USING THE NATIONAL REGISTER OF HISTORIC PLACES TO PRESERVE AND
PROMOTE GOLDEN AGE ARCHITECTURE GOLF COURSES

A Thesis

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Daniel King

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USING THE NATIONAL REGISTER OF HISTORIC PLACES TO PRESERVE AND
PROMOTE GOLDEN AGE ARCHITECTURE GOLF COURSES

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Department of History
Abstract

of

USING THE NATIONAL REGISTER OF HISTORIC PLACES TO PRESERVE AND PROMOTE GOLDEN AGE ARCHITECTURE GOLF COURSES

by

Daniel King

Drastic changes in sports and recreation happened in the first half of the twentieth century, much of it reflected in the development of golf course architecture. However, only four “Golden Age” (ca. 1910-1940) architecture golf courses that were designed by master architects are on the National Register of Historic Places, and these were nominated for reason other than their architecture. This lack of nominated Golden Age architecture golf courses stems from poor communication between historic preservationists and golf course managers. There has been a renaissance in Golden Age architecture literature over the last few decades. There is also a growing interest in preserving and documenting designed cultural landscapes. Both growing interests are leading to more literature about the two aspects of preservation. It is important to ensure golf course managers understand the National Register of Historic Places does not mean a loss of sovereignty of the golf course. With Internet age communication, the NRHP can be used to encourage both thoughtful preservation and promotion of these unique resources.

_______________________, Committee Chair
Dr. Lee Simpson

_______________________
Date

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INTRODUCTION

The National Register of Historic Places has criteria for evaluating a designed historical landscape and criteria for listing a landscape as a work of a master, but of the twenty eight golf courses currently registered, none are on the Register primarily as the work of a master course architect. The existing golf courses on the register were nominated at least partially because of their association with events or persons that made significant contributions to the broad patterns of history.

The reason for this lack of recognition of works of masters in golf course design is because of poor communication between golf course operators and historic preservationists. There are two reasons for the lack of recognition of works of golf course architect masters. First, golf course managers appear concerned that inclusion of golf courses on the register will prevent them from changing the course as necessary as the game changes. Second, historic preservationists assume that integrity issues require golf courses to be frozen in time to reflect the course as it existed at the time of historical significance.¹

Golf courses are unique in the world of historic landscapes because they frequently need to change as the game changes. The game played today is significantly different from the one played during the Golden Age (ca. 19xx-19xx of golf course architecture. A golfer plays the course rather than a human opponent. The game changed because equipment, training, maintenance practices, and instruction all changed and

courses changed to retain the same characteristics as designed by the master designer.

Golf course architect Michael Hurdzan says of the changes:

[T]he game of golf has changed over the last half century, and with breakneck speed the last fifty years. Golf equipment has shifted from wood-shafted clubs and crudely made balls to space-age material and computer-generated dimple patterns in search for “the Longest ball.”

Criteria A or B nomination for the National Register of Historic Places require maintaining the integrity to the period of significance, as both are associated with historic events or persons. Criteria C nominations include works of masters, in this case master golf course designers. Similar to built environments, a criteria C nomination can change since the period of significance, so long as that character-defining features of the golf course are maintained.

All historical golf courses are potentially a Criteria C designation on the National Register of Historic Places. For this study, however, the emphasis will be placed on what is considered the Golden Age of architecture in the United States — a period of less than 30 years between dates — and specifically four golf course designers who operated in those years: Charles Blair Macdonald, Donald Ross, Alister Mackenzie, and Albert Warren “A.W.” Tillinghast. These men are not the exclusive list of master architects of that period, but they are acknowledged in the golf world to be the masters of their craft in the United States. These four proficient designers made clear their intent in designing golf courses in their writings. The highlighted architects supply an eclectic sampling of

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the era. Three were born in Great Britain, one in the United States. Two came from well-to-do backgrounds; one from the middle class; the other from the lower class. Three designed professionally; one was an amateur designer. Three headed firms of architects and contractors; one designed independently. One famously designed courses all over the world; the other three exclusively in North America. Their education levels were startlingly different. One earned multiple degrees from Cambridge and Leeds while another most likely never attended school after the age of ten.

Highlighting the Golden Age of golf course design can open communication between golf course managers and historic preservationists, not only for preserving the courses against government intrusion, but also for promotional purposes. There is renewed interest in the Golden Age of golf course architecture, with many of the courses approaching their centennial celebrations (See Table 1: Significant Golden Age golf courses). Golf course managers could use the opportunity of inclusion on the National Register of Historic Places to promote their golf courses as worthy examples of courses from the original designers. A traveling golfer who enjoyed playing a golf course designed by a specific Golden Age architecture designer at his or her home course could be interested in comparing and contrasting a design in another locale by the same designer. The course maintaining the integrity of the original designer would be of great concern for the travelling golfer who wants to compare and contrast. Golf course managers could use the National Register to promote the golf course as a work of the master architect and still maintains sufficient integrity to experience what the architect intended. Modern architects wishing to learn more about the architecture completed by
their predecessors will know what courses they can visit to learn more about the history of golf course architecture.

The years since the Golden Age have not always been kind to the works of the masters. Many of the character-defining features from the masters were lost to changing golf courses through neglect, maintenance, and modifications. As some of these classic courses start reaching their centennial celebration, golf course management and players have a renewed interest in the original designs. Of the Golden Age designers, golf historian Brad Klein notes “There was something about their panache, their ego, their ability to utilize horse-drawn plows or mule teams and oxen – and no small cadre of immigrant labor – to create shapes that looked like they belonged as part of nature.” As golfers travel increasingly to courses in Great Britain and Ireland they are seeing more of the older, simpler ways to golf, and are taking vacations to resorts that specialize in the simpler game. There is a growing body of contemporary golf course architects who specialize in restoring or renovating Golden Age architects to their original designs while still reflecting aspects of the modern game. Golf course managers need to better understand what it means to maintain the integrity of the original design.

This report is divided into seven chapters. Chapter One reviews the current literature of designed cultural landscapes and examines the history of cultural landscape history as well as legal issues. It also discusses the process for nominating a golf course to the National Register of Historic Places and addresses some of the concerns for golf course

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4 Brad Klein, *Wide Open Fairways: A Journey Across the Landscape of Modern Golf* (Lincoln, NE: University of Nebraska Press, 2013), 169
management. Chapter Two examines golf history prior to the Golden Age and examines how golf grew differently in the United States than in its birthplace of Scotland. It puts the growth of golf in context to other leisure and sport events shaping eighteenth and nineteenth century history. Chapter Three examines the Golden Age of architecture in the United States, putting it in the context of other domestic and international issues. It also looks at the importance of the Golden Age to our appreciation of urbanization, sport, golf, and leisure activity history. Chapter Four surveys four Golden Age architects, their design philosophies, why they are still revered, and their importance to the modern game. Chapter Five reviews the criteria required for a golf course design to qualify for the National Register as a historic landscape and what it means to be qualified as a work of a master. Chapter Six looks at a single golf course, Sharp Park in Pacifica, and examines if it has the historic significance and integrity to qualify for the National Register and if not what changes will be needed to qualify. Chapter Seven sums up the study, and lists future efforts that can help place Golden Age architecture designs on the National Register of Historic Places.
CHAPTER ONE: GOLF COURSES AND THE NATIONAL REGISTER

Geographer Carl O. Sauer in his seminal 1925 work, “The Morphology of Landscape,” wrote that cultural landscapes are “fashioned from a natural landscape by a cultural group. Culture is the agent, the natural is the medium. The Cultural landscape is the result.” The American Society of Landscape Architects defines three classifications of landscapes. Designed landscapes are “altered under a plan by a professional or avid amateur with verifiable results.” Vernacular landscapes are “those that are altered through human interaction on the vernacular level, often related to a desired function and with a discernible pattern.” Natural landscapes are “those that are relatively unchanged by human intervention.” Golden Age architecture golf courses fits in the classification of designed landscapes.

There are currently twenty-eight golf courses on the National Register of Historic Places. (see Table 2 for list of golf courses currently included on the National Register). The majority of these courses are included because of their significant contribution to local events or economies. There are a few included because of the historic significance of the clubhouse or are part of historic districts. Three are on the list because of their

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8 Ibid.
9 Ibid.
involvement in early African-American golf history. Only a few courses on the National Register of Historic Places are courses designed by masters during the Golden Age of golf course design, but none exclusively because of their master architecture. The Golden Age golf courses designed by master architects on the National Register of Historic Places are Merion Golf Club, East and West Course in Ardmore, Pennsylvania (1989); City Park Golf Course in Baton Rouge, Louisiana (2002); Baltusrol Golf Club in Springfield, New Jersey (2005); Kokomo Country Club Golf Course in Kokomo, Indiana (2006); Cape Arundel Golf Club in Kennebunkport, Maine (2009); Temple Terrace Golf Club in Temple Terrace, Florida (2012); and Dunedin Isles Golf Club in Dunedin, Florida (2014). Tom Bendelow designed City Park Golf Club in 1923, Winged Park in 1908 and Temple Terrace in 1922. A.W. Tillinghast designed Baltusrol

in 1922. Local architect Bill Diddel designed Kokomo Country Club in 1923. Donald Ross designed Dunedin Isles Golf Club in 1926. Hugh Wilson designed Merion Golf Club Courses, the East Course in 1912 and the West Course in 1914.

Why such an inconsequential number of courses on the National Register? Golf course managers have been reluctant to get involved in the National Register of Historic Places because of a misunderstanding of what it entails. The game of golf has changed since the Golden Age of golf course design, and golf courses are concerned that historic preservation will mean a loss of sovereignty and a loss of ability to change with the times. Grant Spaeth, president of the United States Golf Association (USGA) in 1991 and 1992, said that when he was president he pushed to get owners and operators to use preservation, but there was always reluctance to be part of the program out of fear of losing control over the ability to make needed changes to the golf courses. He said the USGA lacked the knowledge to communicate the costs and benefits of using the National Register of Historic Places and there was not any known resources for making the needed arguments.17

Golf historian and author Phil Young works with golf course operators researching history and developing golf course histories for clubs. He was involved in getting Baltusrol Golf Club nominated for the National Register of Historic Places. He has heard the concern from golf operators of the loss of the ability to change the golf course as needed if on the National Register. Managers believe that if “a course [gets] on the National Register . . . they have to prove that they are both almost identical to what

17 Grant Spaeth, telephone interview with author, December 1, 2013.
was originally designed and that their course represents the singularly important work of that architect.”  

A significant contribution to why there is a misunderstanding about the National Register of Historic Places by golf course operators has been the history of historic preservation in the United States.

The history of historic preservation has often been a battle between preservationists and property-rights advocates. The conflicts over the years have made property owners and managers reluctant to get involved in historic preservation efforts. Preservationists have tried to battle this perceived conflict, first by ensuring minimal government intervention in preservation efforts, and later by emphasizing the benefits over obligations of historic preservation. Putting the history of historic preservation in the context of the battle between preservationists and property-rights advocates will help to better explain the reluctance of golf course owners and operators.

Built environments and designed cultural landscapes did not always share a common history, however, any history of preservation of designed cultural landscapes would have to tell the entire story of historic preservation. “Many informed professionals in the United States agree that (natural) conservation and (historic) preservation are two sides of the same coin,” Preservationist William J. Murtagh writes. “But efforts to treat them integrally have proven difficult.”  

To understand the history of preservation of designed cultural landscapes requires putting the study in the context of the entire historic preservation movement in the United States.

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The early era of historic preservation dealt with the idea of preserving history to inspire a sense of patriotism. Historic preservation during this period looked to preserve structures associated with famous individuals or events. Two early preservation efforts — Independence Hall and Mount Vernon — reflect this philosophy. Most preservation history in the United States starts with the preservation and reconstruction of Philadelphia’s Independence Hall and the Liberty Bell in 1816. The first generation after the United States’ Revolution showed little concern for the past. Philip Pregill and Nancy Volkman write in *Landscapes in History*, “the new nation saw itself as the embodiment of a future that should be unencumbered by political, social, and historical baggage representing repressive and elitist European traditions.” It took the following generation to start looking to the past to develop an identity tied to the founding generation. This was the motivation for the effort to preserve Philadelphia’s Independence Hall. The Hall, site of the debating and signing of the Declaration of Independence and the United States Constitution, was being sold for demolition despite its historical importance just a few generations earlier. Eventually the City of Philadelphia would save the Hall and various private fundraisers raised money for the restoration effort.

The next big historic preservation project was George Washington’s Mount Vernon estate. The United States Congress was presented with a petition to buy and

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21 Pregill, *Landscapes in History*, 664.
22 Ibid.
preserve Mount Vernon in 1853, titled “For the Proposed Purchase of Mount Vernon by the Citizens of the United States, in Order that They May at All Times have a Legal and Indisputable Right to visit the Grounds, Mansion, and Tomb of Washington.” The petition failed, leaving it to private groups to work on preserving Mount Vernon. The Mount Vernon Ladies’ Association of the Union was formed and was able to privately raise sufficient funds to buy the property, refurbish the buildings, and maintain the property.24

The Mount Vernon preservation process included substantial attention to the landscape. When Washington died his estate was 8,000 acres. When the Ladies Association bought the property in 1860 it was reduced to 1,200 and was no longer a working plantation.25 The goal of Mount Vernon was to have it restored to 1799, the year Washington died. With the landscape it was not always clear what was planted by Washington, his descendents, or by the Ladies Association. Recent work on the upper garden at Mount Vernon, a one-acre Gothic archway garden, shows that historically the garden has been inaccurate. The garden was narrow paths through overgrown boxwoods. Archeologists excavated a small portion of the garden in 2005 and discovered a garden below the existing garden that most likely was Washington’s garden circa 1799. Below that was a fruit-tree garden that Washington planted over earlier. The archeological discovery included large rectangular beds of different fruits, vegetables and flowers. The

24 Ibid.
work also showed historical accuracy required cutting back the boxwoods lining the garden. It is not clear from soil samples exactly what plant life was in the garden in 1799, but the garden now consists of “sweet William, snapdragons, violas, and other flowers surrounding rows of vegetables – cabbage, onions, beans, and more.”  

Without more documentation it is not possible to tell exactly what the upper garden looked like in 1799, but the discovery has led to a garden that is closer to being historically accurate rather than simply aesthetically pleasing.

The second stage of historic preservation was preserving cultural, artistic, and architectural structures. This saw preservationists and environmentalists joining forces to preserve the beauty of the past, both natural and designed. The late nineteenth century saw inaugural efforts to save natural and cultural landscapes. The federal government established Yellowstone National Park in 1872. Yellowstone was not entirely a conservationist’s domain. Railroad magnates, hoping to stimulate train travel by tourists going to Yellowstone to see the “mud pots, hot springs, and geysers,” proposed the park. During the last decade of the nineteenth century many aging Civil War veterans were pushing for the federal government to buy Civil War battlefields and turn them into National Monuments. Around the same time, there was a demand to preserve Native American sites in the Southwest, such as Chaco Canyon and Mesa Verde.

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27 Rose, “Preservation and Community,” 480.
29 Pregill, *Landscapes in History*, 664.
During the nineteenth century, private property was handled at the sole discretion of the property owner. The only legal restriction was the law of nuisance: *Sic utere tuo ut alienum non laedas* (One should use one's own property in such a way as not to injure the property of another.)\(^3^0\) The right to property ended at the boundary line, and obnoxious odors or noise were dealt with by the tort of nuisance law. Beauty was not part of the law of nuisance, as the court saw beauty as in the eye of the beholder and not subject to the judiciary.\(^3^1\) The only historic preservation case to reach the United States Supreme Court during the nineteenth century was *United States v. Gettysburg Electric Railroad Co.* (1896), a decision which allowed Congress to condemn land owned by the railroad to become part of the Gettysburg Battlefield Memorial. Justifying the use of eminent domain, the court went beyond the law of nuisance, with Justice Rufus Peckham writing for the majority, “Such action on the part of Congress touches the heart and comes home to the imagination of every citizen, and greatly tends to enhance his love and respect for those institutions for which these heroic sacrifices were made.”\(^3^2\) *Gettysburg Electric* was the first time the United States Supreme Court ruled in favor of historic preservation over the traditional view of property rights, but justified the takings for patriotic reasons.

As the United States industrialized, it became more difficult to deal with property rights with only the law of nuisance as a remedy. As the country got more urbanized in the decades after the Civil War, new legal remedies were needed for the new age.

\(^3^1\) Dukeminier, *Property*, 879.  
\(^3^2\) United States v. Gettysburg Electric Railroad Co. 160 U.S. 668 (1896), 682.
Gettysburg straddled the nineteenth-century view of preservation as patriotism of the first era and the second era of historic preservation as preserving place for aesthetic as well as a view of place for society. New concerns such as congestion, overcrowding, noise, tenement housing, moral turpitude, air and water pollution from factories, and obnoxious odors were all nuisances that, similar to preservation, could not be adequately remedied with existing nuisance law.

At the beginning of the twentieth century private interests remained involved in historic preservation, sometimes for altruistic motives, sometimes for tourist dollars. Williamsburg, Virginia was settled in 1633 and was the colonial capital of the Virginia colony in 1699. Virginia governor Thomas Jefferson moved the capital from Williamsburg to Richmond in 1779, and the town started deteriorating. In 1923 William A. R. Goodwin became the minister of Bruton Parish Church in Williamsburg and saw the concept of historic preservation as a way to help the economy of Williamsburg. He was able to convince John D. Rockefeller to contribute the initial funds, and eventually fund the entire project. The first landscape architect at Williamsburg primarily based most of the gardens on period representations. The arrival of historical archaeologist Ivor Noel Hume in the 1950s led to more site-specific landscapes in Williamsburg. Hume introduced “precise excavation, accurate recording, rapid publication of results,

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33 Rose, “Preservation and Community,” 483-484.
34 Dukeminier, Property, 821.
35 Tyler, Historic Preservation, 36.
immediate accessibility for the public, and solid integration of documentary research into his work.”

