then everyone would be able to read and would do so often, for states and enterprises also provide literacy and literature at low cost. No, there is something about the audiovisual media that is different. And we know just what it is: humans love to watch and listen. Not to everything, but to a certain class of things. As we'll see, this fact goes a long way toward explaining why we watch and listen in the way that we do.

We talk compulsively, though we don't really realize it. The same is true of listening and watching. Most of us think that we listen to what we want and look at what we will. It's a comforting notion insofar as it conforms with our rather prideful belief that we have unfettered free will. It has the further benefit of being partially true, which is never a bad thing for a notion to be. Forcing someone to listen or look at something attentively is difficult. In Anthony Burgess's dystopian novel *A Clockwork Orange*, the evil state, believing that wayward people could be "rehabilitated" by prolonged exposure to horrible sounds and images, built an elaborate contraption to do the job.[45] Criminals were strapped into chairs, had their eyelids mechanically peeled back, and were given drugs to heighten awareness. In the real world we use similar attention-focusing techniques of a much milder sort: schools

confine students to classrooms, churches confine congregants to pews, and companies confine employees to cubicles. As everyone knows, these methods often fail. Who hasn't slept in a classroom, a church service, or at work? But the fact that no one can really compel you to listen to or look at something doesn't mean that you can listen or look at anything you like. Your ability to do so is constrained by two factors. First, there's only so much material available in any given time and place. If you are in a large art museum, there's a lot to see. If you are on the frozen tundra, there's not. Second, and much more important, there are some sounds and sights that seem to draw our attention whether we like it or not. These might be called "intrusive stimuli." Some are sonic: whispering, lisps, bad music, good music, crying babies, shrieking girls, shouting men, barking dogs, hissing cats, alarms, gunfire. Some are visual: surpassing beauty, unclaimed money, low-cut blouses, drooling, celebrities, explosions, disheveled street people, disfigured faces, open wounds, bloody brawls, car accidents, dead bodies, guns. What all these things have in common is that they are "ear catching" and "eye catching." We are drawn to listen to them and look at them even though we sometimes don't want to. We want to tune them out. We want to turn away. But we can't. Just as we must talk, we must listen and we must look.

The similarity is deeper. Just as we are compelled to talk about certain kinds of things, so too are we compelled to listen and look at certain kinds of things. In fact, they are essentially the same – the relevant ones. As we explained, human speech and reason evolved in part as the result of an age-old competition to gain allies. In what we called the "relevance game," our ancestors attempted to prove their worth to others by presenting relevant facts, that is, interesting tidbits of information that would improve the fitness of their interlocutors. The more relevance individuals brought, the better allies they would be, and the more allies they would have. The number and quality of allies in turn translated into increased reproductive success. What's important to remember is that success in the relevance game depended not only on the ability to present and test relevance – both of which relied on speech and reason – but also the capacity to *uncover* relevance to be presented. Those who were better at finding relevance would naturally enjoy greater reproductive success than those who were worse. This difference, and the advantage it entailed, stimulated the evolution of

sensory hardware and software that made the hunt for relevance more efficient.

This is to say no more than that the human ears and eyes, together with the software that runs them, were specially tuned to pay close attention to certain kinds of aural and visual signals, namely, the relevant ones, the ones that matter to us and to people we might talk to. In Chapter 1, we said that these intrusive signals could be grouped under two general headings: anomalies and puzzles. Nothing will draw our attention like something that shouldn't be there. The human mind is a remarkable pattern-building and pattern-recognizing machine. It is so primed to create models that it often sees regularity where there is none, as is evidenced by the fact that people habitually see patterns in random processes where they do not exist. If you roll a six-sided die three times and get six on each roll, you will somehow expect a six on the next roll, though there is no good reason to do so if the die is fair. Even if you understand the laws of probability and *know* that the die is unweighted, you will somehow sense that it may not be fair after all. You intuit that there is something wrong, something that doesn't "add up." This in turn triggers your inborn reflex for puzzle-solving. You will attempt to "figure it out," to square the anomaly with your world-picture. What's most interesting is that you will do this even at considerable risk to yourself, even where your investigative behavior doesn't appear to be rational in terms of cold, hard cost-benefit analysis. Measuring the die might be a rational way to investigate the fairness of the game, as it is low risk. Calling the person who handed you the die a cheater might not be, but you might do that anyway just to judge his or her reaction. Hopefully it won't be a poke in the nose, but you can never tell.

