The rise and fall and rise of the amusement park Richard Yoon*

*Business Administration. University of Illinois at Champaign-Urbana, United States¹

Abstract

Nearly every major city has an amusement park with some cities becoming a popular tourist destination because of its amusement parks. But what is an amusement park? An amusement park can be defined as a commercially operated park having various devices for entertainment. Amusement parks also typically feature booths for the sale of food and drink. In addition, amusement parks are designed for long-term operation and are permanent, unlike carnivals and fun fairs, which are temporary and mobile. A theme park is a subset of the amusement park. Simply, a theme park is an amusement park centered on one or more specific themes. If we look into the history of amusement parks, they started from the medieval fairs of Europe.

Keywords: History, amusement park, theme park, medieval fair, world expo. roller coasters, technology

1. Origins in the medieval fair

The fair can be traced from its origins in the High Middle Ages of Europe (approximately from the 11th to the late 15th centuries). The word "fair" originates from the Latin word feria, which was used to describe religious festivals during the Roman Empire. Similarly, at the start of the High Middle Ages, a village would hold a fair during the period of a saint's feast and in the precincts of a local church or abbey. Edward I of England soon outlawed this desecration of the churchyard, and thus fairs were held in a prominent area of the village such as the town square.



¹ Richard Yoon, Email: tchrichard@gmail.com

These public gatherings were festive and allowed regular community and tradition to be created, drawing widely scattered populations. Jugglers, theater performers and other entertainers found and developed their craft at fairs. As fairs became more commonplace and popular, traders and merchants saw opportunities for commerce.

Unlike today's amusement parks that are commercially operated, in Europe, there can be no fair without a franchise, which can only be exercised by right of a grant from the crown. The first charter of the great fair of Stourbridge was granted by King John. Records exist of 2.800 grants of franchise fairs between the years 1199 and 1483. More than half of these were made during the reigns of John and Henry III. when the power of the church was in ascendancy. Sometimes fairs were granted to towns as a means for enabling them to recover from the effects of war and other disasters. The importance of medieval fairs may be understood from the financial inducements given to commerce; in the 14th century, Charles IV granted a charter for a "free fair" which declared that both during the continuance of the fair, and for eighteen days before and after it, merchants would be exempt from imperial taxation, from arrest for debt, or civil process of any sort, except such as might arise from the transactions of the market itself and within its precincts. Fairs thus were a welcome and anticipated gathering place for clergy, tradesmen as well as entertainers and farmers. These ever-expanding "free fairs" of England and the continent had a great impact on the development of society and its familiarity with the growing sophistication of banking and finance which developed towards the end of the Middle Ages.

Fairs were the chief centers of country traffic even as late as the 16th century. However, fairs began to decline rapidly after 1759, first in England, then spreading eastward on the Continent when improving infrastructure such as paved roads and canals brought increased urbanization. As the population of Europe began to move to the cities and the technological means to feed the urban populations developed, the village fair



began to decline in importance. With improved transportation, merchants no longer depended on a central gathering place that the fair provided. In many towns, fairs were perceived as having evil effects on the public morals, which accelerated the extinction of fairs. In London, fairs were abolished as public nuisances before 1855—the last year of the famous fair of St Bartholomew; and the decedent fairs of Paris were swept away during the French Revolution.

2. Russian mountains, world fairs and the golden age of amusement parks

As fairs spread throughout Europe, the more frigid and primitive conditions of Siberia and eastern Russia made fairs important centers of trade, even as fairs began to wane in Western Europe. Separating Europe from Asia and running north-south are the Urals Mountains. From the 16th century onward, "ice slides" or "flying mountains" went up in several Russian towns near rivers—St. Petersburg and its Neva River, in particular.

These "Russian Mountains" featured one tower with wooden stairs 20-25 meters in height which led to the top of a 180 meter ice ramp to the base of a second tower. The first Russian Mountains were built upon specially constructed hills of ice around Saint Petersburg, Russia in the 17th century. The riders would ride atop of sleds down these wooden slides covered in ice. At first, these sleds were nothing more than a hollowed block of ice stuffed with straw. The slides were watered each day to keep the ice slippery with sand sprinkled at the bottom of the slide to slow riders down. By the 1700s, these winter amusements soared above the shore of the Neva as part of winter festivals. The slides sometimes spanned several blocks and were flanked by trees, cut and re-erected to evoke forest grove. These artificial mountains surrounded by torches that allowed the thrills to continue in the evening.