The federal government became involved in historic preservation with the passage of the Antiquities Act of 1906, allowing the President to designate “historic landmarks. Historic and prehistoric structures, and other objects of historic or scientific interest.” Ten years later the National Parks Service was established under the jurisdiction of the Department of the Interior. The majority of current federal preservation programs are under the umbrella of the National Parks Service.

The federal government’s involvement in conservation and preservation led to the judicial branch getting more involved. In *Pennsylvania Coal Co. v. Mahon* (1922), the United States Supreme Court first defined regulatory takings, saying the Fifth Amendment guarantee that private property could not be taken for public use without “just compensation,” applied to regulations that affected the value of private property, resulting in a *de facto* taking of private property for public good. Justice Oliver Wendell Holmes, writing for the majority, stated, “The general rule, at least, is that, if regulation goes too far, it will be recognized as a taking for which compensation must be paid.” Following *Pennsylvania Coal Co.*, the Supreme Court left the conflict between private property and government regulations up to the state courts, and through most of the

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38 Ibid.
39 United States Constitution, Amendment 5.
40 *Pennsylvania Coal Co. v. Mahon* 260 U.S. 393 (1922), 415.
twentieth-century public regulators have been mostly successful in defending regulations to avoid compensation.\(^{41}\)

Zoning and historic preservation share many of the same legal issues, as both involve restricting private-property rights for the greater societal good. Early twentieth century historic preservation relied on many of the court cases won by zoning interests. The 1893 Chicago World’s Fair highlighted the idea of the City Beautiful movement, with beautiful cities highlighted by civic monuments and public works, and the city divided into zones.\(^{42}\) The legal basis of zoning allowed for governments to determine property rights based on social concerns rather than strict individual rights. In 1906 Los Angeles divided the city between areas for industry and areas for residents. Ten years later New York went further, classifying several types of land use and segregating them into zones. By 1925, 368 municipalities had zoning laws.\(^{43}\) Opposition to these laws came from real estate developers and realty boards who managed to get some regulations struck down as unconstitutional taking of private property without due process of law in various state courts. The United States Supreme Court resolved the conflict with *Village of Euclid v. Ambler Realty Co.* (1926):\(^{44}\)

Building zone laws are of modern origin. They began in this country about 25 years ago. Until recent years, urban life was comparatively simple; but, with the great increase and concentration of population, problems have developed, and constantly are developing, which require, and will

\(^{41}\) Wise, "Regulatory Takings," 307.

\(^{42}\) Ibid., 823.

\(^{43}\) Ibid., 827.

\(^{44}\) Ibid., 828.
continue to require, additional restrictions in respect of the use and occupation of private lands in urban communities.\textsuperscript{45}

The Court determined that local governments could restrict private property rights for the greater social good, giving local governments new legal techniques for controlling property rights beyond a strict interpretation of the law of nuisance. Alfred Bettman, leader of the National Conference on City Planning, filed an amicus brief in the \textit{Village of Euclid} case, and the court made use of his brief, saying “legislative authority extended to the prevention of nuisances, and that creating single use zones was an appropriate method for avoiding future conflicts in land use.”\textsuperscript{46}

The federal government took more control of historic preservation during the Great Depression with many programs to employ unemployed workers. The Civil Works Administration hired one thousand architects and photographers for the Historic American Building Survey (HABS) in 1934. The programs mission statement reads,

\begin{quote}
The survey shall cover structures of all types form the smallest utilitarian structures to the largest and most monumental. Building of every description are to be included so that a complete picture of the culture of the times are reflected in the buildings of the period may be put on record.\textsuperscript{47}
\end{quote}

The Historic American Engineering Record (HAER) was started in 1969 with concentration on technology and engineering.\textsuperscript{48} With prompting from the Olmsted National Historic Site and the Olmsted Center, the National Parks Service formed the Historical American Landscape Survey (HALS) in 2000 to document historic landscapes

\textsuperscript{45} Village of Euclid v. Ambler Realty Co. 272 U.S. 365 (1926), 387-388.
\textsuperscript{46} Dukeminier, \textit{Property}, 837.
\textsuperscript{47} Ibid., 41.
\textsuperscript{48} Ibid., 42.
in a similar fashion to what HABS did for historic structures and HAER does for engineering structures and systems. All three programs are administered by the National Parks Service, and have documented over 40,000 structures and sites available through the Library of Congress.\footnote{Rolf Diamant, “On Environmental History with a Human Face Experiences from a New National Park,” \textit{Environmental History}, Vol. 8, No. 4 (Oct., 2003), 628-642.}

Prior to 1954 governments had used eminent domain to take blighted areas from landowners. A landmark case that allowed the taking of private property for aesthetic purposes was \textit{Berman v. Parker} (1954). The United State Congress passed the District of Columbia Redevelopment Act in 1945 to address blighted areas of Washington D.C. Berman owned a department store within a blighted area, but was not itself blighted. The plaintiff argued his property could not be taken under eminent domain just to make the area look more attractive.\footnote{Tyler, \textit{Historic Preservation}, 83.} Justice William Douglas wrote for the unanimous decision:

\begin{quote}
It is within the power of the legislature to determine that the community should be beautiful as well as healthy, spacious as well as clean, well balanced as well as carefully patrolled. In the present case, the Congress and its authorized agencies have made determinations that take into account a wide variety of values. It is not for us to reappraise them. If those who govern the District of Columbia decide that the Nation’s Capital should be beautiful as well as sanitary, there is nothing in the Fifth Amendment that stands in the way.\footnote{Berman v. Parker, 348 U.S. 26 (1954), 33.} 
\end{quote}
Preservationists realized Berman gave them a methodology to protect historically significant properties. If governments could regulate against aesthetically displeasing buildings, it should also be able to regulate in favor of aesthetically pleasing building.\footnote{Tyler, \textit{Historic Preservation}, 83-84.} Since the passage of the National Preservation Act of 1966 the primary emphasis in historic preservation legal fights have been with historic districts. A typical case was \textit{Figarsky v. Historic District Commission of City of Norwich} (1976), determined by the Connecticut Supreme Court. Figarsky, the owner of a structure facing the historic green in Norwich, Connecticut, was cited for having an unsafe structure. The building was part of a historic district, but had little individual significance. Figarsky applied for a permit to demolish the structure. The permit was denied on the grounds that the structure blocked the view from the green to a neighboring commercial district. The plaintiff sued saying the district’s language used “vague aesthetic language,” asking for compensation to bring the structure up to code. The Connecticut Supreme Court ruled the commission did not abuse its power in denying the demolition permit and that the plaintiff would have to bring the structure up to code on his own.\footnote{Ibid., 84.}

After the Great Depression and World War II, an expanded federal government searched for ways to handle preservation with a minimum conflict between preservationists and property rights advocates. The National Trust for Historic
Preservation was developed in 1949 as a private and public partnership with the stated goals:

1. Identify and act on important national preservation issues.
2. Support, broaden, and strengthen organized preservation efforts.
3. Target communication to those who affect the future of historic resources.
4. Expand private and public financial resources for preservation activities.\(^{54}\)

The National Trust was developed to link preservation efforts of the National Park Service with private sector activities. The National Trust has assumed ownership of historic properties such as Woodlawn Plantation in Virginia; the 1838 grand Gothic mansion Lyndhurst in Tarrytown, New York; Frank Lloyd Wright’s home in Oak Park, Illinois; and President Woodrow Wilson’s home in Washington D.C.\(^{55}\) Privately funded, the National Trust currently administers 28 historical sites.\(^{56}\)

The National Trust could purchase buildings significant to the United States historical story, but the 1950s saw renewed concerns with city sprawl and the new highway system, often seeing the destruction of historical significant structures and landscapes. The National Trust and the United States Conference of Mayors published *With Heritage So Rich* in 1966 defining the problem as what???. Congress took the recommendations from the book and passed the National Historic Preservation Act of 1966.\(^{57}\) Deputy General Counsel for the National Trust Thompson Mayes said of the passage of the National Historic Preservation Act, “the preservation of historic resources

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\(^{54}\) Tyler, *Historic Preservation*, 42.

\(^{55}\) Ibid., 42-43.


\(^{57}\) 16 U.S. Code §§ 470
has been increasingly recognized as a beneficial societal goal and valid policy at all levels of government.\textsuperscript{58} The National Historic Preservation Act gave state governments the majority of the duties and responsibilities but did create the National Register of Historic Places administered by the National Parks Service.\textsuperscript{59}

The original version of the National Historic Preservation Act encouraged the local designation of regulated historic districts, enabled legislation for funding of preservation activities, encouraged states to create State Historic Preservation Officers, established the Advisory Council on Historic Preservation, and protected property rights by making the program reliant on voluntary cooperation.\textsuperscript{60} The Advisory Council on Historic Preservation is an Executive Branch board designed in an attempt to mitigate destruction of historic resources by federal activities. The process is called a Section 106 Review, involving reviewing and commenting on any federal projects that might affect historic properties, regardless if they are on the National Register of Historic Places.\textsuperscript{61} The Section 106 guidelines state:

1. The federal agency involved with the project identifies historic properties that may be affected and consults with the SHPO or the Tribal Historic Preservation Officer (THPO) to determine what properties are listed or eligible for the National Register.
2. The agency determines for each historic property whether the proposed project will have (a) no effect, (b) no adverse effect, or (c) an adverse effect.

\textsuperscript{59} Pregill, \textit{Landscapes in History}, 668.
\textsuperscript{60} Tyler, \textit{Historic Preservation}, 44-45.
\textsuperscript{61} Ibid., 48-50.
3. If an adverse outcome is anticipated, the agency consults with the SHPO and others to determine how to minimize the negative impact. This results in a Memorandum of Agreement (MOA), which outlines the mitigating measures to be taken.  
4. If an MOA is executed, the agency can proceed with the project under its terms.  

While the National Register of Historic Places was voluntary and did not grant the federal government new powers, property rights advocates expressed concern over the role of the new State Historic Preservation Officer and the ability of local governments to violate property rights. One of the most important and controversial cases for historic preservation was the United States Supreme Court decision in *Penn Central Transportation Company v. City of New York* (1978). New York City Mayor Robert F. Wagner created the Landmark Preservation Committee in 1965 after Pennsylvania Station, a beaux-arts-style train station built in 1911, was demolished in 1963 to make way for Madison Square Gardens.  

Penn Central Transportation Company, owners of Grand Central Terminal, applied to the Commission to construct a fifty-five story addition over the top of the Terminal, a New York City landmark. Penn Central was denied approval of the tower. The Commission ruled:

> [We have] no fixed rule against making additions to designated buildings - it all depends on how they are done . . . But to balance a 55-story office tower above a flamboyant Beaux-Arts facade seems nothing more than an aesthetic joke. Quite simply, the tower would overwhelm the Terminal by its sheer mass. The "addition" would be four times as high as the existing

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62 Ibid., 50.  
structure, and would reduce the Landmark itself to the status of a curiosity.\textsuperscript{64}

Penn Central sued the Commission, claiming the Landmark Preservation Law had taken “their property without just compensation in violation of the Fifth and Fourteenth Amendments and arbitrarily deprived them of their property without due process of law in violation of the Fourteenth Amendment.”\textsuperscript{65} The historic preservation case was different than the typical zoning laws or historic districts as the plaintiff claimed the Landmark Law discriminated against an individual property owner. Zoning and historic district laws spread the cost of the legislation across multiple property owners. The plaintiff claimed the Landmark Law “imposed a substantial cost on less that one-tenth of one percent of the buildings in New York for the general benefit of all its people.”\textsuperscript{66} Justice William Brennan, writing for the majority dismissed Penn Central’s claim:

Unless we are to reject the judgment of the New York City Council that the preservation of landmarks benefits all New York citizens and all structures, both economically and by improving the quality of life in the city as a whole -- which we are unwilling to do -- we cannot conclude that the owners of the Terminal have in no sense been benefited by the Landmarks Law.\textsuperscript{67}

The Court rejected Penn Central’s claim that the Landmark Preservation Law prevented them from getting a reasonable return on their investment. Penn Central had the right to sell their air space rights to other properties in the area “provided significant, perhaps ‘fair,’ compensation for the loss of rights above the terminal itself.”\textsuperscript{68}

\textsuperscript{64} Penn Central Transportation Co. v. New York City, 438 U.S. 104 (1978), 117-118.
\textsuperscript{65} Ibid., 119
\textsuperscript{66} Tyler, \textit{Historic Preservation}, 85.
\textsuperscript{67} Penn Central Transportation Co v. New York City, 134-135.
\textsuperscript{68} Penn Central Transportation Co v. New York City, 122.
Many historic preservationists saw the *Penn Central* case as a victory for government regulators, but property rights advocates also saw a glimmer of hope in the decision. *Penn Central* left an economic test to determine if regulatory takings would require just compensation and numerous cases were brought to courts to clarify the extent of the economic test. In *Keystone Bituminous Coal Association v. DeBenedictis* (1987), the United States Supreme Court again ruled for the regulators, writing, “[t]he destruction of one ‘strand’ of the bundle is not a taking because the aggregate must be viewed in its entirety.” However, property rights advocates were hopeful, as the decision was 5-4.

The *First Evangelical Lutheran Church of Glendale v. County of Los Angeles* (1987) demonstrated the Court’s change since *Penn Central*, with the Court shifting more toward property rights than government regulations. The case dealt with a temporary regulatory taking, with the County of Los Angeles adopting an ordinance prohibiting construction of an area following a flood. The ordinance was later lifted, but the plaintiff sued to get relief for the regulatory taking while the ordinance was in effect. The Court in a 6-3 decision awarded damages to the First Evangelical Church of Glendale for the period it was unable to use the property. Another case the same year before the United States Supreme Court also showed the Court siding more with private property rights. *Nollan v. California Coastal Commission* (1987) dealt with a permit by the plaintiff to demolish and rebuild a beach bungalow that also required the owner to grant public access to the beach on the property. Justice Antonin Scalia, writing for the majority, ruled

71 *First Evangelical Lutheran Church of Glendale v. County of Los Angeles* 482 U.S. 304 (1987)
that if the California Coastal Commission believes public access on the plaintiff’s property was in the state’s interest it “is free to advance its ‘comprehensive program,’ if it wishes, by using its power of eminent domain for this public purpose.”

It was clear with the two 1987 decisions that the Court was expecting regulators to employ heightened judicial scrutiny to regulatory takings. What the Court has made clear is that regulators have to show much more care in crafting regulations to show a clear public purpose to regulatory takings for environmental and preservation purposes. Historic preservation legislation needed to use great care to ensure the legislation did not become a regulatory taking issue, requiring fair compensation to the property owner.

The federal government attempted to use incentive-based legislation to ensure private property rights were maintained and to avoid regulatory taking issues. The passage of the Economic Recovery Tax Act in 1976 provided major preservation tax incentives for preservation of income-producing built properties. Prior to the Act’s passage, tax incentives favored replacing old structures with new construction. Congress resolved the issue with the Economic Recovery Tax Act (1981), and the Tax Reform Act (1986). Tax credits do not apply to cultural landscapes, so the tax breaks only apply to landscapes associated with built environments.

The last quarter of the twentieth century saw renewed interest in cultural landscapes beyond complements to built environments. The National Trusts’ Western

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74 Ibid., 313.
75 Murtagh, Keeping Time, 58.
76 Pregill, Landscapes in History, 668.
Regional Office cosponsored a conference in Denver in 1975 to address preservation of cultural landscapes, leading to the creation of the Alliance for Historic Landscape Preservation (AHLP) in 1978.\textsuperscript{77} The new interest in historic landscapes led to a need for more scholarly research. The National Parks Service developed the Olmstead Archives at the Frederick Law Olmstead National Historic Site in 1979. The Olmstead Archives has branched out since 1979 into research information beyond Olmstead into other landscape architects.\textsuperscript{78}

While landscapes were always mentioned as part of the National Register of Historic Places, often they were not seen as historically significant in their own right to be nominated. The nomination forms are geared toward built environments, with nominations for landscapes needed to adapt to the form. The National Parks Service started issuing training courses and bulletins dealing with the nomination and restoration of historical designed cultural landscapes in the 1980s.\textsuperscript{79} The National Parks Service published \textit{Cultural Landscapes: Rural Historic Districts in the National Parks Service} in 1984, and \textit{How to Document, Evaluate, and Nominate Designed Historic Landscapes} in 1986.\textsuperscript{80} More recently, the National Parks Service initiated a study of nominations of landscapes called the National Register Landscape Initiative (NRLI) in 2013. The NRLI will be investigating if better practices are needed to deal with landscapes on the National

\textsuperscript{77} Keller, “Preserving Important Landscapes,” 190.
\textsuperscript{78} Ibid., 192-193.
\textsuperscript{79} Ibid., 193.
\textsuperscript{80} Ibid., 196-197.
Register. No results had been announced as of July 2015, but it is hoped that NRLI will come up with a nomination process customized for landscapes as well as tax incentives to match what built environments currently receive.

Tax incentives and a better nomination process would help golf courses to become part of the National Register of Historic Places, but the problem remains in getting golf course managers to make use of the National Register. The game of golf has changed since the Golden Age of golf course design, and golf courses are concerned that historic preservation will mean a loss of sovereignty and a loss of ability to change with the times.