Your ears and eyes, then, are designed to draw your attention to anomalies and make you investigate them whether you like it or not. But there is good reason to suspect that there is another class of much more specific intrusive stimuli that you were pre-programmed to hear and see. This is easy to demonstrate. In our world there is nothing anomalous or puzzling about a picture of a naked lady. Such pictures are practically everywhere. But despite their commonality, if you are a heterosexual male, your attention will be drawn by these images almost whenever and wherever they are presented. Even in cases where you feel ethically uneasy about looking at them, or feel that tangible harm will come to you if you do, you will still be drawn to look. As in the case of Leontius,

your reason tells you one thing – do the moral thing, protect yourself – but your eyes and instincts tell you another – look, look now. Often, however, conscious reason never comes into play because it all happens too fast: the image appears, you unthinkingly look, and only then do you feel you've done something immoral or unsafe. For heterosexual males, pictures of naked ladies fall into the category of "relevance reflexes": signals that almost always trigger an automatic perceptual response. Although the exact catalogue of such signals is unknown, our own experience provides us with a fair guide to the basic set. In addition to sexual imagery, we can reasonably add food, drink, power, wealth, conflict, and violence – the "racy things" we mentioned earlier. During our evolution, these specific stimuli were always relevant because they often had a tangible impact on our fitness. Their importance was so universal that there was no reason for the mind to waste energy deciding whether they mattered or not. They almost always mattered. Thus, over the course of millions of years, our response to them became reflexive. They were made part of the elementary program that guides human behavior, not unlike the program embedded in the autonomic nervous system. In this limited sense, we have no more control over what we listen to and look at than we do over whether our hearts pump or our lungs breathe.

Industrial capitalism, the welfare state, and cultural liberalism "pulled" the modern audiovisual media into existence. They were able do this so rapidly and completely because we love to watch and listen. The purveyors of manuscript literacy and print opened a door and forced people through it; the purveyors of the audiovisual media opened a door, and people, of their own volition, rushed in.

WHAT AUDIOVISUAL MEDIA DID

In the modern era, then, the media environment comprised of talking, manuscript-writing, and print became even more complicated with the addition of audiovisual media. Bear in mind that the latter did not supplant the former – media, as we've said, accumulate over time. Neither did audiovisual media come to dominate human communications. Older media remained very useful in the era of movies, radios, TVs, and the rest. People talked, and perhaps even more than before thanks to the telephone. In 1990, at the height of the Audiovisual Era, Americans

were making 9.5 billion calls a day.[46] People wrote, and doubtless even more than before thanks to mass literacy and marked improvements in the post. In 1990, the U.S. Postal Service handled over 166 billion pieces of mail.[47] Just how many of them were handwritten letters we don't know, but even if it was a tiny fraction, say 1 percent, that amounts to 166 million manuscripts. And of course people produced and read print, again more than before thanks to mass literacy and improvements in printing technology. In 1990, almost 43,000 new books and editions were published in the United States.[48] That's book *titles*, not copies. If the average print run was in the range of 1,000 copies, that would amount to 43 million books in that year alone.

Our "push" theory of media effects predicts that audiovisual media should have altered the social practices and values of Print Culture; they should have generated a distinct Audiovisual Culture in the distinct Audiovisual Era (1850 to 1990). As we've already noted, there are ample primary and secondary sources available to test these predictions, and we will use them liberally in all that follows.

Accessibility

We noted previously that print was both accessible and inaccessible, depending on whether you were a sender or recipient of it. The same is true of audiovisual media, only much more so.