Russian aristocrats soon began to enjoy the winter pastimes of the village folk. In The Incredible Scream Machine: A History of the Roller Coaster, Cartmell cites a letter from the court of Tsarina Anna Ioannovna from 1734. The writer describes "a new diversion" that was "wide enough for a coach" and "had water flung upon it, which soon froze, and then more was flung, till it was covered with ice of a considerable thickness." The "ladies and gentlemen of the court" plopped themselves on sledges and girded themselves for a flight to the bottom, "for the motion is so swift that nothing but 'flying' is a proper term."

The Tsarina Elizabeth, and later Catherine the Great commissioned a pair of slides to amuse her courtiers at her Oranienbaum Palace on the Gulf of Finland, as well as adding wheels and grooved tracks to make a summer version at her palace in 1784.

During the Napoleonic invasion of Russia in 1812, the French discovered these Russian Mountains and brought the idea home to Paris. In 1817, Belleville Mountain in Paris became the first slide to lock cars onto tracks by their wheel axles. And the city's Aerial Walks, which had two curving tracks that met at the base of the ride, introduced a system for pulling the cars back up for the next rider.

Following the Wars of Napoleon and the wave of nationalism which swept across Europe, the French began its tradition of holding national exhibitions, culminated with the Industrial Exposition of 1844 in Paris. This fair was followed by other national exhibitions in Europe. As the Europe was undergoing the Industrial Revolution in the 19th century, these exhibitions resembled medieval fairs with their ability to draw people from far-away places—now spanning continents with advances in canal, railroad and steamship technology. Like the medieval fair, these increasingly international exhibitions attracted commerce and began to showcase the achievements of nations.

Concurrent to advent of expositions in the 19th century were the creation of pleasure gardens which were open to the public



for recreation and served as venues for entertainment. particularly zoos and amusement rides. One of the largest pleasure gardens is Tivoli Gardens in Copenhagen, Denmark. The park opened in 1843 after its founder, Georg Carstensen, obtained a royal charter, telling King Christian VIII that "when the people are amusing themselves, they do not think about politics."

The first World Expo was held in London in 1851. Entitled, "Great Exhibition of the Works of Industry of All Nations," it was also the first international exhibition of manufactured products, and was the precedent for future international World Expos that continue to exist today. Globalization in the 19th century meant that these "World Fairs" could be hosted by different nations each year; no longer did countries need to invade other countries to discover revolutionary amusements like Russian Mountains. In the 1880s. St. Paul. Minnesota built its own "Ice Palace," featuring toboggan slides, an ice rink, and a curling tournament modeled after the Russian precursors.

While many abuses in labor were committed during the Industrial Revolution, industrialization as a whole generally liberated millions of people from subsistence farming and provided more leisure time to average people. In particular, many Americans began working fewer hours and had more disposable income. No longer confined to the ruling classes, the descendant of the Russian Mountains, the roller coaster, began to be constructed all over, particularly in America where land to construct large coasters was plentiful and the engineering know-how to create ever-more innovative coasters met the demand of a growing population of thrill-seekers.

La Marcus Thompson is often credited as the "father of the roller coaster" building "Coney's Switchback Railway" at Coney Island, New York in 1884.



Coney's Switchback Railway featured a tower where riders would climb to board a large car with bench seats. Similar to the Russian Mountains, the car would be pushed off down a 183 meter tracked ramp to another tower, travelling at 9.7 km/h. At the top of the second tower, the car was "switched back" to a return track to allow the car to return to the first tower. Following the popularity of the Switchback Railway at Coney, others would build larger and faster rides. Charles Alcoke developed the first oval complete-circuit ride called the Serpentine Railway soon afterwards.

The World's Columbian Exposition of 1893 in Chicago commemorated the 400th anniversary of Christopher Columbus' arrival to the New World in 1492, and was the first world's fair with an area dedicated exclusively for amusement and separated from the exhibition halls. This amusement area was located on Midway Plaisance on the south side of Chicago (which is the origin of the term "midway" to describe where sideshows of a carnival or fair are located). The first Ferris wheel (known in many Latin American countries as "rueda de Chicago" ("Chicago Wheel") was built by George Ferris and was 80 meters high and featured 36 cars, each accommodating up to 40 people.