It is not just misunderstanding. After Penn Central, private property owners are leery of getting involved with historic preservation. The Penn Central case is often used as a warning of an expanding government regulatory system, with historic preservation considered part of the regulatory state. Institute for Justice General Counsel Chip Mellor says Penn Central “leaves property owners increasingly at the mercy of unelected commissions and agencies that will treat them as serfs occupying the land subject to the whims of regulators.” Justice Holmes, in the United Supreme Court majority decision in Pennsylvania Coal Co. v. Mahon (1922), gave warning of excessive regulation without compensation, saying courts were “in danger of forgetting strong public desire to improve the public condition is not enough to warrant achieving the desire by a shorter

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82 Mellor, “How Penn Central Derailed Property Rights.”
cut than the constitutional way of paying for the charge.” Golf course operators are concerned that government regulators will force them to maintain a golf course frozen in time as a historic monument, unable to be modified with changes to the game of golf.

The National Register of Historic Places is voluntary. Property owners are free to object to the nomination of their property and free to insist properties be removed from the Register. Section 60.15 of the National Register Federal Program Regulations states “Any person or organization may petition in writing for removal of a property from the National Register” including the owner. Historian Aaron M. Dougherty said of the National Register’s voluntary aspect, “National Register listing is meant to be a no-strings-attached honor. Just do your homework, get your plaque, and everything will be fine.” Dougherty’s comment about doing your homework is important. The National Register of Historic Places does not put any restrictions on property owners from the federal government but state and local regulations might. Golf course operators need to do their homework of what it might mean for state and local regulations. Dougherty writes, “Preservation initiatives get their strongest support and win their greatest victories at the state and local levels.”

83 Pennsylvania Coal Co. v. Mahon, 260 U.S. 393 (1922), 416.
86 Ibid.
For golf course managers concerned they will lose the ability to change courses with the time, Augusta National has been a listed property on the National Register of Historic Places since 1979 belying the fears of golf operators afraid being on the National Register will mean loss of sovereignty. Augusta National makes significant changes in preparation for the Masters Tournament played on the course annually. Daniel Wexler, in his book *Missing Links*, includes Augusta (by designer Alister MacKenzie) as a course that is beyond recognition. Wexler writes,

> By hosting The Masters every peacetime April since 1934, it has inevitably been subject to the sort of nipping and tucking that generally takes place perhaps once a decade (when a U.S. Open or PGA Championship visits) at places like Winged Foot, Oakmont or Pebble Beach. But at Augusta, well-intended ideas to improve the golf course seldom are tempered by several years worth of study and debate; with the next Major never more than 12 months away, they happen quickly and, in the contemporary era, with almost numbing regularity.  

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The incentive for inclusion on the National Register of Historic Places is more difficult to quantify. The federal government’s Rehabilitation Investment Tax Credit only applies to income-producing historic structures. Various states have different tax incentives for historic preservation. An example is the Mills Act in California. The Mills Act requires:

(a) Listed in the National Register of Historic Places or located in a registered historic district, as defined in Section 1.191-2 (b) of Title 26 of the Code of Federal Regulations.

(b) Listed in any state, city, county, or city and county official register of historical or architecturally significant sites, places, or landmarks.  

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88 Tyler, *Historic Preservation*, 249.

89 California Government Code, Article 12, § 50280.1.
The Mills Act contract is for ten years, renewable every year, with inspections required every five years by the local government entity that is subject to the Mills Act contract. The contract would stay with the property if the ownership changes.\textsuperscript{90} The Mills Act would have limited appeal to golf course operators as golf courses already get significant property tax benefits. Applying the Mills Act for golf courses the tax benefit requires an alternate approach of assessing the value of the golf course for property tax reasons, with the alternate not being as beneficial for golf courses. According to the California Revenue and Taxation Code, Article 1.9, § 439.2 there are three different ways to appraise a golf course for property tax prior to applying the tax credit for historic preservation. The most likely to give a tax advantage to a golf course is: “Where sufficient rental information is not available, the income shall be that which the restricted historical property being valued reasonably can be expected to yield under prudent management and subject to applicable provisions under which the property is enforceably restricted.”\textsuperscript{91}

However, most golf courses already get preferential treatment on property taxes. Typically golf courses are appraised by a cost approach, appraising the property by what it would cost to replace the land with a similar piece of land, plus the value of built structures such as the clubhouse.\textsuperscript{92} An example for illustration is Del Paso Country Club in Sacramento County. Del Paso Country Club is governed by Sacramento County, which

\textsuperscript{90} California Government Code, Article 12, § 50280-50290.
\textsuperscript{91} California Revenue and Taxation Code, Article 1.9, § 439.2(2)
has not adopted the Mills Act, but is used only for illustration purposes. The course’s current property tax bill is $20,000 annually.\textsuperscript{93} Typically Mills Act properties will receive between 40 percent and 60 percent discount on property tax annually, so imagining the Mills Act calculation is close to the cost approach, a golf course could have a potential savings of $8,000 to $12,000 annually.

Promotional value of the National Register of Historic Places is more difficult to quantify. According to golf writer Brad Klein, the Golden Age golf course designers are “being recognized and venerated as visionaries worthy of respect, admiration, and meticulous restoration.”\textsuperscript{94} Can that be turned into increased daily fees or initiation costs?

Pasatiempo is an Alister MacKenzie designed course in Santa Cruz, California. It has gone through good and bad financial times since it opened in 1929. It is a membership course that also allows some public play. Unlike most golf courses that have memberships, Pasatiempo has shares. There are currently 390 outstanding shares, with each shareholder having unlimited play on the course. Pasatiempo is a San Francisco Bay Area premier golf course, typically on the lower end of golf magazine’s top 100 golf course lists. When a share became available for sale in the 1970s, the typical price was about $2,500. With the interest in Golden Age architecture starting in the 1980s the course began promoting its original design by Alister MacKenzie, his home along the sixth fairway, and more recently hired architect Tom Doak for restoration of the course to get it reasonably close to the 1929 MacKenzie design. The Alister MacKenzie design is

\textsuperscript{93} Sacramento County, Sacramento County Assessor, Assessed Value Lookup, http://www.assessor.saccounty.net/DeclineInValue/Pages/Prop8Viewer.aspx (Accessed on Nov. 28, 2013).

\textsuperscript{94} Klein, Wide Open Fairways, 169.
front and center on the golf course’s website. Shares are subject to availability, but are currently being offered for $95,000.95 The limited tee-times for the general public went from $25 in the 1970s to $260 today.96 Correlation does not always prove causation, so it is not clear if all that increase is because of the promotion of Pasatiempo’s heritage, but the course now includes the course’s pedigree in much of its literature.

Golf course promotion of Golden Age origins can be compared to the ranking of golf courses on various golf publications. Numerous golf magazines publish annual top 100 golf course rankings, sometimes world, sometimes country. *Golf Digest* divides its list by individual states. United Kingdom architect Adrian Siff reported he tells courses inclusion in *Golf World’s* Top 100 increases the valuation of the golf course by at least £1,000,000. For a daily fee course it can bring in £250,000 in extra revenue. Architect Tom Doak says in the United States a top 100 United States ranking can raise green fees between $25 and $50. A course with 25,000 rounds would see an increase in revenue between $625,000 and $1,250,000.97

Ideally a website would be created with all golf courses included on the National Register as works of masters, allowing a place for people to make travel plans to see the best examples of works of their chosen master.

With the renaissance interest in the Golden Age, it is conceivable that inclusion on the National Register of Historic Places could be as popular as golf publication top 100 golf course lists.

While golf courses are included as the type of property to be included in the National Register, as criteria C nominees we need to prove there is historical significance to these properties. The development of golf in the last decades of the nineteenth century not only tell a rich story of changes to American sport and leisure, but also an important development in United States findings its place in international politics at the nineteenth century fin-de-siècle.
CHAPTER TWO: GOLF HISTORY BEFORE THE GOLDEN AGE

Golf came to the United States at a time of great social upheaval, when Americans were just starting to determine their place in international affairs. A look back at how golf developed in Scotland and at its beginnings in North America shows how and why golf developed differently in the United States compared to Scotland, specifically as it related to the playing fields. Golf courses reflected the changes to the game and to the country and supply a unique landscape of the changes, worthy of preservation.

Golf is unique in the world of sport in that the player plays the course, not the opponent. That is true in other sports such as bowling, and to some degree racing sports, but golf is different with a lack of standardization beyond the basics. Each golf course offers different challenges to the golfer, and the diversity is celebrated. The design of golf courses in the United States tell a significant story of how golf developed differently in the United States than in Europe.

Golf lacks knowledge of its pedigree. There is no Abner Doubleday or James Naismith of golf. There are numerous theories, based on various artifacts and records, but there is no way of knowing exactly how golf originated. It is assumed it originated in Scotland sometime around the fourteenth or fifteenth century and evolved from other stick and ball games. The first remaining historical record of golf was an edict in March of 1457 from a Scottish King, King James II ‘James of the Fiery Face’ who prohibited golf from being played because it was interfering with preparation for war, “the futeball
and golfe be utterly cryed down and not be used." It was still prohibited by the next few
Scottish Kings for similar reasons. The game called golf from the fifteenth century might
have had more in common with hockey than the game of golf we know today. Recent
scholarship from Scottish golf historian David Hamilton makes the case for two different
forms of golf, the version played by nobles, in retrospect called “the long game,” and a
game played by commoners he calls “the short game.” Hamilton proposes it was the short
game that the Kings of Scotland would have prohibited, not being willing to antagonize
noblemen the King would have needed for his wars with England. Regardless of its
origin and how the short game disappeared, it would take centuries to move out of
Scotland, south to England and Wales, and west to Ireland, and then another couple
centuries to catch on in North America and other parts of the world.

What is important to golf course design history is that at some point in golf’s past
it went from being a typical club and ball game where opponents battled each other, to a
game where the golfer battles the golf course and compares his success against the course
to the battle of his opponent on the same playing field. Early noble golf more than likely
consisted of the elite going to large un-used land and having a servant run ahead to make
or find a hole, mark the location of the hole, and ensure the object that was hit did not get
lost in any natural hazards or vegetation. Even the beginning of developing courses is lost
to history. Scots who played golf at some point decided to play from one permanent
location to another, marking the places where the playing of a hole of golf would finish.

Golfing societies developed in the early eighteenth century, and a few courses became relatively permanent: Bruntsfield Links in the center of Edinburgh (1735), Leith Links on the outskirts of Edinburgh (1744) and St. Andrews in the university town of Fife (1754).¹⁰⁰

The first record of golf in North America again takes the form of an edict prohibiting the game, this time from the magistrates of Fort Orange (Albany, N.Y.) from December 10, 1659; a prohibition of playing on the city streets:

> The Honourable Commissary and Magistrates of Fort Orange and the village of Beverwyck, having heard divers complaints from the burghers of this place against the practice of playing golf along the streets, which causes great damage to the windows of the houses, and also exposes people to the danger of being injured and is contrary to the freedom of the public street; Therefore their honours, wishing to prevent the same, hereby forbid all persons to play golf in the street, under penalty of forfeiture of Fl. 25 for each person who shall be found doing so.¹⁰¹

There were various records of golf over the eighteenth and nineteenth centuries primarily of immigrants from Scotland, Ireland, and England playing the game. President Ulysses S. Grant is reported saying while president “It does look like a very good exercise. But what is the little white ball for?” upon watching a beginning golfer unsuccessfully trying to hit a golf ball.¹⁰² Golf would not gain any permanency in North America until golf courses were designed for the game, with Royal Montreal in 1873 and St. Andrew’s in Ardsley, N.Y. in 1888 being two early North American examples.¹⁰³

Golf quickly spread after 1888 in the United States, with many of the early golf clubs hiring anyone with a Scottish brogue to both layout a golf course and teach the membership the game. An early proponent of more interesting courses was Chicagoan Charles Blair Macdonald, who learned the game as a sixteen year old when his father sent him to complete his education at United College of St. Salvador and St. Leonard’s in St. Andrews, Scotland. After completing his studies he returned to the United States and wanted to continue to play the game. Macdonald’s opportunity to golf was limited to when former classmates would visit from Great Britain and they would go out to a pasture and hit the ball around, or when he would travel back to the British Isles.

Macdonald built a small, seven-hole course in 1892 at Lake Forest, Illinois on the property of a friend’s father-in-law, Senator Charles B. Farwell. He designed this rudimentary course because he expected friends from Europe to visit in 1893. The World’s Fair was coming to Chicago for the 400th anniversary of Columbus’ discovery of America. Friends from Europe and Chicago enjoyed the play on the rudimentary course during the World’s Fair. He built a more elaborate 18-hole golf course for the

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104 Layout differs from design or architect in that it is less about building golf holes than finding golf holes on existing topography.
107 Bahto, The Evangelists of Golf, 15.
Chicago Golf Club two years later in Wheaton, Illinois on a site where the course still resides.\textsuperscript{108}

The courses developed differently in the United States from Britain. Many early Scottish courses were owned by the municipality, but were primarily played by landed gentry. Living out in the country they would monitor the harvest, and then come to the larger cities to ensure the sale of the harvest, to buy supplies for the next harvest, and to ship their harvest to foreign ports. Often they would socialize with other elites at taverns, drinking, playing cards, and setting up games of golf. The early courses were played on ground that was unusable for agriculture. The early golfers found the best place to play the game was on linksland. Golf course historians Geoffrey Cornish and Ronald Whitten describe links as:

\begin{quote}
[T]rue linksland consisted of rich alluvial deposits of soil left upon sand dunes by a river as it flowed to the sea. True links, then, would be the golf courses formed by nature on or near river estuaries. Indeed the game of golf was first played in Scotland along the estuaries of the rivers Eden, Tay and Forth.\textsuperscript{109}
\end{quote}

The last half of the nineteenth century featured an explosive growth of golf in Scotland, with the number of courses growing from 17 in 1850 to 195 in 1900.\textsuperscript{110} This is attributed to the Industrial Revolution in Great Britain and the growing middle class, which quickly increased the number of people with the leisure time to play golf. Courses still remained primarily near the river estuaries because the major cities of Scotland—

\begin{footnotes}
\end{footnotes}
Edinburgh, Glasgow, Aberdeen, and Inverness—were near rivers for shipping from the interior to foreign markets.\textsuperscript{111}

To the south in England golf also grew quickly during the Industrial Revolution. The large industrial cities such as London and Manchester were far from the dunes traditionally used for golf. Early golf course designers in England used heathlands to substitute for linksland. Heathland has similarities to linksland, as they are well-drained, rock-free and sandy soil, also ill suited for agriculture.\textsuperscript{112} Heathland golf course design required more development work than linksland, as the heath was typically covered by “undergrowth of heather, rhododendrons, Scottish fir and pines.”\textsuperscript{113} It was in the heathlands near London that course architects gained fame and profits designing golf courses. Architects such as Willie Park, Jr. J.F. Abercromby, H.S. Colt, and W. Herbert Fowler inspired and sometimes mentored the United States Golden Age course designers.\textsuperscript{114}

Golf spread quickly in the United States at the same time that team sports, such as baseball, college football, lacrosse, and basketball were also surging. Golf was an individual sport, and at least at the time, a participatory, not spectator sport. A November 1901 article titled “Golf” by Arnold Haultain tried to explain the appeal of the Scottish game for Americans:

The foe in golf is not your opponent, but great Nature herself, and the game is to see who will overreach her better, you or your opponent. In almost all other games you pit yourself against a mortal for; in golf it is

\textsuperscript{112} Cornish and Whitten, \textit{The Architects of Golf}, 21.
\textsuperscript{113} Ibid.
\textsuperscript{114} Ibid.
yourself against the world: no human being stays your progress as you drive your ball over the face of the globe. It is very like life in this, is golf. Life is not an internecine strife. We are all fighting, not against each other for our lives, but against Nature for our livelihoods.\footnote{George B. Kirsch, \textit{Golf in America} (Urbana, IL: University of Illinois Press, 2009), 19.}

Golf began to gain a modicum of popularity in the United States during the last two decades of the nineteenth century amongst the elites in temporary locations such as unused pastures. The difference between the nineteenth century elite in the British Isles and in the United States was the American cousins were rarely landed gentry but more likely involved in urban industry: manufacturing, banking, government, or money markets. This typically required living and working near city centers. The earliest North American golf was played on pastures close enough to city centers to have a game usually just outside city centers.\footnote{A.W. Tillinghast, \textit{Reminiscences of the Links: A treasury of Creative Essays and Vintage Photographs on Scottish and Early American Golf} (Rockville, MD: TreeWolf Production, 1998), ed. Richard C. Wolfe Jr., Robert S. Trebus and Stuart F. Wolfe, 30-31.}

Why golf grew quickly in the United States, compared to the slow growth in the United Kingdom, had a lot to do with the drastic change in transportation in the late nineteenth and early twentieth centuries. The working class did not have the financial ability or the leisure time to spend the afternoon playing golf or opportunities to travel on a vacation to a golf destination. The early golf courses in the United States were either within a short carriage ride of city centers or near rail stops, specifically between financial centers near New York and winter vacation spots in the south. Trains were also
developed from the new suburbs to the city, allowing people to live farther away from their employment.\textsuperscript{117}

The time of golf’s growth in the United States paralleled a transportation revolution. Transportation would have an impact on how golf courses were designed and the real estate that could be used for golf courses. The bicycle was the first to drastically change transportation in the United States after the railroad revolution early in the century. Civil War veteran Colonel Albert A. Pope travelled to England and imported British bicycles to the United States under a Columbia trademark. His company sold over 5,000 Columbia bicycles in 1884.\textsuperscript{118} James Kemp Starley of Coventry, England introduced a geared, low-wheel bicycle in 1885. Less than two decades later there were at least 300 companies manufacturing bicycles in the United States and estimates were that over a million people were regularly riding bicycles by the end of the nineteenth century. According to James J Flink, writing in the American Quarterly, by the 1890s:

\begin{quote}
The crest of the bicycle movement in the United States coincided with the climax of several decades of agrarian discontent, which had singled out as a prime target the abuse of monopoly power by the railroads. Farmers were beginning to see highway transportation as an alternative and to complain about the scandalous lack of good “farm-to-market” roads.\textsuperscript{119}
\end{quote}

Bicycles also became more middle class, as the competition between manufacturers led to the price of a bicycle dropping from over $100 to $50 during the

\begin{flushleft}
\textsuperscript{117} Cornish and Whitten, The Architect of Golf, 49.  
\end{flushleft}
1890s. The bicycle allowed golf to be played slightly farther away from city centers and the suburbs. The rich and middle class could put their golf equipment in a bag over their shoulder and peddle out to a playing field on the outskirts of town, allowing for more permanent golf course locations.