Beginning on the send side, anyone who has ever seen the inside of a modern radio or television station knows that the tools and skills necessary to produce and send audiovisual signals are expensive. The equipment itself – sound stages, microphones, cameras, transmitters, signal towers, satellites, and so on – does not come cheap. You can't afford it if you are not Ted Turner. Even if you had a fully equipped studio and the wherewithal to send signals from it, you wouldn't know how to use any of it without extensive training. A degree in television or radio production would come in very handy. Once you had your studio and knew how to use it, you'd still have to produce something to broadcast. This is no easy feat. You don't just whip up an evening news broadcast or a sitcom. So you'll need degrees in journalism and the dramatic arts as well. Yet you'll never be able to acquire and learn to do all of these things. No individual could. That's why audiovisual media are produced and transmitted by large teams of people. Directors

get all the credit for great films, but it's the army of people on the crew who do all the heavy lifting. Not only is audiovisual production naturally expensive, it's not that hard to make it more costly by artificial means. This is because audiovisual media, like print, present those who would control it with a nice logistical bottleneck, a stage in the production and distribution process that is particularly vulnerable. With audiovisual media, it's the studio and transmission facilities themselves that cannot (with the partial exception of radio) be hidden. This is why tyrannical governments *always* control the airwaves and fill them with self-serving garbage. In such an environment, the cost of private transmission is death, and that's a high price to pay.

On the receive side, the tools and skills necessary to get and understand audiovisual signals are generally cheap. In terms of equipment, all you need is a box, either a radio or a TV. Like almost all mass-produced electronics, these items became less expensive as the twentieth century progressed. Eventually, even people of moderate income could afford them, and they became nearly universal in the free, developed world. Today, radios and televisions are everywhere. As for skills, you need none. You do not have a reading organ, so you need to learn to read. But you do have listening and watching organs, so you don't need to learn anything at all to listen to the radio or watch the TV. It's possible that there are people who, for whatever neurological reason, just don't "get" the box. They don't understand where the voices come from, or how large, three-dimensional people become small, two-dimensional people. But if such unfortunates exist, they are rare exceptions. A comprehension test of audiovisual media has now been performed on billions of people, and the results are clear: almost everyone "gets" radio, TV, and the movies immediately. Now, the degree to which people "get" them varies considerably. You may not "understand" an art-house movie due to a "cultural barrier." If it's in a foreign language, then you may not "understand" it due to a "language barrier." But your lack of full comprehension doesn't mean you don't "get" it at all. Billions of people all over the world consume audiovisual media – particularly American music, television, and films – that they don't "understand" in either of these senses. But they seem to "get" them enough to enjoy watching or listening to them, for they both watch and listen avidly. Not only are audiovisual media cheap to get and consume, they are difficult to make more expensive than they naturally are. This doesn't mean it

can't be done. A despotic government could make it illegal to own a radio and TV receivers. But even despots are loath to take this step because it would deny them the opportunity to use radio and TV for propagandistic purposes. The trouble is that, once the boxes are widely disseminated, they can be used to receive "subversive" foreign broadcasts. The Soviet leadership made the reception of foreign broadcasts illegal and even attempted to jam their signals.[49] Nonetheless, millions of Soviet citizens daily tuned into Deutsche Welle, the Voice of America, and the BBC. Finnish television was very popular as well (it aired the TV series *Dallas*).[50]

Thus, audiovisual media are inaccessible on the send side and accessible on the receive side. As such, they foster a dual network. On the send side, the network is concentrated: control of the means to produce and transmit audiovisual signals is held by a few nodes. On the receive side, the network is diffused: a large percentage of those in the network will have the ability to receive signals. This is what is commonly called a "one-to-many" network, meaning that a few nodes send messages to many nodes, and the many nodes do not send messages back. Such a description fits audiovisual media perfectly. Following our theory, a dual network will both *hierarchicalize* and *equalize* social practices evolved in and around it. Concentrated networks encourage the formation of ranks, while diffused networks work in the opposite direction.

On the send side, hierarchicalization can clearly be seen in modern audiovisual networks. After an initial scramble, the motion picture industry in the United States simplified to a number of big players all coordinated into the "Hollywood system": Fox, Paramount, Warner, MGM, and RKO (the "Big Five") plus United Artists, Universal, and Columbia (the "Little Three").[51] Similar concentration took place in the radio industry, with NBC (1926), CBS (1927), and ABC (1943) emerging as the dominant players.[52] When television was finally launched en masse in the 1950s, the "Big Three" networks dominated it as well. Outside the United States, the situation was different as governments almost uniformly initiated or nationalized radio and television networks.[53]