The World's Columbian Exposition in Chicago also featured many cultural exhibits centered on a theme such as the Tiffany Chapel, a Turkish village or Buffalo Bill's Wild West Show. The Chicago World Fair would presage the theme parks of today.

The Chicago midway, in turn, inspired one attendee, George Tilyou, to build the world's first major amusement park, Steeplechase Park on Coney Island, New York in 1897. Food merchant Charles Feltman introduced the first hot dog cart on Coney Island, delivering easy-to-eat, affordable food to the masses that would congregate at Coney Island on weekends.

The success of Steeplechase led to many more amusement parks being built at the turn of the century. The period between 1900 and 1920 is often referred to as the "Golden Age of Amusement Parks" with over 2,000 parks in operation in



the United States alone. Many amusement parks were located at the end of streetcar lines of major cities, while many small cities and big towns had big merry go rounds, under large gazebo-like buildings in town squares. These parks served as source of fantasy and escape from real life. In an age of no television or internet, there was a ravenous public appetite for roller coasters and other rides.

Electrical companies and street ล11 car companies collaborated in the planning of amusement parks. New roller coaster innovations thrilled riders with ever-higher drops and faster speeds. Because many of the rides at amusement parks were constructed primarily out of wood, there were many instances where parks burned down to the ground from negligent fire. Many of the safety laws concerning rides which now exist today were not in place during this time.

3. Decline, Disneyland and the baby boom

The development of the automobile provided Americans with more options for entertainment outside of amusement parks. The Great Depression in the late 1920s and 1930s resulted in significantly decreased attendance at amusement parks as well as park operators themselves running out of money. Lack of financial resources meant fewer renovations or rides as well as overcrowding and safety accidents. Finally the military draft during the Second World War resulted in shortages of qualified staff, and many parks that survived the Depression had to close down due to staff shortage. Changing demographics in towns and cities during the war also led to decreased patronage.

The fortunes of amusement parks changed dramatically in 1955 with the opening of Disneyland in Anaheim, California. Originally, Walt Disney envisioned building a tourist attraction for both adults and children next to Disney Studios. Inspired by Tivoli Gardens in Denmark and the World's Columbian Exposition in Chicago, Mickey Mouse Park eventually became Disneyland, becoming the first modern theme park.

Disneyland was built at time when the United States was experiencing both post-war prosperity and an unprecedented baby boom. This led to a revival of amusement parks. Six Flags in Texas followed Disneyland in 1957. Unlike the increasingly immersive experience theme parks like Disneyland provided, amusement parks like Six Flags placed a greater emphasis on providing the latest and greatest roller coasters.

In addition, smaller, family-owned kiddie parks sprouted throughout the 1950s and 1960s to meet the demands of growing middle class families. Some of these smaller kiddie parks revolved around markets or restaurants, or with certain themes like Christmas or water slides.

The 1970s energy crisis and changing demographics would continue to present challenges to amusement parks, and parks needed to continually adapt in order to thrive or even survive.

4. The advent of theme parks and the future

The 1980s saw movie blockbusters like Star Wars and Indiana Jones in the entertainment industry. Films such as those from Harry Potter, Jurassic Park, and the Marvel Cinematic Universe are not only accessible and enjoyed by audiences all over the world, but these immersive films involve "world-building." World-building is the process of constructing a fictional, imaginary world with coherent qualities such as a history, geography, and ecology. Many fantasy and science films incorporate world-building which extended to television, novels, toys, video games, websites, cosplay and even social media. Because of exposure across multiple mediums, prospective visitors are attracted to theme parks which indulge and even add on to this world-building; a visit to a theme park is about creating an experience for the visitor. Thus, there is a natural connection between theme parks and world-building movie blockbusters.

Technological advances in safety systems and more efficient networking has also played a part in this new golden age of amusement and theme parks. In a connected world, any injury



or egregious safety violation is quickly disseminated to the public and could destroy the public image of safety of a park. Thus parks today are highly motivated to put the safety of their ticket-holders as their top priority with much thought and planning going towards theme park design.