With people quickly adjusting to the idea of individual transportation giving them more freedom than they had from trains or trolleys in the United States the stage was set for the next evolution: the automobile. An old cliché about early automobiles is “the automobile was European by birth, American by adoption.” The early days of automobile acceptance in Europe, and later in America at the turn of the twentieth century, was a battle between steam, electric and internal combustion engines. They each had their advantages and disadvantages. The internal combustion engine in the United States had clear benefits because of the distances and speed required. With the growth of infrastructure in the United States for the internal combustion engines, the steam and electric cars quickly became curiosities and the popularity of internal combustion engines grew. (See Table 3: American Motor Vehicle Production).

The early automobile magazine, *Horseless Age*, predicted the soon to come changes in leisure activity in a March 1896 article:

> [the automobile] will make the suburbs easier to access, improve the trade of country hotels in many places, and will further depress the business of horse-racing. Much of the land now used for horse-raising and growing

\[\text{References:}\]

120 Ibid., 13.
122 Ibid., 9.
horse feed will in process of time find other uses more in harmony with the trend of progress.\textsuperscript{124}

In the second decade of the twentieth century the popularity of the automobile quickly grew in the United States. Fordism made the automobile more affordable and therefore, more popular for the working classes. The stage was set for golf to move away from the game played near city centers and estuaries like in the British Isles and to a more Americanized version of the game. The final piece of the equation is the drastic changes in golf equipment, requiring changes to the playing fields (See Figure 1).

Without solid written evidence we can only make guesses of early golf equipment. More than likely it was someone digging a hole or finding a burrowing animal hole, and using a wooden crook to propel a roundish stone toward that hole. The earliest clubmakers were bow makers. The earliest mention of golf club manufacturing comes circa 1650 from an unidentified biographer recalling a St. Andrews sermon: “the eminent [St Andrews] preacher Mr. Blair is said to have illustrated the relations of our Lord to the Church by a homely simile drawn from the clubmakers art, the whipping and the glue which unite the head and the shaft.”\textsuperscript{125}

Golf writer Horace Hutchinson once described golf as a game “that consisted in putting little balls into little holes with instruments very ill adapted to the purpose.”\textsuperscript{126} The equipment has drastically changed since Hutchinson’s time, with clubs he would never recognize; for the purposes of the golf course, however, the effect has been more


\textsuperscript{125} Hamilton, \textit{Golf: Scotland’s Game}, 45.

\textsuperscript{126} Horace G. Hutchinson, \textit{The Badminton Library: Golf} (London: Longmans, Green, and Co., 1880), 53.
about the golf ball. Golf more than likely adapted from early ball and stick games. The Danish played a game called *colf* or *kolven*, as early as the thirteenth century. This was a game played on ice and the ball was wood, typically beech or elm, and weighing about one and a half ounces. It is not clear if the leather ball used in *colf*, *kolven*, or golf originated in Demark or Scotland, but sometime in the late sixteenth or early seventeenth century the leather ball became popular in both regions for both sports.\(^{127}\) The better leather golf balls were stuffed with feathers, but cheaper balls were available stuffed with wool or hair.\(^{128}\) This early golf ball was called a feathery and was the ball of choice for golf for a couple centuries. Feathery manufacturing was a time consuming business with typically a ball maker only able to produce four or five balls a day. The leather was soaked to make pliable, cut into four pieces, stitched together and then turned inside out so the threads would be on the inside. A small hole was left open and the ball maker would stuff into that hole a top hat’s worth of goose feathers. The hole was carefully sewed shut, and finally, the ball was hammered to roundness and coated with paint.\(^{129}\)

The next stage of balls was the gutta-percha ball. The mythology is that Rev. Dr. Robert Adam Patterson brought back a statue of Vishnu from India in 1845 and it was packed with the sap from a gutta-percha tree for safe keeping in his travel home to Scotland. He got the idea of rolling this gutta-percha material into a ball. This changed the game, as a gutta-percha ball was less expensive, lasted longer, had truer flight, rolled better on greens, and could survive during wet weather. There were concerns about this

new ball, called the gutty, making the existing golf courses too easy, the advantages resulted in it quickly replacing the feathery.\textsuperscript{130} This rapid change not only helped to make the game more popular, but it also made some of the old courses too short, requiring more land to expand or develop nascent golf courses. The gutty and similar balls were the balls that were used when golf first developed in North America.\textsuperscript{131}

The next evolution of the ball was the rubber-cored Haskell ball developed in the United States. In 1898 Coburn Haskell of Cleveland was visiting a friend at the B.F. Goodrich plant in Akron. While waiting for his friend, he was playing with bands of rubber; he wrapped them around a small rubber ball. As a golfer he realized this ball was much livelier than the gutty he had been playing with. He received the patent on his idea on April 11, 1899, creating at the time great controversy in the golf world. Some argue the gutty travelled just as far as the Haskell but that was only true of experienced players. New players could better control the ball, hit it reasonable distances, and the ball was mass-produced, making it cheaper.\textsuperscript{132} According to a 1904 article in \textit{Golf Illustrated}, the Haskell quickly replaced the old gutty:

\begin{quote}

The great controversy on the respective merits of the old golf ball of solid gutta-percha and the new American rubber-cored ball has ended in complete victory for the new ball. At the most moderate estimate, not more than one in a thousand players remain faithful to the ‘gutty’ and the rubber-cored ball of one variety or another is the ball of the moment.\textsuperscript{133}
\end{quote}

\textsuperscript{130} Ibid, 329.
\textsuperscript{131} Jeffrey S. Ellis, \textit{The Clubmaker’s Art: Antique Golf Clubs and Their History}. (Vancouver: Zephyr Productions, Inc., 1997), 561.
\textsuperscript{133} \textit{Golf Illustrated}, 5 Feb. 1904: 107) in Ellis, \textit{The Clubmaker’s Art}, 562-563.
Great Britain was much slower to adapt the Haskell ball, partially out of fealty to their position as the birthplace of golf and partially out of concern for their treasured golf courses. Eventually, because of ability to mass produce, durability, and cost, the Haskell would replace the gutty in Great Britain. The Haskell and various different versions of the rubber-cored balls lasted another century with various changes to the cover material, ranging from Balata to Suryln. Spalding patented a solid ball in 1967 (called a two-piece ball because of the core plus the covering material), which was popular with novice golfers because of its reliability and low cost, but not as popular with more experienced golfers because of the lack of spin. By the end of the twentieth century improvements in the solid ball made it more attractive for experienced golfers, again allowed them to hit it farther than the old rubber-cored ball. It also allowed more experienced golfers to swing as hard as they want with new material clubs and shafts and with less concern for excessive side-spin. Now almost all golf is played with a solid two-piece ball.¹³⁴

Since 1920, the United States Golf Association and the Royal and Ancient Golf Club of St. Andrews have regulated and tested balls to determine if the balls meet standards for overall distance, size, weight and initial velocity.\textsuperscript{135} Ball manufacturers improved on designing balls that can pass the USGA tests and still fly farther for experienced golfers. In 1999 the USGA announced a new ball test that would better deal with improved balls, but the new test was never implemented as golf-ball manufacturers threatened lawsuits if any of the current conforming balls were found non-conforming.\textsuperscript{136} According to golf course writer Geoff Shackelford:

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Relative yardage differences with each evolution of the ball.}
\end{figure}

\textsuperscript{135} The United States Golf Association is the voluntary ruling body for golf in the United States and Mexico. The Royal and Ancient Golf Club of St. Andrews is the ruling body for the rest of the world.
Regulation has been undermined because golf equipment companies believe the road to Fortune 500 heaven is traveled by marketing the newest, longest flying ball and the biggest, easiest-to-hit driver. So they out-smarted the USGA test and with a few threats, bullied their way around the rules. The USGA, armed with a test to take control and fearful of being branded socialists for interfering with the “free market,” shelved regulation.¹³⁷

Like the previous evolutions of the golf ball, the golf industry had to lengthen courses to reflect the changes to the equipment. With the change from the guty to the Haskell, the longer courses at the turn of the twentieth century were close to 6,000 yards spread over 100 acres, but now with the longer two-piece ball, modern courses are now closer to 7,000 yards and at times over 200 acres.¹³⁸ Many of the courses from the Golden Age added yardage, sometimes without concern for how yardage could affect the design characteristics designed into the Golden Age golf courses. The context of the Golden Age of course design needs examination to better understand how some of these masterpieces were harmed by adding length to deal with changes in the equipment.

¹³⁸ Ibid.

CHAPTER THREE: THE GOLDEN AGE

Just like the bicycle, automobile, and various other European imports, golf was brought to America and modified to fit American needs. In the early days of golf in the United States there was a fight between traditionalists, who wanted to retain the game exactly as it came from the Old World, and modernists, who wanted to modify the game into a uniquely American game. The architects of the Golden Age took many of the traditional values of the game of golf and tweaked them to make them more palatable to Americans, retaining many of the traditions, but creating a hybrid game.

The exact beginning and ending of the Golden Age of architecture are as hotly debated in golf circles as the concept of a Golden Age of golf course architecture. Golf course historian Geoff Shackelford puts the Golden Age between 1911, when Charles Blair Macdonald opened what was considered an ideal course on Long Island (The National Golf Links of America), and 1937 when Perry Maxwell constructed the first nine holes at Prairie Dunes in Nebraska. There are arguments to lengthen or shorten this period on both ends – some put it from the end of World War I to the beginning of World War II -- but new course construction began stagnating with the worldwide depression in the 1930s and the resultant shortage of financial resources.

Golf is somewhat unique in the sports world in that the golfer’s opponent is the course, not the other player or team. Golf courses serve a variety of golfers of differing ability. Sports writer Grantland Rice said it is not difficult to design a golf course that

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will test a champion and neither is it difficult to create a course that will interest a novice golfer. The difficulty is designing a golf course that will do both and all the various golfers between the two extremes.  

Understanding how the Golden Age developed in the United States assists in comprehending what the Golden Age means to golf architecture. Golf caught on in the United States at the tail end of the Gilded Age among the country’s elite who was more likely to attend school or vacation abroad. The Gilded Age was a period of roughly twenty years, coming out of the growth following the Civil War and the end of Reconstruction, when railroads spread, steel mills and other industry flourished, and money was borrowed from British bankers to finance the expansion. When the British bankers called in their loans, the result was the panic of 1893, ending the era. The Gilded Age was a time when, according to Ethan Wagner, “the titans of industry accumulated enormous wealth while the masses toiled for meager wages.” The elite credited their success to hard work and intelligence. Rarely would they consider themselves lucky. They carried the same attitude to the new game of golf. As golfers gained experience they would want to reward their more advanced play while punishing their beginner opponent. Often hazards that could cost the golfer a shot were placed short of where strong players could hit, catching the novice who lacked the technique to carry

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the hazard. Often these early golf courses were designed on small pastureland close to city centers and lacked the hazards of the great sand-based courses of the British Isles. Other hazards were required to punish the weak. This was an era of square lateral hazards, mounds called chocolate drops, railroad ties, and whatever vegetation existed in the pasture before the golf course. This primarily penal form of golf was not a transplant from the British Isles, but an Americanized creation.143

The rise of American sports coincided with the Progressive Era in United States history. Fredric L. Paxton wrote one of the first treatises on the rise of American sports for the *Mississippi Valley Historical Review* in 1917, claiming sports was a safety valve for the closing of the western frontier as popularized by Fredrick Jackson Turner. He wrote, “The free lands were used up. The cow country rose and fell. The social safety valve was screwed down. But the explosion did not come.”144 Paxton argued early golf was a chief driving force behind the existence of country clubs. These country clubs were different from the urban British clubs, as they were “the country toys for city men.”145 Men would go to the country to get away from their city lives and wanted golf courses more removed from the earlier pasture-style courses. They wanted an oasis as “unconscious of the local world around the grounds as possible.”146

Golf developed differently in the United States because the cities were different. Country clubs became an oasis for white, Anglo-Saxon Protestants. As cities became

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145 Ibid., 162.
146 Ibid.
more industrialized and urbanized, they became the natural dwelling for early immigrants looking for work, many from eastern or southern Europe. The suburbs became the place to get away from the urbanization in the cities in the last few decades of the nineteenth century. The elites and upper middle class began to reside in the suburbs, but still work in the cities, initially with the electric trolley, later with the railroad, and eventually with the automobile.  

With the automobile revolution soon coming, they had the new individualized ability to move farther from city centers than they could in the past, and they wanted courses unlike the early pasture game of their ancestors. These new country club courses were built in places such as Long Island, Tuxedo, Brookline, Newport, Wheaton and other early suburbs of the well-to-do. The growing middle class also took up the game in the early days of the twentieth century and transformed the game into an Americanized version of a British sport.  

With the end of the Gilded Age and the beginning of the Progressive Era, many aspects of life in the United States changed, both economically and socially. Sports, both participatory and spectator, were part of the change. Historian Mark Dyerson makes the argument that the emerging middle class saw themselves as the equal to the rich, just without their advantages. Given enough breaks going their way, everyone could be the next Andrew Carnegie. The middle class was envisioned as the “foundation of the

American republic.”

Golf in Scotland was played almost exclusively on municipal golf courses. The first municipal golf course in the United States was built in 1895 at Van Cortlandt Park in the Bronx. It was a rudimentary course and originally free to play. It was primarily played by the middle class; with poor youths employed as caddies. Golf crusaders wished to prove the game was not a game only for the idle rich and pushed for more municipal, low-cost opportunities for golf. They hoped the growing middle class would take up the game. During the early years of the twentieth century there was a “pervasive culture of mass consumerism based on rising disposable income, increased leisure time, and changing attitudes toward work and recreation that made sports more acceptable” for the growing middle class. Golf grew so quickly at Van Cordlant that it started to be dangerous. The New York Times described the crowds:

Players who had just driven from the tee found others following before they had reached the green, and amid the mass of flying ball, wild shouts of warning, and inextricable confusion which sometimes occurred, it is a wonder that serious accidents were averted and that any genuine enjoyment was obtained.

A second municipal course was added, the Links at Pelham Bay Park in the Bronx opened in 1901, followed quickly by Forest Hills in Queens (1905) and a second eighteen holes at Van Cordlandt Park (1914). All this golf was available to New Yorkers for a season golf permit costing a dollar. In 1914 6,600 New Yorkers purchased the seasonal

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151 Ibid., 30.
permit. Many golfers demanded municipal golf courses in other cities around the country, and before the United States’ entry in the First World War almost all major cities had at least one municipal course. Following the war, there was a bigger push for the middle class to play the game, and advocates believed that more interesting, strategic golf course designs would help. Some of the more interesting work during the later half of the Golden Age of architecture was in municipal or daily fee courses.

With the beginning of the twentieth century, participating in sports was seen as the new republicanism. The earlier version of republicanism was tied to agrarian roots. According to Dyerson, “[t]hey opposed the symbol of the healthy, moral yeomen farmer to the dissipated, venal city dweller.” But people were needed in the urban areas for the Industrial Revolution. Participating and spectator sports seemed liked the ideal way to combine city dwelling with republicanism. Politicians, journalists and commentators of the new era were quick to tie sports as a healthy outlet for living in cities.

Many in the lower or middle class felt no connection to United States Presidents during the Gilded Age, but they felt a connection to three of the first presidents in office of the twentieth century. Teddy Roosevelt, despite his membership in a very wealthy elite family, was promoted as an “every man.” With the need for a new, more urbanized republicanism, an athletic president was a valuable promotional tool for the concept. A New York Times reporter wrote, “Andrew Jackson could shoot as well and ride as well as Mr. Roosevelt, but we doubt if he could have safely faced him with a tennis net between

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152 Ibid., 31.
153 Ibid., 34.
154 Dyerson, Regulating the Body,” 131.
155 Ibid.,124.
them.” New magazine’s such as *Outing*, edited by journalist Caspar Whitney, tied sports with modern America:

> Unless we can make bodily culture keep up with mind culture our civilization can not possible last. From this point of view athletes are not the amusement of an idle hour, -- a way of killing a vacation, -- they are elemental duties. Vital moral laws.  

Chicago, seen by nineteenth century mid-western agrarians as venal during the Gilded Age, tried to transform during the Progressive Era. Mayor Carter Harrison, who came to office promising parks, said the city needed athletics to succeed:

> If it is desired that the next generation be a namby-pamby one then the boys and girls of to-day should leave athletics severely alone. To neglect the body and train merely the mind is, in my judgment, little short of criminal. The time has come, in my opinion, when cities should officially recognize the absolute necessity for a broad and systematic plan of physical training for the children and youth of both sexes.”

