first trans-Atlantic "airships," with routes to New York from Europe. Later the airplane became the preferred mode of air transportation. It was faster and safer than dirigibles. A trip from to Los Angeles to New York was an overnight flight, compared to a four- or five-day train ride. Skyscrapers and airplanes closed physical distances with physical means from something imagined in radio communication to something physically possible.

When industry picked up on these innovations, new devices and vehicles were "streamlined." Cars, trains, and airplanes, which were also faster, were sheathed in aerodynamic "skins." Everything from radios, appliances, and home decor to aircraft, automobiles, and trains were streamlined as objects of speed. The transcendence of time and space that was once considered a radical conception had carried across generations as new and fashionable design.

MODERNISM GETS A MUSEUM

With all things fast and new, modern art forms also became institutionalized. One of the influential figures who made this possible was Abby Aldrich Rockefeller, who was the spouse of John D. Rockefeller Jr., of Standard Oil. In the twentieth century, the Rockefellers established significant art and cultural institutions in their native New York and beyond. John D. Rockefeller Jr. had a preference for classical and historical approaches to the arts, though Abby Rockefeller promoted the new modern art forms. Abby and her friend, Bernice Kert, took over the seventh floor of the Rockefeller house on Manhattan's West 54th Street and established a gallery for Abby's modern collection. John continued things his own way. He built The Cloisters, a medieval-style complex at the north end of Manhattan Island to house medieval works. He also funded the design and building of New York's Riverside Church. This was John's way of establishing the cultural traditions that he thought would benefit society symbolized in architecture and arts-related institutions. His projects were revivals of historical styles of art and architecture. Even with his classical orientation, John Rockefeller did not stop Abby from collecting modernist works. When she wanted to build a museum of contemporary art. he authorized the demolition of their house for the building site. The museum was finished in the early 1930s, and it was named The Museum of Modern

Art, known also as MoMA. Modern art that was perceived as radical and nonsense, if not dangerous, was now institutionalized with a permanent home in the United States.

THE JAZZ AGE

New musical forms called jazz were promoted by radio and the recording industry, and it became part of the breathless forward pace of the new technologies and social changes of the twentieth century. After World War I, sociologists began to study families of the middle classes to determine changes brought on by what they termed "new consumerism." Families were changing. Young adults began to marry across ethnic and racial lines. They bought ready-made food and clothing instead of growing gardens and sewing their own clothes. Sociological studies, including one for President Herbert Hoover, identified these changes as a decline of the "typical American family." The problem with these studies was that they selected only white families and steered clear of groups that they regarded as "ethnic" and "Negro." These groups were ignored because they had become the whipping boys for causing social ills with their ignorance of the Anglo-American Protestant culture. Whether they meant to or not, the sociologists profiled marketing data for a "cookie-cutter," White American family, who owned homes or patches of land and balanced work life with private leisure time for pursuits in cultural activities.

One of the significant changes in popular culture at this time, particularly in music and film, was the development of a youth market, which was also blamed by traditional groups for the decline of the family. It was the first time that mass industry consciously marketed one style of music and the culture that went with it to teenagers and another to their parents. This difference is what sociologists referred to as the "generation gap." Part of the interest in young people was that high school had become mandatory for young people by the 1920s, and it quickly became an institution that was associated with the phenomena of dating, dancing, and after-school life, among many other stereotypes of adolescence. The notion of public high schools was only 30 years old. These parents, especially in the middle classes, would have been the first generation of adults to send their children to high school. They observed as their teenagers became

preoccupied with a new form of music and dance known as jazz.

Jazz cultures were problematic because they emerged among mostly African Americans. There were other forms of country music, but jazz was the idiom that enjoyed the most publicity. Jazz and its association with African Americans arose at a time when most minds were preoccupied with Prohibition, new concepts of sexuality, and new social customs, which challenged the values of older generations. The biggest reaction to the popularity of jazz music was that it was emotional and sensual. The rhythms occurred on the offbeat, and the harmonies were dissonant, which offended the ears of those who preferred hymn singing and barbershop quartets. Another worry was that jazz music was broadcast on radio. Parents were used to monitoring their children's entertainment, and they worried about radio broadcasts that brought into their private homes objectionable material that their children could hear with the flip of a switch.

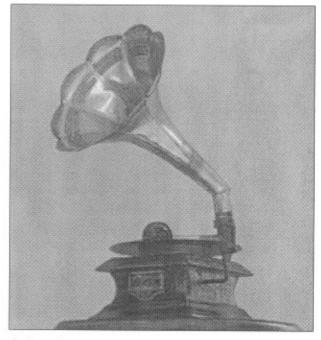
Another development that made a dramatic change in the consumer market is that machines could reproduce copies of musical performances. Until this invention was available, most music was reproduced either by sheet music or passed by ear from one musician to another. Player pianos mechanically reproduced piano scores in bars, parlors, and churches. However, the phonograph would change the perception of popular music for the rest of the century, as coming from stores or a factory rather than from performers.

The most-discussed publisher for sheet music was Tin Pan Alley, a music publishing center whose name came from the street where it was located. Tin Pan Alley began in the 1890s in New York, at 28th Street between 5th Avenue and Broadway. Later the industry moved to Broadway, between 42nd and 50th Streets in the heart of the theater district. Sheet music repertoire was mostly commercial music by songwriters in the forms of ballads, dance music, commercial music of songwriters, and vaudeville numbers. As the broadcast and recording industry developed, the demand for music increased, and the music came from other sources.