That was the "is" of the situation: a few nodes in the network would control all production and transmission of broadcast audiovisual materials. The "ought" depended on the way hegemony was established. In the United States, it was argued that corporate domination of

audiovisual media was a natural result of the operation of free enterprise and free speech, both of which were hallowed principles. In this peculiarly odd view, the big media companies were simply victors in the marketplace and the "marketplace of ideas." If anyone thought they could do better, they were free to try. "Market entry," as the economists have it, proved singularly difficult until the era of cable television, and even then was no easy trick. The "marketplace of ideas," therefore, did not (and does not) operate as the Founding Fathers or Mill might have hoped.[54] In Europe, members of the Vanguard Party argued that the state had to control audiovisual media in order to protect "the people" from harmful private interests, precisely the kind that dominated the media in the United States. This logic had the odd effect of making politicians into art critics, a role they were singularly unfit to play. Sometimes the result of taking audiovisual media from "the people" in order to make it the "people's media" were benign, as in the case of the UK's BBC. Other times it wasn't, as in the case of the USSR's ITAR-TASS.

On the receive side, equalization is just as apparent. We see it most notably in the formation of the "masses" or "mass society." In the Manuscript and Print Eras, there were many different audiences: literate and oral, elite and common, this confession and that confession, this region and that region. In the nineteenth century, with the introduction of mass print publications and the rise of mass literacy, this began to change. Ever larger audiences began to form, a phenomenon noted early on by many observers. In 1932, for example, José Ortega y Gasset wrote of the emergence of the "mass man."[55] The rapid spread of the audiovisual media, particularly following World War II, accelerated this process of "mass-ification." Both capitalist enterprises and communist parties saw the value in audiovisual media and worked to make sure that everyone would have access to them. To be sure, their motives were quite different: the capitalists wanted to sell soap and the communists wanted to sell the party line. But the result was the same: nearly universal access to a small set of audiovisual signals. The varied, smallish audiences of Manuscript and early Print Culture were thereby united into mass audiences of "listeners" and "viewers," all of whom are equal and all of whom have one "vote" (their attention). This phenomenon, too, was noted by observers. In 1956, for example, C. Wright Mills wrote a classic treatment of "mass society."[56]

That was the "is" of the situation: everyone was going to listen and watch, and moreover to the same (often bad) things. The "ought" that followed was a peculiar twist on egalitarianism by which the mass consumption of audiovisual media was intertwined with the notion of democratic citizenship. The idea that the free press – both the right to send printed materials and to receive them – was essential to democracy and cultural enrichment had already been established in the nineteenth century. Free-press doctrine was applied to the audiovisual media as well but it meant different things on the send and receive sides. On the send side, it was a merely formal right: any citizen was free to transmit audiovisual signals within the confines of the state's regulatory structure, though only those with the means – that is, the very wealthy or powerful – could actually do so, at least to large audiences. On the receive side, however, it was, or rather became, a substantive right: any citizen *could* listen and watch the audiovisual media. Now most of what was "on" – music, game shows, sitcoms, sports – had nothing to do with the workings of democracy or cultural enrichment. But some of it did: news, election coverage, government announcements, and the various high-brow offerings like those found on Soviet television and American PBS. Programming of this sort was enough to allow politicians and industry lobbyists to claim that listening and watching constituted "participation" in the democratic process and national cultural life. This argument provided the opening necessary for state regulation and public subvention of the audiovisual media: the government needed to make sure the right things were broadcast and that everyone had access.[57] Thus, access to the media – and television in particular – became a sort of tacit right.[58]

Privacy

We saw that printing is usually public, but reading print is private, or at least can be made so reasonably inexpensively. It's the same with audiovisual media: transmitting is public, receiving is private, or at least often so in practice.