Roosevelt, despite his elite upbringing, was not a golfer. He enjoyed more strenuous sports. The next three presidents were golfers and enjoyed getting away from the office to enjoy the game with friends, diplomats, and fellow Washingtonians. Roosevelt’s successor, William Taft reportedly said, “Golf in the interest of good health and good manners. It promotes self-restraint and, as one of its devotees has well said, affords the chance to play the man and act the gentleman.” Today 350-pound William Taft would seem a strange choice as either an athlete or a spokesperson for the middle class. Taft had gained fame in the United States when he was appointed to the Philippines

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157 “Editors Open Window,” *Outing* 4 (May 1884), 143.
Commission in 1900 and then shortly after as Governor-General of the Philippines. Taft shared many of the popular ideas of the time about the superiority of the white race but he believed there was a better way than the British Empire’s “white man’s burden.” He wanted the Filipinos trained in self-government and democratic rule. “Not that I am an expansionist, for I have not changed my mind on the general subject, but only that in the situation into which events have forced us, the Democratic policy of abandonment of these islands was impossible.”

Taft would go on to serve as Roosevelt’s Secretary of War and Provisional Governor of Cuba before winning the presidential election of 1908. With the transition to Taft the presidency went from one type of physical activity to another. According to newspaper editor William Allen White, Taft was “a hewer of wood,” strong and steady and a solid athlete to Roosevelt’s strenuosity. There were numerous stories in the Republican press about Taft’s idea of fair play and hard work, the new republican ideals that were not in conflict with urban life. Stories often tied his philosophy to the fair play philosophy of golf. The progressives believed the concept of fair play and playing within the rules could transition from the playing fields to corporate endeavors, labor relations, and commercial exchanges.

Golf was the ideal sport to fit within these concepts of modern republicans. Many sports emphasized winning over playing by the rules. Ty Cobb was gaining fame with the Detroit Tigers for his winning at any cost in baseball. Boxing had its share of shady characters and questionable bouts. Horse racing was seen as a playground for mobsters.

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161 Dyerson, *Regulating the Body,*” 135.
Golf required all players to play by the rules, often with no supervision from an official. Baseball players could never call their own balls and strikes, but a golfer will report how many strokes it took to get the ball into the hole. Golfers are not perfect, and there are numerous instances of people cheating at golf; but the expectation is to not cheat. The idea is the correct playing of the game is more important than the winning. This was a definition of fair play during the progressive era; there was a better way to play than win at all costs. Caspar Whitney compared the idea of fair play between the different sides of the Atlantic, “In a word you would get a square deal [in the United States], even though there was not so much talking about it – and no tea drinking.” President Taft gave a speech in San Francisco about the virtues of golf in October 1909, less than a year after taking office:

When you play a game of eighteen holes and walk four or five miles there is only a pleasant feeling of fatigue when you get through. There is none in baseball or tennis. (Colonel Roosevelt please note.) I am hopeful that out here you may have land not irrigated that you can devote to this game.

Sports being part of the new republicanism and leading American figures playing this new American game of golf, it was still not clear how golf would develop in the United States. There were many pushing for a uniquely American game. The United States had a pattern of taking continental games and changing them into American games. Football had developed from rugby, baseball from cricket, softball from rounders, and field hockey from shinty. Charles Blair Macdonald in his memoir, Scotland’s Gift

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*Golf*, spends a chapter discussing the attempted split from British golf. It was primarily a way to make the game fairer than traditional golf, with fewer disqualification penalties and more options for the golfer. Rather than making changes to the game or the equipment, the winning movement in the United States was to maintain some of the traditions of the old game from Scotland, but Americanize by changing the playing field.¹⁶⁵

The final two steps in the Americanization of golf were American golfers being able to compete with the best British golfers and the building of an exceptional American golf course that could hold its head up with the best of British golf courses. The 1913 United States Open provided the first step. British Golfer Harry Vardon was considered one of the greatest golfers of his time, and now is typically on the list of one of the greatest of all time. He was a member of what British writers called “The Great Triumvirate,” along with John Taylor and James Braid. Together, they dominated the Open Championship during the British fin de siècle. Vardon, from the Isle of Jersey on the Channel Islands, began his tour of Canada and the United States in 1900. He had won three of the total six Open Championships he was destined to win. The Spalding Company had arranged for him to make the tour to promote the new gutty ball, the Vardon Flyer. He played exhibition matches and competed in the US. Open, easily winning by nine strokes. His tour did not sell many golf balls; the Haskell was the new rage in North America, but it did show Americans and Canadians how the game could be

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played. Vardon returned for another tour of the United States in 1913, this time along with another great British golfer, Edward “Ted” Ray, who was a “dramatically long hitter.” By the time of this tour, golf had gained some popularity, and golf and sports fans came out to see the two British golfers play in exhibitions. Again, they took time off from their exhibitions to play in the United States Open, this year at the Country Club in Brookline, Massachusetts. A surprise to everyone, young homegrown Francis Ouimet, all of twenty years old, tied the two British giants after seventy two holes, and defeated both Brits in a playoff. Herbert Warren Wind writes of the encounter and its importance to American golf:

Americans turned to their newspapers the following morning and read about the incredible accomplishments of Francis Ouimet. Outside of Massachusetts, no one had ever heard of him. Who was this Ouimet? What had he done before? How was the name pronounced – Qymet, or Umet or Weemay or what? The name was pronounced Weemet. In time the country received the answers to the other questions and learned that its hero was ten-tenths a hero, compounding from the best parts of Charles Dickens and Booth Tarkington with a touch of Horatio Alger.

With some Scots immigrating to the United States to play professional golf, build equipment, build and maintain golf courses; there was a large demand to a limited supply, sometimes leading to very quick designs. An early immigrant from Scotland, Tom Bendelow’s designs were called “eighteen stakes on a Sunday afternoon” because of his quick method of design.

There are primarily three different forms of golf design: penal, heroic, and strategic. Courses rarely are all one or the other, but often mix the three. In the early days

167 Ibid., 95.
of golf in the United States the penal school of design dominated. With limited resources to dedicate to golf close enough to city centers, the courses had to get maximum benefit for the limited amount of space. Modern golf course architect Forrest Richardson claims strategic golf naturally grew out of early penal golf. An architect has limited ability to determine how a golfer will play his finished design. Richardson wrote, “holes described as penal were played by way of alternate routes devised by golfers who refused to believe there was no way around the impediment.”

According to Richardson it was not so much architects that changed penal to strategic, but the golfers themselves. Penal is still designed in golf courses, but typically has a designed way around the impediment, allowing the shorter hitting golfer a mechanism to compete with the longer hitter.

Heroic golf holes typically require some sort of carry over an obstacle to gain an advantage. Often times these are designed with diagonal hazards or dogleg holes. The hole will turn sharply around an obstacle. A long hitter can try to fly over the obstacle by as much as he dares, while the shorter hitter has a longer, but safer route using the center line. In describing heroic golf, the cliché, “bite off as much as you can chew” is used. An aggressive golfer might try to cut a little more with each play, gaining a little more advantage, until he fails to cross the obstacle and is penalized. Then he might return to the more cautious route, biting off a little more again, until another failure.

170 Ibid.
171 A dogleg hole is a hole with a sharp turn either to the right or left.
172 Richardson, “Penal, Strategic and Heroic Design Redefined,” 73.
Strategic holes are more difficult to define. In general terms, a strategic hole allows numerous different ways to play a hole, each valid depending on the skill of the golfers. One golfer might try a more heroic approach, while his more cautious opponent believed either his opponent will pay a price for his heroic attempts or knowing he will gain an advantage once the two golfers get closer to the green. “Strategy can be evident even in its absence,” Richardson wrote. “In my opinion, strategic is no more useful description of a golf hole than it would be for war. Strategy is a constant.”

Modern designers and writers Robert Muir Graves, Geoffrey Cornish and Ronald G. Dodson define strategic in *Golf Course Design*:

Strategic holes require players to think. They provide alternate routes from tee to green, with safer but longer routes for those incapable of maximum distance and accuracy… In accomplishing this, many an architect places hazards so they come into play less often so as not to discourage the short hitter unduly. Yet such placement still forces the long hitter to think and to play accurately.

Walter J. Travis, leading American golfer and editor of *American Golfer* addressed the new form of American golf at the dawn of the Golden Age, saying the original penal style of course design was “dead wrong – from every standpoint.” And what the game needed was a return to the Scottish style “natural type of seaside links which have stood out for generations as the highest and best example of golf course architecture.”

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173 Ibid., 70.
land comparable to Scottish linksland. The Golden Age of architecture was a response to that difference, taking many of the more heroic or strategic concepts of Scottish golf and applying it to land which was considered at the time ill-suited for golf while also applying American ideas of fair play and second chances.\textsuperscript{176}

The National Golf Links of America is now seen as land ideally suited for a golf course similar to the greatest in Scotland. When Charles Blair Macdonald first went looking for a location for his ideal golf course concept at the turn of the twentieth century he first looked in Cape Cod, but felt is was too remote to attract the “right sort” of people. Other areas, such as the land between Amagansett and Montauk on Long Island were considered but too costly. He found 450 acres of land on Sebonac Neck on the eastern end of Long Island. The land was bogs and swamps, and was “covered with an entanglement of bayberry, huckleberry, blackberry, and other bushes and was infested by insects.”\textsuperscript{177} The land was three miles from Southampton, “where thoroughfares and railroads would never bother us – a much-desired situation. When playing golf you want to be alone with nature.”\textsuperscript{178} Here Macdonald built a golf course with the holes based on holes he admired from his travels to Europe. Replica courses are popular in the modern era, with many popping up in the strangest places. Macdonald built holes similar to the holes from the Old Country, but different enough because of the environment where he placed them. The premier British golf writer of the time, Bernard Darwin, nephew of

\begin{footnotesize}
\textsuperscript{176} Shackelford, \textit{The Golden Age of Course Design}, 4-5.  
\textsuperscript{177} Macdonald. \textit{Scotland’s Gift Golf}, 187.  
\textsuperscript{178} Ibid.
\end{footnotesize}
English naturalist Charles Darwin, wrote after his first visit to The National Golf Links of America:

How good a course it is I hardly dare trust myself to say on a short acquaintance; there is too much to learn about it and the temptation to frantic enthusiasm is too great, but this much I can say: Those who think it is the greatest golf course in the world may be right or wrong, but are certainly not to be accused of any intemperateness of judgment.  

Not only had the United States proven it was capable of building courses as good as the ones in Britain, but golf had also stolen some of the limelight from golf’s birthplace in the playing of the game. The combination of Ouimet’s victory and the creation of the National Golf Links resulted in the United States never feeling inferior to the British Isles about golf. The Great War, and its destruction of the British economy and loss of lives would put the finishing touches on British golf superiority. The economy went from a war economy to a peace economy much more quickly in the United States, understandable when considering how short a time was spent fighting the war, the fewer number of deaths, and the lower percent of gross domestic product spent on the war.

There was concern that the Golden Age was short lived; killed by the Great War in 1918. The golf business tried to fight these concerns. A columnist for American Golfer in January 1919 wrote. “To shoot with a gun in battle may be at times a fine and splendid thing, but yet we know that when the world is set to right it is a finer thing to tap a little

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ball upon a sunny putting-green.”\footnote{Kirsch, \textit{Golf in America}, 85.} Golf was growing amongst the middle class prior to the Great War, but it exploded in the remaining years of the Golden Age after Johnny came marching home (See Table 4: Facilities and Courses/United States.)

The new courses designed by the masters during the Golden Age made the golfer not just perform a golf shot, but to think his way around the course. Shackelford says what made these golf courses different was they were “special then and timeless now because of their ability to test the mental as well as the physical component of the golfer’s game, a concept better known as strategy.”\footnote{Geoff Shackelford, \textit{The Golden Age of Golf Design}. (Chelsea, MI: Sleeping Bear Press, 1999), 5.} The great architects of the period were willing to study the courses of the British Isles, read each other’s articles and collaborate with each other. These Golden Age designers also took advantage of advanced travel possibilities to travel all over the country, examining each other’s work and taking design jobs far from their home base.\footnote{Shackelford, \textit{The Golden Age of Golf Design}, 5-9.} This new design style, taking concepts of heroic and strategic designs from the Old Country, applying those concepts on different environments available in the United States, and including American concepts of fair play and second chances was what made Golden Age of golf course design distinct. Many of the concepts they developed during this period are still important and useful in current golf design and playing.

By the end of World War II Americans felt much different about their role in the world. Americans were no longer tied to European traditions, which after all, led to two world wars. The United States could now Americanize the world, forcing it to fit its
tastes. The United States had the bomb and were not afraid to use it – for the good of humanity. American innovation could replace European tradition. This was true even in golf. British chronicler of America during the post war years, Alistair Cooke wrote of the new attitude toward golf courses:

Americans are less mystical about what produces their inland or meadow courses: they are the product of the bulldozer, rotary ploughs, mowers, sprinkler systems and alarmingly generous wads of folding money. And often very splendid, too. It seems to me that only a British puritan on one side of the Atlantic, and an American sybarite on the other, will deny the separate beauties and challenges of the links and inland course.\(^\text{184}\)

In this era golf courses had potential to be built anywhere. There was a feeling that the Golden Age architects got all the best land for golf, but that should not preclude them from building masterpieces. They could build courses anywhere, in the desert of Las Vegas or the side of a volcano in Hawaii. All they needed to do was move enough dirt to create stunning holes and allow golf carts to get the golfer around from one spectacular view to the next. Nature was not something harmonized but something to be conquered.\(^\text{185}\)

Golf had always been a game that combines athletic ability, strategic thinking and a strong attitude to resolve the challenges in golf. But post-war golfers spent most of their time working on the physical aspects of the game, so strategy and attitude seemed like ways to promote unfairness in the game. It did not seem right to American sensibilities that someone who developed a repeatable swing was defeated by attitude or strategy. Was it better to just eliminate the unfairness? The architect, along with expensive


maintenance techniques, could eliminate the vagaries of nature from the golf courses, allowing for only the one that hit the best shots to dominate competitions. Even the courses built during the Golden Age were not immune to the changes in the game, resulting in changes to the courses.\textsuperscript{186}

The game has changed. Maintenance practices, equipment, training, and golf instruction resulted in golfers able to hit the ball farther, straighter and higher (See Table 5: Maximum Yardage Changes to golf courses.) This has influenced course owners to change the old masterpieces. But in changing them they did more than just lengthen the course, they also removed some of the character that the masters designed into the courses. Change is a natural occurrence but many changes were made to reflect the changes to the game. Trees were planted to block out the weather; hazards were made easier to escape. Signature hole design became a priority to better sell real estate and end up on various publication course rankings with beautiful color photographs.\textsuperscript{187} Golf writer Gib Papazian compares the Golden age architecture to modern architecture, saying:

\begin{quote}
It is a pity that with few exceptions, golf architecture seems today more science than art, with competent technicians simply parroting watered down versions of classic strategies. Pleasing to the eye, yes, but too often exuding a cold mechanical quality. Technical perfection has its limitations.\textsuperscript{188}
\end{quote}

\textsuperscript{186} Doak, \textit{The Anatomy of a Golf Course}, 216.
\textsuperscript{187} Ibid., 10-11.
Golf legend Jack Nicklaus summed up the difference between Golden Age and modern courses when comparing the traditional versus modern golf courses on the Monterey Peninsula. “Pebble Beach and Cypress Point make you want to play, Spyglass Hill – that’s different; that makes you want to go fishing.” Pebble Beach and Cypress Point are both Golden Age architecture golf courses, while Spyglass Hill is a modern design.

Some golfers and golf writers began noticing these changes. They were becoming bored with American golf, and its repetitive nature. They saw golfers fighting elements once a year when the Open Championship in Britain was televised. Golfers would take vacations in Scotland, England, Ireland, and Wales and notice how much more fun it was to play a simpler game and deal with nature rather than avoid it. By the last decade of the twentieth century there was a growing movement to return to these simpler times, to the game that was popular during the Golden Age. As golfing great Jack Nicklaus said of the modern game, “Golf has become too difficult, too expensive and takes too long.”

With the growing interest in Golden Age architects and their courses, there has been a growing effort to restore these courses rather than renovate. A class of golf architects now specializes in restoration, often times for a specific architect. Ron Prichard is an architect who specializes in restoring Golden Age architect Donald Ross courses. He said care is needed when dealing with Donald Ross expertise. “Often times they do not do the research, and believe the courses they have examined that are credited to Ross

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are his original design, not realizing the courses they believe demonstrates Ross’ philosophy have changed since Ross’ time.”

The leading Golden Age architects and their philosophies of design are now being examined to see where golf architecture went wrong. Golf writer Brad Klein, when asked who his favorite golf course architects are, responds with “Dead Guys.”\textsuperscript{192} There are numerous biographies of the leading architects of the Golden Age published in the last decade. The four architects featured in the next chapter, Charles Blair Macdonald, Donald Ross, Alister MacKenzie, and A.W. Tillinghast, all have societies to honor and preserve their designs and are now considered the forefathers of modern United States golf course architecture.\textsuperscript{193}

\textsuperscript{191} Ron Prichard, telephone interview with the author, March 4, 2015.
\textsuperscript{192} Klein, \textit{Wide Open Fairways}, 169.
\textsuperscript{193} Ibid., 169-170.
CHAPTER FOUR: THE MASTERS

The Golden Age architects discussed in this chapter were not the only Golden Age architects nor are they necessarily representative of the architects of the era. They are chosen as the ones that are considered masters at their craft by just about everyone interested in golf architecture.\textsuperscript{194} There are many other names that could be included, but these four are not controversial as masters. What follows are not biographies of the master architects, but rather a description of their design philosophy, how that philosophy developed, some of their more noteworthy courses and their importance to our understanding of the Golden Age of golf course architecture.