Tin Pan Ally was influenced by jazz, as most commercial music was in the early twentieth century, but it did not have much to do with the blues and the original jazz clubs that began the jazz

age. In short the music published through Tin Pan Alley constituted blues that had been cleaned up and refined for White markets.

The popularity of jazz and other genres of music throughout the twentieth century had as much to do with the cultural influences of consumerism as they did with technology. Phonographs, tape recordings, CDs, and DVDs all extended the audiences for recorded music.



A Gramophone © 2007 JupiterImages Corporation.

Early phonographs were known as gramophones. The first gramophones were plain in appearance. Later models were styled as freestanding cabinets with a place to store records. Manufactures hoped that phonographs would appeal to a broader market if they would appear as a piece of furniture. The turntable was spring driven, and the user used a crank to wind it up. Because no electricity was used, amplification was accomplished by sending the vibrations of the wooden needle, or stylus, to a cone-shaped horn, which turned these vibrations into sound waves.

Some 40 years later, phonographs were powered by electricity, which provided better amplified sound. The most popular discs put out by record companies were the 45 RPM records that carried one song on each side. These "singles" were affordable. They could be played on phonographs one at a time

or stacked on a "changer" that would play a record and drop the next disc in succession. Later, the sale of 33 RPM albums with multiple songs expanded the market for records and record players. These "record players" were the first of many innovations that made recorded music more portable. The players were usually designed to close up securely and be carried like a suitcase to another location.



A Transistor radio @ 2007 JupiterImages Corporation.

Radio was the next media to be made portable. In 1954, the Regency TR-4 was the first transistor radio on the market. These radios were made for portability and were one of the first handheld communication receivers. They were one of the most affordable devices for listening to popular music. The popular image of young people out for a stroll listening to the small radio held to their ear using an earplug made radios very popular. Promotion of music on the radio was actually a way to endorse one musician over the other. A well-regarded disc jockey could spike sales of one song or another. Recorded music was delivered in personal copies and recordings that were played on the radio.



Record player @ 2007 JupiterImages Corporation.

In 1964, the Ford Motor Company introduced an eight-track cartridge player as a custom option in its automobiles. With this development automobile interiors became acoustical chambers that were designed to enhance stereo sound. The eight-track tape was a self-contained magnetic spool of tape that played an entire album of music. Home players were introduced in 1966. Magnetic tapes were desirable because they could be played in an automobile with a minimum of fuss. Owners of home eight-track players no longer worried about scratching records. Though eighttrack media became popular, audiophiles (people interested in professional-level equipment and recordings) tended to avoid eight-track formats. The sound was slightly distorted with what was known as "wow and flutter." Because the tape actually rubbed against itself while it played, there was a chance that the tape could jam. The superior audiocassette format won the satisfaction of most consumers and would soon replace the eight-track cartridges. In the long run, magnetic tape media changed the nature of popular music in important ways. Not only did automobiles become listening studios, but also the phenomenon of riding down the road, listening to songs about trucking, journeys, and life's joys and sorrows, helped make the automobile that much more of an important cultural icon.



A 8-track stereo @ 2007 JupiterImages Corporation.

As the use of media players extended to automobile driving, a similar transformation was underway in home listening. Such forms of media as disc recordings, magnetic tapes, AM and FM radio, and television became available. and manufacturers consolidated all this hardware

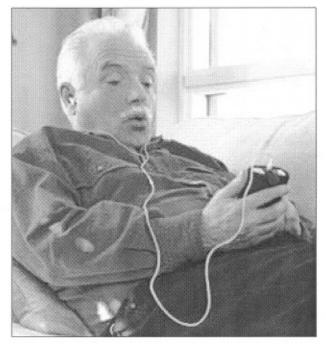
into multipurpose console-style cabinets, which became known as home entertainment centers. Like radios and phonographs 40 years earlier, stereo consoles were marketed as furniture made to conceal the audio components from view. Until this time, music was amplified to be heard well. But the 1960s brought a change in the production of recordings. Music was recorded to sound real, not just loud. The recordings were made in stereo, which meant that some sounds came from a left channel and some from the right. The illusion was of sound surrounding you. High fidelity, or "hi-fi," also reproduced high and low sounds to further this illusion and to better distinguish between instruments that played low notes and high notes. Rhythm was clearer, and the spatial illusion of sitting in a concert hall was unprecedented.



A Stereo console @ 2007 JupiterImages Corporation.

Sales of new stereo equipment escalated, pushed by the sale of new stereo recordings. Monographic recordings that played all sound through one channel would be available for awhile, but soon were phased out along with the hardware that played them. To be sophisticated about sound equipment was to be aware of the latest developments. For those consumers who did not know the technical advantages of owning the newest equipment, manufacturers generated new sales by changing the style of console cabinets. This kind of aesthetic and technical savvy created a persona of the consumer as a technical and

artistic expert. Individuals who were known as "audiophiles" usually owned high-powered and costly equipment. AM-FM radios, reel-toreel tape recorders, and high-quality speakers created the ambience of a recording studio. The important point in these new developments is that recordings were no longer considered copies of live performances, but new kinds of music production in their own right.



MP3 players @ 2007 JupiterImages Corporation.

Alongside development of the entertainment centers, manufacturers were also at work on new handheld players and receivers. Audiocassettes and compact disc players became a part of the equipment necessary to exercise by the late twentieth century. Everyone from marathon runners to weight lifters showed up at their health clubs with their own music or even recordings of books. Aerobics classes became a new danceexercise. These devices featured an improved stereo effect in headphones that blocked outside noise and created an illusion of the user in their own sphere of simulacra. This was a way to isolate oneself, and working out became a contemplative experience.