On the send side, it's difficult to hide the fact that you are broadcasting signals from a radio or television station. The reason is that you are broadcasting signals from a radio or television station. Occasionally we hear about things like "pirate radio" and "pirate TV."[59] In the popular imagination, these operations are run by radicals shacked up in secret locations with primitive equipment. Said radicals "appropriate" bandwidth from "the man" and therewith broadcast their scratchy radicalism to the masses yearning to be free (or listen to weird music). It's all very outré. It's also very risky business because the authorities – the folks who license the airwaves – usually have no difficulty locating and closing down the pirate operations. Actually, pretty much anyone with a radio direction finder – not a complicated or expensive piece of equipment – can make their way to the source of a radio or television signal. Once they find the source, they are going to find you, and your "cover" is going to be blown. So you can't hide your identity very easily in the world of broadcast. But can you hide your message, that is, transmit it to a closed audience? You only have two options for accomplishing this feat: limiting reception and limiting comprehension. There is no way to do the former while broadcasting: anyone with the proper equipment can pick up an airborne signal. You can, however, constrain reception by transmitting your signal over a closed circuit; that way only those "in the loop" will be able to receive it. But this won't really work for a large network because it will have too many loose ends to monitor. Someone will hack in. As for limiting comprehension, this can be accomplished by encrypting your signal whether you broadcast it or send it over a closed circuit. If you have the cipher, you can decode the signal. If not, then not. Again, this won't work well on a large network because too many people will have the cipher to secure it properly. Somebody will leak it. All this talk of closed circuits and codes may sound far removed from your humdrum life, but it's not. If you have cable TV, you are both on a closed circuit and have a decoder. If you aren't paying for your cable TV, then you have joined the millions of viewers who have hacked through both.

On the receive side, it's entirely possible for someone to tell whether you are listening to the radio or watching TV in the "privacy" of your own home. Both kinds of receivers give off signals that can be detected through walls and from some distance. Just ask anyone who lives in Britain. The United Kingdom sells annual licenses to the owners of TV sets in order to fund the BBC. These licenses aren't cheap: £142.50 for a color TV and £48.00 for a black-and-white one.[60] Naturally, some people don't pay, or at least try not to. So the TV Licensing office (TVL) has a fleet of unmarked vans with ultra-secret detection

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35. Abraham Lincoln, "Address Delivered at the Dedication of the Cemetery at Gettysburg," in *The Collected Works of Abraham Lincoln*, 9 volumes, edited by Roy P. Basler (Springfield: Abraham Lincoln Association, 1953), vol. 7: 19.
36. Gerhard Ritter, *Fredrick the Great: A Historical Profile*, translated by Peter Paret (Berkeley: University of California Press, 1975), 166.
37. For recent treatments, see Herman Beck, *The Origins of the Authoritarian Welfare State in Prussia: Conservatives, Bureaucracy, and the Social Question* (Ann Arbor: University of Michigan, 1995); and E. P. Hennock, *The Origins of the Welfare State in England and Germany, 1850–1914: Social Policies Compared* (Cambridge: Cambridge UP, 2007).
38. On the role of politics in the creation of the modern media, and the origin of the split between state ownership in Europe and private ownership in America, see Paul Starr, *The Creation of the Media: Political Origins of Modern Communications* (New York: Basic Books, 2005).
39. By "cultural liberalism" we mean the idea that people should be allowed to do as they want in the cultural sphere. The notion is tightly bound up with the notions such as "freedom of religion," "freedom of the press," "freedom of expression," the "right to privacy," and "toleration" generally. The literature on each of these ideas is sizable. For a recent summary of the liberal tradition, see Pierre Manent, *An Intellectual History of Liberalism*, translated by Rebecca Balinski (Princeton: Princeton UP, 1994). On the widening of what was permissible to write and read, say and hear, and show and watch in the United States, see Margaret Blanchard, *Freedom of Expression in Modern America* (New York: Oxford UP, 1992).