Old Tom Morris

Before discussion of the United States architects of the Golden Age, we need to take a look at the influence of Old Tom Morris of St. Andrews in Scotland.\textsuperscript{195} All four of the highlighted United States architects had direct influence from Old Tom in Scotland.\textsuperscript{196} Born just forty years after the defeat of the British Army at Yorktown, Old Tom lived five years after Orville and Wilbur’s first flight. Tom Morris came in second in the first Open Championship in 1860, and won the event in 1861, 1862, 1864, and 1867. Even with his wonderful playing career, Old Tom is primarily remembers as the custodian of the Old Course and for his design of golf courses around the British Isles.\textsuperscript{197}

\textsuperscript{194} Cornish and Whitten, \textit{The Architects of Golf}, 49-97.
\textsuperscript{195} Called Old Tom Morris to differentiate from his son, also a championship golfer, Young Tom Morris.
\textsuperscript{196} Kroeger, \textit{The Golf Courses of Old Tom Morris}, 56-59.
\textsuperscript{197} Cornish and Whitten, \textit{The Architects of Golf}, 351.
It is common to claim the Old Course at St. Andrews was designed by nature, but reality is Tom Morris made changes to numerous features of the Old Course that are cherished today. He was hired as custodian of the Links in 1865, and spent the next forty years maintaining and altering the course, making it the premier golf course in the world.\textsuperscript{198} He widened the fairways, modified numerous greens, added the First and Eighteenth greens, made the course more accessible and friendlier, and designed a right hand and left hand side of the golf course to end congestion of players going out meeting up with players coming in.\textsuperscript{199}

Charles Blair Macdonald met Tom Morris in 1872, when he was sent to St. Andrews to attend college. He bought his

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\includegraphics[width=\textwidth]{figure2.png}
\caption{Old Tom Morris at St. Andrews}
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\begin{footnotesize}
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\item Prior to his widening, golfers would play out to the ninth green, then turn around and play in on the same fairways and greens.
\end{enumerate}
\end{footnotesize}
first golf clubs from Morris, and was taught to play the game. He attended school in St. Andrews and remained until 1874. He quickly got better at golf, able to compete in matches with Young Tom Morris.  

Donald Ross, from Dornoch in the Scottish Highlands, was sent to St. Andrews to train on greenskeeping and club making from Morris in 1891. Ross worked under Morris for two years, and more than likely travelled with Morris on his golf design trips, as this was the heyday of Morris’ trips around the British Isles designing golf courses. Ross assisted Morris with his design of Luffness New, still considered to have some of the best greens in Scotland. Ross returned to Dornoch in 1893, then immigrated to the United States in 1899.

A.W. Tillinghast was born into a wealthy family and spent summer vacations in St. Andrews starting in 1895. Morris taught Tillinghast to play the game and they would often discuss golf course design. Tillinghast would continue to prefer designing in the field rather than an office throughout his career, a process he absorbed from Old Tom.

Dr. Alister Mackenzie was born in England to Scottish parents, and often vacationed in St. Andrews and reportedly struck up a friendship late in Morris’ life. He saw St. Andrews as the ultimate course and used many of the concepts he learned in his own design career. A couple decades after Old Tom Morris’ death, Mackenzie returned

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201 Ibid., 56.
202 Ibid., 57.
to St. Andrews and spent a year creating a detailed map of the Old Course, a map that has a place of prominence in the Royal and Ancient Clubhouse.\textsuperscript{203}

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\includegraphics[width=\textwidth]{Figure_3_Charles_Blair_Macdonald.jpg}
\caption{Charles Blair Macdonald}
\end{figure}

\textbf{Charles Blair Macdonald}

\textit{If there was one individual who provided the foundation of golf in America and the organic linkage to the very roots of the game, it is Charles Blair Macdonald. In fact, because of his significant contributions to the game, he can justly be called the Father of American golf. --World Golf Hall of Fame}\textsuperscript{204}

According to golf writer and architect Tom Doak, “Charles Blair Macdonald and his seminal achievement, The National Golf Links of America, in one fell swoop inaugurated the evolution of golf course architecture in America.”\textsuperscript{205} All four of the architects highlighted were important contributors to the Golden Age of architecture, but there is likely to have

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{203} Ibid., 58-59.
\item \textsuperscript{205} Tom Doak, Introduction to George Bahto, \textit{The Evangelist of Golf: The Story of Charles Blair Macdonald} (Chelsea, MI: Clock Tower Press, 2002), 7.
\end{itemize}
\end{footnotesize}
never been a Golden Age without Macdonald. Macdonald was important as a player, administrator, evangelist, but most importantly as an architect of golf courses.

In 1872 a sixteen-year-old Macdonald was sent to St. Andrews, Scotland to complete his education at United College of St. Salvador and St. Leonard’s. He resided with his paternal grandfather. His grandfather, William Macdonald, a golfer and member of the Royal and Ancient Golf Club of St. Andrews, took young Macdonald to Old Tom Morris’ golf shop, beside the eighteenth green of the Old Course. He was fitted for clubs and procured a locker (minors were not allowed membership in the Royal and Ancient golf club) and received lessons from Old Tom Morris. Arriving in the summer, Macdonald had twenty hours of daylight on the Old Course to fit in his new obsession. It is hard to imagine the possibility of an introduction to the game better than Old Tom Morris, the Old Course, Young Tom Morris as a playing companion, and twenty hours of daylight.

Following his introduction to the game at St. Andrews and his completion of studies in Scotland, Macdonald returned to Chicago, but had difficulty finding people willing to play golf. He would occasionally make trips back to Great Britain and play, but there was not much interest in golf in Chicago. His opportunity came with the World’s FairColumbian Exposition, coming to Chicago in 1893. Friends from Scotland and England visited during the World Fair, and he could entertain them with golf. He laid out a rudimentary golf course on the estate of United States Senator Charles B. Farwell. After

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the success of the small course and a move to New York in 1900, he began looking for a site for what he believed would be the ultimate United States golf course.\textsuperscript{207}

When Macdonald decided to build his ultimate golf course there were already a number of courses in the United States. Most of these were penal, rather straightforward and quickly becoming boring. Macdonald’s idea was to build a course based on some of the greatest holes he knew in Great Britain. While finding the land where he would build his course – the eastern end of Long Island – Macdonald made three separate trips to Great Britain to scout out holes for his inspiration. According to golf historian Geoff Shackelford, his idea was “design a course that had no weak holes and which could be enjoyed by all skill levels of golfers.”\textsuperscript{208} Macdonald’s learning of the game on the Old Course at St. Andrews inspired him, as the Old Course was played and interesting to him when he was a rank beginner and still served him well when he was able to compete with Young Tom Morris.\textsuperscript{209}

Macdonald, in his book \textit{Scotland’s Gift Golf}, talks about the process of construction, saying he did receive good advice from many sources. The famed British golfer and writer, Horace Hutchinson, advised him not to compete with nature but try to emulate:

\begin{quote}
[H]e impressed on me that the human mind could not device [sic.] undulations superior to those of nature, saying that if I wished to make undulations on the greens to take a number of pebbles in my hand and drop them on a miniature space representing a putting-green on a small
\end{quote}

\textsuperscript{207} Ibid., 170-173.
\textsuperscript{208} Shackelford, \textit{The Golden Age of Golf Design}, 31.
\textsuperscript{209} Macdonald, \textit{Scotland’s Gift Golf}, 43.
scale, releasing them, and as they dropped on the diagram, place the undulations according to their fall.\textsuperscript{210}

There was much criticism regarding Macdonald’s vision prior to the opening, but much praise after it opened. It was almost universally praised as the United States finest course from critics on both sides of the Atlantic. Many of Macdonald’s principles in building the National Golf Links of America would become rules for building courses during the Golden Age. Features Macdonald incorporated in his design that were new to American golf included multiple tee boxes on each hole for different levels of play, wide fairways so players can pick the best route for them to the hole, no definitive line of play to the hole, and diagonal carries from the tee, allowing golfers to establish his own line of play depending on ability or playing conditions.\textsuperscript{211}

Macdonald would go on to design a few other courses for friends (Piping Rock, Sleepy Hollow, St Louis Country Club, Greenbrier Resort) but following his design of National Golf Links of America it was difficult to get excited for any other projects. Macdonald’s National Golf Links of America was still considered one of the finest golf courses in the United States, but it was on the eastern end of Long Island. Some of the members of the National wanted a course closer to Manhattan, where they could play a round of golf after work.\textsuperscript{212} The challenge to Macdonald was simple: “Build us a course that would have on it, your greatest holes … and you can have complete freedom.”\textsuperscript{213}

Macdonald wrote for Golf Illustrated the special challenge of Lido, starting out with a

\textsuperscript{210} Ibid., 192.
\textsuperscript{212} Bahto, The Evangelist of Golf, 169.
\textsuperscript{213} Ibid., 170.
“flat sea meadow partly underwater.”

The sea meadow was first filled in with sand, and then the undulations for the course were made from sand pumped out of a man-made lagoon. The course was designed to again use holes inspired, but not copied, from the great holes of the British Isles, all built to look as if nature did the work rather than the hand of man. The project was expensive. The construction of a golf course on a difficult site cost as much as $200,000 at the time. The cost for Lido was $1,430,00; with most of that, at least $800,000 in construction costs. Similar to the National Golf Club of America, the Lido Golf Course would also consist of holes emulating the best overseas holes, except for the finishing hole. The English magazine *Country Life* solicited ideas from readers, picking the best design as the eighteenth hole at Lido, as chosen by the editors Bernard Darwin and Horace Hutchinson. A 34-year-old non-practicing physician Dr. Alister MacKenzie won the contest with a risk-reward hole full of options.

Lido would suffer hard times. Maintenance costs on the course were high, and difficult to cover during the Depression. Pieces of the property were sold off to help defray costs. The course eventually closed, and was taken over by the United States Navy during World War II and never re-opened. There is now a newly designed Lido course designed in 1956, but it has little similarity to the original Lido other than the name and the general location.

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215 Ibid.
217 Ibid., 176-177.
218 Ibid., 180-182.
After completing Lido, Macdonald was over sixty and ready to retire from amateur design. A few more courses were designed by Macdonald: Ocean Links in New York (1919); the Mid-Ocean Club in Bermuda (1924); Deepdale in New York (1925); and Yale University in Connecticut (1926).219 His associates, Seth Raynor and Charlie Banks, would go on to design numerous other courses using the National School of Design of holes inspired by great holes of Europe. Macdonald’s reputation was hurt, with many people arguing his designs were penal and only replica holes (See Table 6: Holes designed by MacDonald based on traditional holes.) It would take the revival in the Golden Age architects for modern architects and historians to recognize Macdonald’s proper place in golf design, and his use of great holes to inspire his own designs.

Donald Ross

When I was a young man in Scotland, I read about America and the American businessman absorbed in making money. I knew the day would come when the American businessman would relax and want some game to play, and I knew that game would be golf. I read about the start of golf in the United States, and knew there would be a great future in it, so I learned all I could about the game: teaching, playing, club-making, greenkeeping and course construction.

Figure 4: Donald Ross


construction. And then I came to America to grow up with a game in which I had complete confidence. Golf has never failed me.”\(^{220}\)

Donald Ross was born and raised in the Highlands of Scotland, in a town named Dornoch, famous for its cathedral and its golf course. As a youngster Ross was sent south to St. Andrews to learn greenkeeping from Old Tom Morris. Old Tom mentored him at the height of Morris’ career as a course designer. Ross would immigrate to the United States where he originally worked as the greenkeeper and golf instructor at Oakley Country Club in Watertown, Massachusetts. James Tuft, designing a seasonal resort, discovered Ross at Watertown and stole him away to work at his new resort at Pinehurst, North Carolina. His work at Pinehurst gained him fame as an architect and he would gain credit for designing four hundred courses over the next forty years.\(^{221}\)

Ross’ standard in golf course design included:

- Make each hole present a different problem.
- So arrange it that every stroke must be made with full concentration and attention necessary to good golf.
- Build each hole in such a manner that it wastes none of the ground at my disposal, and take advantage of every possibility I can see.\(^{222}\)

Unlike Macdonald, who had a formula of emulating other great holes, Ross’ career had different stages where different techniques of design were used. “In trying to make your course fit certain famous hole treatments, you are certain to be doomed to

\(^{222}\) Ross, *Golf Has Never Failed Me*, 12.
disappointment,” Ross wrote. “Make your holes fit your course, No other way can be as satisfactory.”  

Getting a handle on Ross’ design philosophy is difficult, as his career spans forty years. Golf writer and Ross expert Bradley Klein divides Ross’ career into three stages: Formative Era (1900-1920); Mature Phase (1920-1930); and the Functionalist Phase (1930-1948).  

During his Formative Era Ross was adjusting to getting the most out of his routings of the course. Often these courses included bold and creative putting surfaces; unusually shaped sand hazards; a gnarly look; mounds containing rocks collected from the site. Klein wrote that “The putting surfaces offer steeply graded contours, and there is a tendency for the green complex to embody sharply graded outslopes rather than smooth, flowing lines.” After the war years Ross returned to design with a much more mature style, a style that flowed with the existing topography. Klein credits his change during the Mature Phase to his hiring of design associates Walter B. Hatch and J.B. McGovern and professional engineer Walter Irving Johnson who did the design drawings. The courses during the Mature Phase featured smoother transitions between fairway and green; fewer, but more strategic bunkers; the contours of the greens being softer, but also more visible from the fairway; and favoring greens positioning and contours to the approach from the fairway along the line of the course. The

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223 Ibid., 33-34.
225 Ibid., 109-111.
226 Ibid., 111.
Functionalist Phase used many of the same principles of the Mature Phase but with more emphasis on playability and maintenance. Much of his work during this phase was designing municipal courses, since municipals could rely on the Work Progress Alliance for construction costs. But municipalities cared more about affordable maintenance practices than private clubs before the Depression. Much of his work became administrative, overseeing his large design firm.\textsuperscript{227}

Ross was responsible for about 400 golf course designs in his 45-year career. “Ross’s distinctive genius came from being trained in the earlier mode of golf course design,” Klein wrote in his biography of Ross. “And adapting himself toward the newer style of what might well be called mass production.”\textsuperscript{228} Ross is credited with almost 400 designs but there were varying degrees of involvement from the architect. Roughly one third of the course he designed he never visited. These were designs based on topographical maps, with his associates carrying out his planned designs. Another third he made a single visit. The visit could be a few hours or it could be a few days, again relying on associates to carry out his plans. The final third he made multiple visits. Still his associates would follow up on much of his plans, but often under his direct supervision. Klein wrote:

The pursuit of large volume of production is surely the most unfortunate legacy of Ross’s otherwise admirable design career. As he himself acknowledged toward the end of his life, he simply did too many courses and didn’t have enough control over them.\textsuperscript{229}

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\textsuperscript{227} Ibid., 111-112.
\textsuperscript{228} Ibid., 108.
\textsuperscript{229} Ibid., 237.
\end{flushright}
Michael Fay, founder of the Donald Ross Society, argues that “Ross believed that golf should be a pleasure not a penance… He designed courses that were playable by nearly every level of golfer.” However, there are certain standards that are common to Ross designs:

1. **Efficient routing**: Short distance between green and the next tee; a feeling of strolling around the property; compositional unity.
2. **Modest getaway holes**: In the days before practice areas, it was a good idea to give a golfer a relaxing start to his day, a sense of security, not start out with difficulty.
3. **Generous fairways**: Ross typically had 40 yard fairways on shorter holes, 60-90 yards wide on longer holes, typically without the straight cuts common in today’s fairways.
4. **Angles of play**: Ross’ hazards were often designed to give the golfer strategic options, not to punish, “designed to indicate to the intelligent player that a choice needed to be made between the bolder and the safer (if longer) path to play. Often a left-to-right tee shot would be followed with a right-to-left approach for maximum benefit.
5. **Offset tees/S-shaped fairways**: Rather than straight away holes or severe doglegs, Ross often put the tee slightly offset from the fairway, followed by an S-shape fairway, so the golfer who had the ability to shape his shot would have an advantage.
6. **Demanding iron play**: Approaches to the green often required imagination. With subtle contours on the green, the player that knew a shot needed to come from the left or from the right would have an advantage over the player just trying to his the middle of the green or aiming for the flagstick.
7. **Slightly raised putting surfaces**: Ross built up the greens to aid in drainage., but a common misconception based on Pinehurst and Dornoch, he was not a fan of crowned greens.

Ron Prichard has specialized in restoring Donald Ross courses. He does the research, and strives to get as close to the original design as remains possible. “You can speak of generous fairways, optional lines of play, meaningful bunkers, and undulating

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231 Klein, *Discovering Donald Ross*, 249-260.
putting surfaces which are fearsome to putt and awe-inspiring to study. But classical architecture is more than the sum of these elements,” claims Prichard. “The magic must be experienced and felt first hand.”  

Alister MacKenzie

*It by no means follows that what appears to be attractive at first sight will be so permanently. A good golf course grows on one like a good painting, good music, or any other artistic creation.*

Some of the Golden Age architects disappeared from the public following World War II when new ways of design became popular. Alister MacKenzie remained popular, partially because of his design at Augusta National, home of the annual Masters Tournament, and partially for his design of Cypress Point, called the Sistine Chapel of Golf.