Since the 1970s, automated theme park rides became more common, mostly in the form of point-to-point cabling as well as Ethernet technology. This creates a blocking safety system which reliably detects when more than one car is on the track at a time and quickly stop collisions. When one car comes within a certain range of another, the programmable logic controllers (PLC) will trigger an anti-collision system to avoid an accident. The monitoring of each ride can take place centrally or remotely, allowing operators to check the health and status of every machine in the park.

With high safety levels in mind, a new theme park ride can now be commissioned through a two-step process before the proposed design can even go to review and initial testing. Park directors write the specification before consulting engineering department for advice control on systems. Structural design is completed in CAD software manufacturing partner is then selected to build the ride. A team of civil engineers piece together the steel structures before each section is sent to the park for installation.

Theme parks have the organization and resources to use the latest in technology to enhance the guest experience. Mobile electronics and apps such as Disney's My Disney Experience allow ticket holders to create ride itineraries in advance of their visit, reserve parking, make reservations and order meals. Such apps can even give wait times for rides. Universal Studios offers a Universal Pay app which allows riders to set up a wallet within the app and link a credit card. This allows a QR code guests can use to scan for purchases within the park for touchless payment. This convenience allows guests to make purchase without the need to carry credit cards or cash while keeping record of all purchases.

Other technological advances include wearable tickets and kevs. Universal Orlando's Volcano Bay water park features a waterproof, wearable device called TapuTapu which holds guests' place in "virtual lines." This allows guests to explore the park during their wait times and provides alerts when their ride is available. TapuTapu is similar to Disnev's MagicBands which can be used as room keys for entry at Disney hotels as well.

Robotics are now being integrated in theme parks for accommodating guests. Hospitality robots are already used to greet visitors: Disney is developing a free-roaming robot that looks like Baby Groot from Guardians of the Galaxy which will roam around the grounds and greet visitors. Robotics throughout the park also reduce operational and labor costs.

A new generation of robots are being integrated in the rides themselves; riding in automatically-guided vehicles (AGV) would provide each guest with a unique entertainment experience, as the robots would be reactive. Instead of having one frontal wheel, or two wheels steering, four traction wheels would be integrated at the corner of each vehicle and kinematically mapped together. This would allow the AGVs to navigate safely at high speeds, simulating a variety of effects such as slides and skids. Rides can be completely trackless, and drones can work together with AGV for a truly immersive experience.

film industry and special effects will The also drive innovation as theme park guests seek ultra-high-definition, CGI and 360° immersive experiences; what people see on film has become the standard for what they expect in all experiences at a theme park.

With mobile electronics and entertainment, some fear that the theme park industry will inevitable decline as the thrill of riding roller coasters take a back seat to the entertainment offered by online gaming and virtual reality. Rather than be seen as competition, the future of amusement and theme parks incorporate mobile will communications metaverse to further create an immersive experience for guests



who seek to enter the new worlds they first encountered in movies and graphic novels.

conclusion

Throughout human history, advances in technology has allowed people to focus less on survival and given more time towards leisure and travel for pleasure. The medieval fair reached its height in the 1500s but gradually diminished due to industrialization and urbanization. This, in turn led to the rise of world expositions, and the worldwide exposure to different technological innovations led to amusement parks spreading particularly in the United States until the Great Depression and World War II. The post-war Baby Boom then saw a revival of amusement parks as well as specialized theme parks such as Disneyland. Today's amusement parks and theme parks will continue to adapt to advances in technology, changing demographics and trends just as their forerunners had.

References

Cartmell, R. (1986). The incredible scream machine: A history of the roller coaster. Popular Printers Bowling Green State.

Grogan, A. (2012). The golden age of amusement parks. Engineering & Technology, 12(2).

D. (2004). Riverview amusement park. Arcadia Haugh. Publishing.

Hill, B. (2020). Imagineering an american dreamscape: Genesis, Evolution, and Redemption of the Regional Theme Park. Rivershore Creative.

King, M. J. (2002). The theme park: Aspects of experience in a four-dimensional landscape. Material Culture, 34(2), 1-15.

C. (2013). factories: inventing American Pursell. Fun amusement parks. Icon, 19, 75-99.

Silverman, S. (2019). The Amusement Park: 900 Years of Thrills and Spills, and the Dreamers and Schemers Who Built Them. Black Dog & Leventhal.



Snow, R. (2019). Disney's Land: Walt Disney and the invention of the amusement park that changed the world. Scribner.