40. See Janet Clark, *'Art Made Tongue-Tied by Authority': Elizabethan and Jacobean Dramatic Censorship* (Manchester: Manchester UP, 1990); R. Dutton, *Mastering the Revels: The Regulation and Censorship of English Renaissance Drama* (London: MacMillan, 1991); and David Thomas, David Carlton, and Anne Etienne, *Theatre Censorship from Walpole to Wilson* (Oxford: Oxford UP, 2007).
41. See David Colclough, *Freedom of Speech in Early Stuart England* (Cambridge: Cambridge UP, 2005), and, more generally, Leonard W. Levy, *Emergence of the Free Press* (Oxford: Oxford UP, 1985).
42. See David M. Rabban, *Free Speech in Its Forgotten Years* (New York: Cambridge UP, 1997).
43. See Leigh Ann Wheeler, *Against Obscenity: Reform and the Politics of Womanhood in America, 1873–1935* (Baltimore: Johns Hopkins UP, 2004).
44. On what follows, see Laura Wittern-Keller, *Freedom of the Screen: Legal Challenges to State Film Censorship, 1915–1981* (Lexington: University of Kentucky Press, 2008); and Laura Wittern-Keller and Raymond J. Haberski, *The Miracle Case: Film Censorship and the Supreme Court* (Lawrence: UP of Kansas, 2008).
45. Anthony Burgess, *A Clockwork Orange* (London: Heinemann, 1962).
46. Carter et al., eds., *Historical Statistics of the United States*, table Dg 55.
47. Website: United States Postal Service, "Pieces of Mail Handled, Number of Post Offices, Income, and Expenses, 1789 to 2008." Retrieved June 4, 2009.
48. Carter et al., eds., *Historical Statistics of the United States*, table Dg 225.
49. Ellen Propper Michiewicz, *Split Signals: Television and Politics in the Soviet Union* (New York: Oxford UP, 1990), 21–22. The Soviets were hardly alone in censoring foreign broadcasts. See George H. Quester, "Coping with Transborder Penetration: The Politics of Television," *Journal of Policy Analysis and Management* 3:4 (1984), 532–543.
50. Ellen Propper Michiewicz, *Changing Channels: Television and the Struggle for Power in Russia* (New York: Oxford UP, 1997), 99.
51. Starr, *The Creation of the Media*, 315–326.
52. Starr, *The Creation of the Media*, 348–363.
53. Starr, *The Creation of the Media*, 339–346.
54. See Jerome A. Barron, "Access to the Press – A New First Amendment Right," *Harvard Law Review* 80 (1967), 1641–1678.
55. José Ortega y Gasset, *The Revolt of the Masses* (New York: W. W. Norton, 1932).
56. C. Write Mills, *The Power Elite* (New York: Oxford UP, 1956), chapter 13. One might also mention Raymond Williams, *Television: Technology and Cultural Form* (London: Fontana, 1974).

57. In most of Europe television is state-owned, which is to say completely subsidized by tax-payers. But even in the United States, the government subsidizes both radio and television production (via the Corporation for Public Broadcasting) and radio and television *consumption*. For example, the National Telecommunications and Information Administration is subsidizing the purchase of digital-to-analog converters for those 17 million Americans who do not have digital-ready televisions. See Glenn Derene, "Digital Transition Looms, but Do Americans Have a Right to TV?" *Popular Mechanics* (May 5, 2008).
58. In neither the United States nor the United Kingdom is television reception viewed as a legal "right." If someone builds a code-compliant structure that blocks your reception, you have no legal recourse. For the United States, see T. K. McQueen, "Nuisance – No Right to Interference-Free Television Reception," *DePaul Law Review* 22 (1972–1973), 870ff. For the United Kingdom, see Janet O' Sullivan, "A Poor Reception for Television Nuisance," *Cambridge Law Journal* 55:2 (1996), 184–187; and Janet O' Sullivan, "Nuisance in the House of Lords: Normal Service Resumed," *Cambridge Law Journal* 56:3 (1997), 483–485. That said, both governments have recognized that they need to take measures to ensure that all citizens have access to radio and television. More than that, for decades now legal scholars and the courts have been flirting with a positive "right to access" interpretation of the First Amendment. See Barron's seminal "Access to the Press – A New First Amendment Right" and his more recent reviews, "Rights of Access and Reply to the Media in the United States Today," *Communications and the Law* 25:1 (2003), 1–13, and "Access Reconsidered," *George Washington Law Review* 76:4 (2008), 826–844.
59. See Andrew Yoder, *Pirate Radio: The Incredible Saga of America's Underground, Illegal Broadcasters* (Salona Beach: HighText Publications, 1995); Andrew Yoder, *Pirate Radio Stations: Tuning in to Underground Broadcasts in the Air and Online*, third edition (New York: McGraw-Hill, 2002); and Sue Carpenter, *Forty Watts from Nowhere: A Journey into Pirate Radio* (New York: Simon & Schuster, 2004).
60. Website: TV Licensing. Retrieved June 30, 2009.
61. "New Generation of Television Detector Vans Hits the Streets," BBC press release, June 24, 2003.
62. Media Institute of Southern Africa, "Zimbabwe: Street Vendor Arrested for Listening to Critical Radio Program," *Africa News* (June 23, 2009).
63. See Michael Nelson, *War of the Black Heavens: The Battles of Western Broadcasting in the Cold War* (Syracuse: Syracuse UP, 1997), 63, 133, and 184.
64. Nelson, *War of the Black Heavens*, 62–66, 133–136, 163–164, 190–192.
65. Website: Carin Zissis and Preeti Bhattacharji, "Media Censorship in China," Council on Foreign Relations. Retrieved August 3, 2009.
66. Fardin Alikhah, "The Politics of Satellite Television in Iran," in *Media, Culture and Society in Iran: Living with Globalization and the Islamic State*, edited by Mehdi Semati (London: Routledge, 2008), 94–110.
67. Website: Ian Liston-Smith, "Meager Media for North Koreans" (October 10, 2006), BBC News. Retrieved June 30, 2009.