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MacKenzie’s career in design was as unique as his creations. He was born in Yorkshire, England to Scottish parents and graduated from Cambridge University with degrees in medicine, natural science and chemistry. He served the British Army in the Boer War as a surgeon and became fascinated with the Boers’ ability to hide on treeless veldts.  

As a medical doctor in Leeds, MacKenzie became interested in golf, “One of the reasons why I, a medical man, decided to give up medicine and take up golf architecture was my firm conviction of the extraordinary influence of health in pleasurable excitement, especially when combined with fresh air and exercise.” It was while helping to redesign his home course at Leeds, he met Harry Colt, England’s leading designer of the era. He entered the Lido contest put on by golf writers Horace Hutchinson and Bernard Darwin for *Country Life* magazine to design a hole for C.B. Macdonald’s Lido course in the United States. MacKenzie’s design won the contest, gaining MacKenzie fame in America.

Macdonald said of MacKenzie’s hole design:

The eighteenth hole is a copy of the hole that took first prize in the competition abroad, the architect being Dr. Mackenzie, who is a noted golf expert. The hole gives one of three fair greens to play to from the tee, each to be chosen according to the player’s ability and according to the wind. The fairway is full of bunkers and the second shot must be as accurate as the first. As a finishing hole I know of none that will give a golfer whose

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opponent has him one down a better chance to retrieve himself on the last hole than this one, unless it be the eighteen at the National.236

During the Great War, MacKenzie would again serve the British Army, this time as a major specializing in camouflage.237 Following the war, MacKenzie partnered with Colt and H.S. Alison on golf course architecture. MacKenzie gave a series of lectures about golf architecture in 1912 for the Golf Greenskeeper’s Association and these were developed into his first book, Golf Architecture in 1920. Key elements include

1. The course, where possible, should be arranged in two loops of nine holes.
2. There should be a large proportion of good two-shot holes, two or three drive-and-pitch holes, and at least four one-shot holes.
3. There should be little walking between greens and tees and the course should be arranged so that in the first instance there is always a slight walk forwards from the green to the next tee; then the holes are sufficiently elastic to be lengthened in the future if necessary.
4. The greens and fairways should be sufficiently undulating, but there should be no hill climbing.
5. Every hole should have a different character
6. There should be a minimum of blindness for the approach shots.
7. The course should have beautiful surroundings and all the artificial features should have so natural an appearance that a stranger is unable to distinguish them from nature itself.
8. There should be a sufficient number of heroic carries from the tee but the course should be arranged so that the weaker player with the loss of a stroke or portion of a stroke shall always have an alternative route open to him.
9. There should be infinite variety in the strokes required to play the various holes…interesting brassy shots (fairway woods), iron shots, pitch shots and run up shots.
10. There should be a complete absence of the annoyance and irritation caused by the necessity of searching for lost balls.
11. The course should be so interesting that even the plus man is constantly stimulated to improve his game in attempting shots he has hitherto been unable to play.
12. The course should be so arranged so that the long handicap player, or even the absolute beginner, should be able to enjoy his round in spite of the fact that he is piling up a big score.
13. The course should be equally good during winter and summer, the texture of the greens and fairways should be perfect and the approaches should have the same consistency as the greens.  

All of these ideals he would frequently break, as the land dictated. He said he regretted emphasizing some of the rules only because golfers took them as gospel rather than ideal. “If land for a golf course lends itself readily to construct the two loops, well

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and good,” he said of his first principle. “But it is a great mistake to sacrifice excellent natural features for the purpose of obtaining it.”

The undulations of greens designed by Mackenzie were called MacKenzie greens. Many golf designers of the era designed flat greens, but MacKenzie wanted undulations of nature. “A test of a good undulation is that it should be easy to use a mowing machine over it,” he wrote. “If undulations are made of the kind I describe, it is hardly possible to make them too bold or too large.”239 Some of MacKenzie’s greens were softened since his era. Newer grass and maintenance practices resulted in faster green speeds, leading many players to see MacKenzie’s greens as unfair. Australian course architect Neil Crafter says some of the MacKenzie greens were softened to retain the fairness, “the pressure to increase green speed rather than perhaps lowering it to better suit these character-filled greens is proving difficult to withstand.”240

MacKenzie was hired to create a survey of the Old Course of St. Andrews in 1922, and gained new insight and appreciation for the Old Course, and lessons he would implement after striking out on his own. “It took me a full year to complete the task, not with standing the fact that I thought I new the course thoroughly,” he said of the job. “In actual fact I found that my knowledge was of the slightest, and the subtleties which I discovered have always been a source of amazement for me.”241

Following the break from Colt, MacKenzie travelled to Australia, New Zealand, and South America, designing courses in each locale. He then moved to the United

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States. Travelling golfer MacKenzie often designed courses on paper, never to see his finished projects. But when he settled in the United States he typically concentrated on each course, often visiting the site during construction. He formed partnerships, first with Robert Hunter, then with Chandler Eagan, and finally with Perry Maxwell.242

Albert (A.W.) Tillinghast

A round of golf should present eighteen inspirations – not necessarily thrills, for spectacular holes may be sadly overdone. Every hole may be constructed to provide charm without being obtrusive with it.243

A.W. Tillinghast was an only child of wealthy Philadelphia parents, living the life of a sportsman. He dabbled in cricket, billiards, polo, and bridge. On a vacation to St. Andrews he fell in love with golf after taking lessons from Old Tom Morris. Tillinghast said of his friendship with Old Tom:

Playing around the Old Course at St. Andrews with the patriarch made me feel as though my own game must seem glaringly new, just like walking up the church isle in new, squeaky boots, but this feeling soon vanished.

243 Shackelford, Lines of Charm, 67.
The old man and I were just boys together, for such is golf and such was “Old Tom Morris.”

Tillinghast returned to St. Andrews every summer and spent some time following Old Tom around Great Britain as he designed courses. Tillinghast, called Tillie or the Tillie Terror, competed in golf tournaments in the United States doing well enough to be noticed. Tillie first started designing golf courses as an amateur. Other members of the Philadelphia School of Design, Hugh Wilson, George C. Thomas, Jr., and George Crump, were rich unemployed dilettantes who designed as amateurs. Unlike the other Philadelphia architects, Tillinghast eventually became a professional architect. Tillinghast made an additional fortune designing golf courses, charging many clients ten percent of the construction costs. He was also a writer and was editor of *Golf Illustrated*. When the Depression hit, Tillie lost much of his fortune, getting work as a consultant for the PGA of America on golf course maintenance, and designed municipal golf courses for the Works Progress Administration. He would eventually move to Beverly Hills and open an antique store.

Tillinghast designs are famous for their rugged and natural looks. He looked for specific features on a course. “I am sure that none moves me to greater enthusiasm than do sand dunes,” he wrote, “Big sand dunes contoured through the years by sweeping

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246 The Philadelphia School of Design was golf course architects, primarily amateur, who contributed and were influenced by the designs at Pine Valley and Merion Cricket Club.

247 Shackelford, *Golden Age of Golf Design*, 75-76.
winds, and set off by wild grasses and drifting sand."°248 Tillie’s designs are harder to pin down. He emphasized naturalism in construction, typically spending time on site during the construction phase. His greens were typically medium size, often with the size of the green based on the expected approach shot. His bunkers were typically flat-bottomed. His later designs emphasized ease in maintenance primarily because they were built after the beginning of the Great Depression. A difference between Tillie and the other Golden Age architects was his love for trees. Tillinghast liked a well-placed tree used to frame a hole. The lone tree could help to define a hole. “Our eyes, accustomed to the sight of many trees,” he wrote, “rather accustom themselves to distance when one tree stands prominently as a guide.”°249

Tillinghast fell on hard times with the Great Depression and was largely forgotten by the golf world until someone noticed in 1974 that four of the United States Golf Association Championships were to be played on courses designed by Tillinghast: Winged Foot in Mamaroneck, N.Y. (United States Open); San Francisco Golf Club, San Francisco (Curtis Cup Matches); Brooklawn Country Club, Bridgeport, Connecticut (United States Junior Amateur Championship); and Ridgewood Country Club, Ridgewood, N.J. (United States Amateur).°250 Frank Hannigan wrote a couple of pieces for the USGA’s Golf Journal, titled “The Forgotten Genius,” reintroducing him to the golf world. Hannigan says Tillinghast just had unfortunate timing:

°248 Tillinghast, The Course Beautiful, 17.
He was not the first top-notch American architect (that distinction belongs to the bumptious Charles Blair Macdonald, designer of the National Golf Links of America on the tip of Long Island); he was not the most prolific (Donald Ross by a long shot); he never had the luck to work on a dramatic ocean-side site, such as Cypress Point, by Dr. Alister MacKenzie, Seminole, by Ross, or the lost Lido Course on Long Island by Macdonald; he did not settle down as Ross did, in the case of Pinehurst No. 2, near one course and hone it to perfection; and none of his courses were destined to serve as the perennial site of a great occasion, as was the case with Dr. MacKenzie, who worked with Bob Jones on the design of Augusta National.\footnote{Ibid.}

The four architects mentioned are not the complete set of architects from the Golden Age. There are many others, but these four are the ones that wrote extensively about their philosophy of design. With their extensive writings they left a clear record of their intent and philosophies. Other architects of the era will need examination to determine their design philosophies withstood the years when determining if a course retains enough integrity to supply lessons of the Golden Age of golf course architecture.
CHAPTER FIVE: THE NATIONAL REGISTER

The National Register of Historic Places defines four different types of cultural landscapes, “not mutually exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes.” National Register Bulletin No. 18 deals with how to evaluate and nominate designed historic landscapes, with the first step identifying if the property evaluated is a designed historic landscape. The Bulletin categorizes the types of landscapes that are designed historic landscape fitting anyone of these criteria:

- a landscape that has significance as a design or work of art;
- a landscape consciously designed and laid out by a master gardener, landscape architect, architect, or horticulturalist to a design principle, or an owner or other amateur using a recognized style or tradition in response or reaction to a recognized style or tradition;
- a landscape having a historical association with a significant person, trend, event, etc. in landscape gardening or landscape architecture; or
- a landscape having a significant relationship to the theory or practice of landscape architecture.

The designs of the Golden Age architecture golf courses fit all five criteria, but for the purposes of this study will be looked at primarily as “landscapes consciously designed and laid out by a master gardener, landscape architect, architect, or horticulturalist to a design principle.” The National Register has four different criteria for

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designating a property worthy of the National Register. For Golden Age architecture purposes Criteria C applies:

That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.²⁵⁴

Two key issues associated with determining if a landscape meets the criteria for the National Register is historical context and period of significance. The importance of the Golden Age of golf course design was put into context, both in early twentieth century history and in golf history, in Chapters Two and Three of this thesis. The period of significance will typically be around the time of the course’s opening day, and often a few years later. The golf course architects of the Golden Age would often remain involved in the golf course for a few years, responding to member criticism and examining how golfers played the finished project. There are cases to both extremes. Architects such as Donald Ross at Pinehurst, A.W. Tillinghast at Bethpage, and Alister Mackenzie at Pasatiempo, remained involved in modifying the golf course much longer, spending years refining the course. There are also cases where the master architect designed the course on paper, turned the design over to the construction company and then had nothing to do with the course after that. Research on each individual golf course will give a better idea how involved the architect was after the course was opened and the span of the period of significance would reflect the individual course.

The most important criteria for evaluating a property, based on its period of significance, is integrity. Just like a built property, the golf course receives evaluation on seven integrity aspects to ensure the property still has the ability to convey its significance. All seven aspects are important and are needed to retain the golf course’s ability to convey its significance, but a researcher can find one aspect is much more important than others to convey the architect’s vision. According to the guidelines, “Determining which of these aspects are most important to a particular property requires knowing why, where, and when the property was significant.”

The National Parks Services lists the seven aspects of integrity that need evaluation:

The National Register criteria recognizes seven aspects, or qualities, which, in various combinations, define integrity. Historic location, design, setting, materials, workmanship, feeling, and association must be considered in determining whether a landscape retains enough of its important features to convey its historically significant appearance or association.

Geoffrey Cornish and Ronald Whitten tied the art principles to golf course design:

**Harmony** is exemplified when lines on the green, bunkers, mounds, and backgrounds are similar. **Proportion** is related to scale. For example, in mountain country bunkers are large to be in scale with their surroundings. **Balance** can be formal or asymmetrical. Formal balance is achieved with similarly shaped bunkers placed symmetrically on either side of a green. Asymmetrical or informal balance is exemplified by a large feature on one side of the green and two mounds on the other. To explain these two kinds of balance, landscape architects use examples of two people of equal weight on either side of a seesaw, which is then equally balanced (formal)

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and for informal one large person on one end and two smaller persons who combined weight equals the larger person’s on the other side. **Rhythm** resembles ripples from a stone dropped into a still pond. One example on a golf course is concentric mowing patterns established by a superintendent around his greens by different mowing heights. **Emphasis** The eye is carried first to the most important part of the arrangement and then to other details.\(^{257}\)

These five aspects are mapped to some of the integrity issues, so that historic preservationists and golf course professionals can speak a similar language. The integrity issue of design in golf courses relates closely to the harmony and emphasizes principals of golf design, while setting fits within the concept of proportion. Workmanship ties closely to rhythm, feelings with harmony and balance, and association parallels the design concept of harmony. Integrity in location and materials do not tie into course design philosophies, but both are straight-forward concepts. Is the course in the same location and are the materials such as vegetation the same as during the period of significance?

**Location**

Since golf course architecture is so tied to the natural landscape where it is placed, it is difficult to imagine the possibility of a course moving to a new location and retaining the other aspects of integrity. A course that is still on the same property, but with playing corridors significantly changed, would likely not meet integrity criteria because of the loss of the fabric of the original design. There are issues of location that affect integrity without automatic disqualification, such as some of the holes being lost to road or other

development. Then it might depend on the replacement holes retaining the character and/or challenge of the original designer.

An example of this is the San Francisco Golf Club, a Tillinghast design from the Golden Age. In 1950 the state of California announced a freeway to be built bordering the golf course, and it was determined that the golf course was going to lose three holes. Harold Simpson was hired to re-route the golf course without the three holes. The 13th and 14th holes were swapped, so the tee became the green complex and the green complex became the tee, and a new 15th hole was created. The golf course was still highly ranked, and only true Tillinghast aficionados saw the change as significant. It is not clear if the San Francisco Golf Club at the time retained enough integrity without the holes to be qualified as still the work of a master. Like many Golden Age architecture golf courses, changes had taken place to the course beyond the three holes, and the membership decided to do a restoration. In 2001 it hired architect Tom Doak to restore the course as close to Tillinghast’s original design as possible. With research it was discovered that the freeway did not intrude on the golf course as much as first assumed, and Doak was able to restore the three holes to Tillinghast design as well as the other 15 holes. Location would be a strike against integrity if those three holes remained changed from the course during the period of significance, but with the restoration, it is no longer an issue.

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Design

[Design] is defined as “the composition of natural and cultural elements comprising the form, plan, and spatial organization of a property.” One of the key ingredients of Golden Age architecture was the view that a golf course was a work of art. George C. Thomas, Jr. wrote about the emphasis on beauty and harmony on the golf course. “In golf construction art and utility meet; both are absolutely vital; one is utterly ruined without the other.” Tillinghast, in an article appropriately enough called “The Course Beautiful,” wrote:

It seems to me that he, who plans any hole for golf, should have two aims: first to produce something which will provide a true test of the game, and then consider every conceivable way to make it as beautiful as possible. He should have in mind not only the skill and brawn of the golfer but their eyes as well.

The architects of golf courses during the Golden Age saw themselves as artists on a grand scale, and saw visual harmony and balance as important components of their art. With the era’s advancement in travel, they could find the most beautiful pieces of land, and create beautiful golf courses that were in harmony with nature. They believed playing a golf course should feel like a walk in nature, following a path to get the best views out of a property, while maintaining the feeling of a pleasant walk. They relied on nature to help with their design in the days before bulldozers.

262 Klein, Wide Open Fairways, 169.
The design features, both for the playing of the game and the feeling of nature were well documented by these architects, and to maintain integrity of the property, this was a key ingredient. Golf courses change, both intentionally and unintentionally, but the changes cannot disrupt the original ideas of harmony and balance and still maintain the integrity of the course.

**Setting**

A golf course should fit in with the surrounding environment and not feel out of harmony with the surrounding areas. The designers of that period would often try to harmonize the golf course with surrounding areas, so a mountain in the background would be reflected in the mounds, greens, and hazards of the golf course, both giving a pleasing view. Alister Mackenzie discussed the idea of beauty in his writings:

> Another erroneous idea which is prevalent is that beauty does not matter on a golf course. One often hears players say they “don’t care a ticker’s cuss” about their surroundings, what they want is good golf… The chief objective of every golf course architect or greenkeeper worth his salt is to imitate the beauty of nature so closely as to make his work indistinguishable from Nature herself.  

The golf course management has very little influence on development outside its boundaries. Golf courses originally built far from the urbanized area saw the city sprawl and encroach on the course boundaries. Trees off the golf course that started out as saplings now might block out the view. The setting of the golf course in the surrounding area can detract from the integrity of the golf course, but, similar to built environments, it

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often has less influence on maintaining integrity, but can be an added feature of integrity when it is preserved.