68. For what follows, see Starr, *The Creation of the Media*, 295ff.
69. Lee Hyo-won, "Living Film Legend Tells Her Story," *Korea Times* (November 23, 2007).
70. On the idea that the public "owns the airwaves," see Reed E. Hundt, "The Public's Airwaves: What Does the Public Interest Require of Television Broadcasters?" *Duke Law Journal* 45:6 (1996), 1089–1129. On the erosion of this doctrine, see Krystilyn Corbett, "The Rise of Private Property Rights in the Broadcast Spectrum," *Duke Law Journal* 46:3 (1996), 611–650.
71. On film exhibition, see Douglas Gomery, *Shared Pleasures: A History of Movie Presentation in the United States* (Madison: University of Wisconsin Press, 1992).
72. On early radio listening in public spaces, see Richard Butsch, *The Making of American Audiences: From Stage to Television, 1750–1990* (New York: Cambridge UP, 2000), 187–189. On early television watching in public spaces, see Anna McCarthy, "The Front Row Is Reserved for Scotch Drinkers: Early Television's Tavern Audience," *Cinema Journal* 34:4 (1995), 31–49; Butsch, *The Making of American Audiences*, 238–243; and Anna McCarthy, *Ambient Television: Visual Culture and Public Space* (Durham: Duke UP, 2001).
73. See Linda Williams, *Hard Core: Power, Pleasure, and the "Frenzy of the Visible"* (Berkeley: University of California Press, 1999), 58–92.
74. John Heitmann, *The Automobile in American Life* (Jefferson: McFarland, 2009), 99–100.
75. Busch, *The Making of American Audiences*, 235–236.
76. Lynn Spigel, "Television in the Family Circle: The Popular Reception of a New Medium," in *Logics of Television: Essays in Cultural Criticism*, edited by Patricia Mellencamp (Bloomington: Indiana UP, 1990), 73–97. Also see Lynn Spigel, *Make Room for TV: Television and the Family Ideal in Postwar America* (Chicago: University of Chicago Press, 1992).
77. On the Walkman, see Paul du Gay et al., *Doing Cultural Studies: The Story of the Sony Walkman* (London: Sage, 1997). On the videotape, see Julia R. Dobrow, ed., *Social and Cultural Aspects of VCR Use* (Hillsdale: Lawrence Erlbaum Associates, 1990).
78. On the video revolution and the growth of video porn, see Stephen Prince, *A New Pot of Gold: Hollywood under the Electronic Rainbow, 1980–1989* (New York: Simon & Schuster, 1999), 121–123.
79. "...wie es eigentlich gewesen ist." Leopold von Ranke, *Geschichte der romanischen und germanischen Völker von 1494 bis 1514* [1824], third edition (Leipzig: Verlag von Duncker und Humblot, 1885), Vorrede, 7.
80. The distinction between icons and symbols is drawn from the writings of Charles S. Peirce. On it, see Floyd Merrell, *Pierce, Signs and Meaning* (Toronto: University of Toronto Press, 1997).
81. On the capacity of Circus Maximus and other large venues of the Ancient World, see Hazel Dodge, "Amusing the Masses: Buildings for Entertainment and Leisure in the Roman World," *Life, Death and Entertainment in the Roman Empire*, edited by D. S. Potter and D. J. Mattingly (Ann Arbor: University of Michigan Press), 205–255.
82. For an interesting overview, see Thomas M. Fitzgerald, *The Crowd and the Mob: From Plato to Canetti* (London: Unwin Hyman, 1989).