**Materials**

Other than minor buildings, trails and accouterments, the materials on a golf course are organic life. This is a problem for preservationists, because the materials from the period of significance are long dead and replaced by new organic life. Plants can be destroyed by disease or drought, requiring replacements. The United States Department of the Interior says “[o]riginal plant material may enhance integrity, but their loss does not necessarily destroy it.”\(^{264}\) Similar vegetation can convey integrity of materials. Golf is unique to historic landscapes because they are playing fields, and technological advances often come into play. New grasses, new maintenance methods, and new irrigation techniques often replace the old variety. Modern golfers expect a higher level of maintenance than was expected during the Golden Age. According to golf historian Brad Klein, the defenders of modernism in golf will “accuse traditionalists of violating that most sacred canard of golf, the super-green, densely lush courses.”\(^{265}\) Geoff Shackelford compares the drastic changes to Golden Age golf courses to compensate for changes to the game to the art world:

> Would an art museum respond to complaints that their Renoir’s and Rembrandt’s are poorly lit by commissioning someone to repaint the canvases with brighter colors? Would the Louvre bring in Leroy Neiman


\(^{265}\) Klein, *Wide Open Fairways*, 177.
to jazz up those dark Renaissance portraits so the visitor could make out the faces better?266

Golf on the Scottish links was played on the natural grasses of the linksland, what many golfers and greenkeepers would now consider weeds. Even in modern times, Walter Wood, longtime custodian of the golf courses at St. Andrews talks about preparing for the Open Championship on the Old Course:

Our goal for the Open Championship is to have a good stand of fescue in the immediate area where the hole is to be cut on the greens. The year before a championship is to be held here, we transplant good fescue from the edges of the green into the championship pin-placement areas. But it really doesn’t worry me much. Over a long putt things tend to even out, and on a short putt a good player will see a patch of Poa annua, and allow for it.267

This is significantly different than championship golf in the United States where the players expect billiard smooth surfaces. The materials used during the Golden Age were often native grasses, or transplanted grasses that could handle the environment and traffic. But golfers constantly expected grasses with better consistency. This has resulted in changes to golf course design, with flatter greens and fairways needed to handle these faster and more consistent greens. Tom Doak said greens during the Golden Age typically had a maximum of five percent slope in the area of the hole which at the typical speed was the maximum slope that would allow enough friction for the ball from rolling downhill. However, at modern green speeds, the highest slope level is closer to three

percent, requiring a softening of the slopes on greens to allow the putting surface to remain puttable.\textsuperscript{268}

Augusta National, site of the annual Masters tournament, was designed by Alister MacKenzie for Bermuda grass; a hardy grass that originated in the Middle East and can survive the summers in Georgia. In 1981 the club changed to bent grass greens, allowing closer mowing, and less variations in the putting surfaces. During tournament week the greens often go without water, making the greens dryer and firmer. This led people to complain about the slopes on the MacKenzie greens; believing the greens need flattening to better handle the faster pace on the greens. "They were designed for Bermuda grass, not bent, and that's what makes them difficult," says PGA Professional golfer David Toms.\textsuperscript{269} Prior to the change of the grass on the green, the greens were measured at an average of 7.9 feet on the Stimpmeter.\textsuperscript{270} The speed of the greens varied across the course, with the 12th hole measuring 6.3 and the sixth green at 9.5. The greens now, after the change, all consistently measure at 13.5 feet.\textsuperscript{271} Augusta is an extreme example, but it shows how a drastic change in the materials used for the golf course, in this case the grasses, have a profound affect on the integrity of the golf course, and how it will play now very differently than how it was originally designed. It would not be clear if the grasses have a profound affect on the integrity of the golf course, and how it will play now very differently than how it was originally designed. It would not be clear if the

\textsuperscript{268} Doak, \textit{Anatomy of a Golf Course}, 111-112.
\textsuperscript{270} Stimpmeter is a device to measure green speed. A ball is rolled down a chute at a fixed height and the ball is measured how far it goes, measured in two different directions, and averaged between the two.
material change would be enough to affect the overall integrity, but it would be a major factor.

**Workmanship**

Workmanship in the case of golf courses is taking the golf course from the design phase to the construction phase. As construction happens in nature, it is not always possible that what the designer has on paper will always be what happens in construction. Many of the architects, and especially the four highlighted, spent much of their time at the golf course dealing with construction issues. Regardless of the talents or the experience of the architect, the design will rarely match the finished project, as issues will always come up in the field. Golf Architect Rod Whitman writes, “A world-class golf course cannot be created on paper at a drafting board in a downtown office. An architect’s most critical work is done in the field, throughout construction.”

Workmanship is important to the building of the golf courses in most cases but the period of significance was when the course opened for play until perhaps a year after opening day, so it makes very little difference if the course differs from design to construction, so long as the master architect was involved in both. Some of the architects from the Golden Age were heads of firms, and it is not always true that a course designed by the firm of Donald Ross was actually designed by Donald Ross. Research is required both to determine whose initial design and the extent of the involvement of the master

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during construction. Research is needed to determine the involvement of the architect after the initial design phase.

**Feeling**

Courses are organic and living. The course as it existed on the opening day of the golf course is not the same as the course on the day after opening day. As architect Tom Doak writes, “A golf course is not canvas or stone, but a community of plants which take on a life of its own.” With proper maintenance a course can remain relatively unchanged, but even then, vegetation grows, trees grow toward the playing corridors, sand is sprayed from hazards near the green, building up the green, mowing patterns can just change a millimeter now and then, but eventually shapes of greens, fairways, and hazards change. Does the course today retain the same physical characteristics as during the period of historic significance? Without great effort by the maintenance staff, or restoration work, more than likely it will not.

Golf courses not only change by accident, but green chairmen and boards like to leave their mark on golf courses. Perhaps a green chairman has lost too many matches by ending up in the same bunker, and now that he has the power he can grass over that bunker. Far too often the green chairman has too narrow of a perspective, often only considering his own game or the game of people he plays golf with. Perhaps the better players repeatedly complained about a feature of the course they consider “unfair,” and convinced a need for change. Character-defining features will get modified or removed to

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save on maintenance costs. A golf course can quickly lose its feeling from its original if the maintenance crew or the green committee do not understand the intent of the original designer. Feeling can be a real sticking point when it comes to maintaining the integrity of the course to the time of historic significance.275

Sometimes changes to the course are required, similar to the addition of Americans with Disability Act changes in a built environment. Mackenzie-designed Pasatiempo Golf Club in Santa Cruz can show how feelings can adversely effected by changing circumstance. Mackenzie designed Pasatiempo with the Old Course in St. Andrews, Scotland in mind. He admired the combined first and 18th hole fairways at St. Andrews and gave that wide-open feel to a golf course in the middle of the redwoods of Santa Cruz. Pasatiempo was developed by Marion Hollins as a residential community, so it would never feel as wide open as the original, but MacKenzie designed shared fairways to give it a similar feel. In June 1947 golfer Milton Haber was killed by a stray golf ball where holes number seven and eight paralleled. Trees were planted between many of these shared fairways to protect golfers from stray balls. Pasatiempo went from a course with wide-open fairways to fairways lined with Monterey pines.276 Despite the reasoning for the tree planting, this does detract from the feeling of the course during the period of significance. It is not clear if it is enough to warrant the course not being nominated for the National Register. More research of other aspects of integrity will need further

275 Ibid., 213-215.
investigation, but it does adversely affect the feeling Mackenzie was trying to convey at Pasatiempo.

**Association**

Association should be a fairly sure integrity aspect. Does it remain a golf course that was opened as a golf course during its period of historical significance? There can be some aspects of association that could adversely affect association while still remaining a golf course. Sometimes golf courses switch between members courses, resort courses, daily fee courses, or municipal courses. If the original design had features specifically designed for the type of course associated, association is adversely affected. A single golf course can also get chopped up with holes divided between newer courses. Royal Melbourne comes to mind as that type of course. The original 18 holes were divided between two different courses and occasionally reunited for special events or tournaments. Those are extreme cases, and rarely would come up, but should be considered if they do.

There is no formula for determining the importance of each of these integrity issues in relationship to the overall integrity of the golf course. A golf course can be very strong in six of these areas, but having been recreated in a new location, would lack integrity of location, and that would most likely not be enough to qualify for the National Register of Historic Places. The National Register Bulletin, No. 18, “How to Evaluate

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and Nominate Designed Historic Landscapes” specifies three questions a researcher should ask to evaluate integrity:

1. To what degree does the landscape convey its historic character?
2. To what degree has the original fabric been retained?
3. Are changes to the landscape irrevocable or can they be corrected so that the property maintains integrity?278

These three questions will be examined in the next chapter as they relate to a specific golf course being considered for the National Register of Historic Places.

CHAPTER SIX: SHARP PARK

Sharp Park in Pacifica is a Golden Age architecture golf course that has been endangered by developers, the City of San Francisco, and environmental groups throughout its history. Most recently a collection of environmental groups filed suit in 2011 to close the course because of frogs and snakes protected by the Federal Endangered Species Act. In December, 2012 a federal district court ruled the lawsuit moot based on finding of a United States Fish and Wildlife report, and in March 2015 the lawsuit was dismissed by a three-judge panel of the Ninth Circuit Court of Appeals.\textsuperscript{279}

Sharp Park Golf Club has been owned and operated by the City of San Francisco since opening in 1932. It is in the San Francisco suburb of Pacifica, on the Pacific coast just south of San Francisco on Salada Beach. The Eden Course in St. Andrews Scotland and Sharp Park are the only two seaside municipal courses designed by Alister MacKenzie, mentioned Sharp Park in his \textit{Spirit of St. Andrews}:

\begin{quote} 
The municipal course[s] in San Francisco are far superior to most municipal courses. The newest which we constructed at Sharp Park, was made on land reclaimed from the sea, similar to the Lido course; the greens and fairways were built with sand sucked up from below the water. One fairway alone required 200,000 cubic yards of sand to build it up above 10 feet of water. This was probably the biggest engineering feat of its kind that has ever been attempted.\textsuperscript{280}
\end{quote}

The land where Sharp Park was designed was originally part of a land grant bequeathed to San Francisco by the estate of Honora Sharp. Her husband, attorney

\begin{flushright} 
\end{flushright}
George Sharp, came to San Francisco in 1849 and made his fortune as an attorney for the western railroad interests. When San Francisco’s two early municipal golf courses, Harding Park and Lincoln Park became overcrowded, it was decided to build a golf course on part of the Sharp property. By that time MacKenzie was living at Pasatiempo and had offices in Oakland. He was brought in to design the third San Francisco municipal course. His course design was constructed by his associates, Chandler Egan, Robert Hunter, and Jack Fleming.\(^{281}\) MacKenzie wrote about the finished product, “The course now has a great resemblance to real links land,” he wrote. “Some of the holes are most spectacular.”\(^{282}\) MacKenzie wrote about his desire to see more municipal courses similar to Sharp Park:

> I hope to live to see the day when there are crowds of municipal courses, as in Scotland, cropping up all over the world. It would help enormously in increasing the health, the virility and the prosperity of nations, and would do much to counteract discontent and Bolshevism. There can be no possible reason against, and there is every reason in favour of, municipal courses.”\(^{283}\)

MacKenzie’s design at Sharp Park featured many new ideas in American golf course design. Three of his holes had multiple tees; two had double fairways; one had a large cross bunker; two had fairways on the sandy beach; and tees on spits in the water. MacKenzie made use of the inland lake in the middle of the property and included two of


\(^{283}\) Ibid., 250
his award winning Lido designs on each side of the lake. The course was changed after a couple winter storms during the 1930s. In 1941 a large seawall was built and four holes were replaced on the other side of what is now Highway 1. MacKenzie by this time had died. Design and construction of the new holes was overseen by MacKenzie associate Jack Flemming. The course today only has twelve of the original eighteen holes by MacKenzie with four by Fleming, and two holes having replacement greens.

Maintenance has been spotty, and some times one has to look hard to find trademark MacKenzie features such as tumbling greens and rolling fairways. After the addition of the seawall, and the four replacement holes, the order of the holes was completely changed.

Besides its value as a rare seaside municipal golf course designed by MacKenzie, Sharp Park also has great historical value for the two Lido holes. In 1914 Charles Blair Macdonald was going to design a course on Long Island, adjacent to Reynolds Channel. Occupying marshland, he was going to need to build the course from nothing. He allowed legendary golf writer Bernard Darwin to run a contest in the English magazine *Country Life* to come up with the best design for the finishing hole on his new course. MacKenzie’s design won the award for his risk reward hole, and also gained him fame as a potential designer. His design for the hole came to be called a Lido hole, and Mackenzie designed two Lido holes for the course at Sharp Park, one right hand the other

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284 Links and Harris, “Sharp Park.”
285 Ibid.
286 Ibid.
left. Both holes still exist, though in different places in the course order, and are opposites of each other on two sides of the lake.  

Sharp Park has significant historical value with a period of significance as a work of a master and can have a period of significance from the opening of the course in 1932 until the changes by MacKenzie’s associate Fleming in 1941. The routing changed following the opening, when the seawall was erected, but the routing and new holes were done by Fleming, who had intimate knowledge of MacKenzie’s design philosophy. Fleming left his native Ireland to work for MacKenzie, first as a construction foreman, and later as a supervisor of MacKenzie designed courses, the Meadow Club, Cypress Point, Pasatiempo and Sharp Park. The question is does the course retain enough integrity from the period of significance to still teach us enough about the work of MacKenzie?

**Location**

Sharp Park is still in the same location. It has been changed since opening day, with the seaside holes replaced by four holes on the other side of Highway 1. If the period of significance were 1932, then location would be a strike against integrity. However, if we use 1941, when the seaside holes were lost to the seawall, and the four new holes were added, then we do retain integrity of location. It takes us outside the work of a

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master during the Golden Age, but Fleming was the best possible choice to fulfill MacKenzie’s vision.

Design

When one examines pictures of the course from 1932 to 1941 and compares them to today, many of the same features of the course still exist. The course still plays around the lake and the wonderful cypress trees still frame holes such as hole No. 17. There were twenty-two sand bunkers grassed over to save maintenance costs, but they do still exist as grass bunkers. In 1932 Jack Fleming wrote an article describing the holes in some detail for the San Francisco Call-Bulletin. The holes are no longer in the same order, but many of the details he mentioned still exist on the course. The greens at holes 1, 2, 3, 9, 10, 11, 13, 14, 15, 17, and 18 look very much like what we would expect from MacKenzie, with tumbling undulations and distinct pin areas. More study would be required to see if the size of the greens has changed since the period. The location of some of the 1942 abandoned holes still exist, now hard against the seawall. The land for the original holes Nos. 4, 6, and 8 is still there, but are no longer in play. The four additional holes on the other side of the highway feel very different than the other fourteen holes. When the golfer travels under the highway he goes from wind-swept seaside golf into a forest setting. However, this was not uncommon during the Golden Age, with other West Coast courses such as Cypress Point, Pebble Beach, Monterey Peninsula and Bel-Air having similar abrupt changes in environment. If we discount the environment and the change to a more hilly course, many of the features of the Fleming
four holes fit well with the other 14 holes. Figure 8 and 9 are aerials of the course showing the differences between the course on opening day and the changes that happened in 1941.

**Figure 8**: The original golf course from opening day 1932.

**Figure 9**: Sharp Park as it exists today.


**Setting**

Setting has changed since 1941. State Highway 1 now cuts through the course. There are apartment buildings to the north of the course along Lakeside Avenue and housing on the south along Fairway Drive. The housing along Fairway Drive is not as obvious from the golf course since Cypress trees block out much of it, but on the north side of the course the apartments are only a few steps from teeing areas. As Figure 10 shows, the seawall blocks out the view to the ocean on the west, but the course still has a
strong feel of an ocean-side golf course. There is still the matching of the hole design to the hills and headlands that border the course to the east as shown in Figure 11.

Figure 10: The North East corner of the course and surroundings.


Figure 11: The Old Fifth hole, with the headlands in the background.

The clubhouse, built by the Works Progress Administration, is not a character-defining feature of the golf course. However, the setting of the clubhouse still fits within the setting of the course as seen in Figure 12. The Spanish Hacienda style clubhouse was designed by associates of noted architect Willis Polk, and still exists much as it did when built in 1939. If the clubhouse were to be included in the listing for the National Register of Historic Places more investigation would be needed to its period of significance and if the integrity to the period has been maintained.

Figure 12: The Clubhouse as it exists today.


290 Links and Harris, “MacKenzie’s Sharp Park Under Siege”
Materials

The vegetation on the course is where Sharp Park does an excellent job with integrity. More than likely this is mostly due to a low improvement budget by the City of San Francisco; but regardless of reasons, the course vegetation exists similar to the period of significance. The grass is still primarily rye, with some fescue and *poa annua* in places. The meadow grasses off the fairway are still the native grasses from the area. Cypress trees still line the course giving it the San Francisco feel of neighboring courses. The lagoon still exists as the center of the west part of the golf course, with many holes taking advantage of the lagoon features. The Cypress trees still frame many of the holes.  

Workmanship

As mentioned earlier, the construction of the course was handled by Chandler Egan, Robert Hunter, and Jack Fleming. All had experience working with MacKenzie at other courses, specifically at Cypress Point and Pasatiempo just prior to the construction of Sharp Park. There are cases in the Golden Age where the original designer drew up plans and then left it to a construction company, never to return to inspect the course. There is a record of MacKenzie playing a round at Sharp Park with Marion Hollins a year after opening day.  

291 After the course opened, he gave credit to John Maclaren, who designed Golden Gate Park, for much of the beauty of the finished project. “We have the
greatest assistance from Mr. John Maclaren,” he wrote. “His help not only in the planting of trees but in creating other delightful features was most valuable.”

**Feeling**

The course has changed over the years. The neglect has worked to the advantage of materials but it has not worked as well for the integrity of feeling. Trees have overgrown; hazards not adequately maintained. As mentioned, twenty two sand hazards were grassed over to save on maintenance costs. Even with all the neglect, people who are familiar with MacKenzie’s work have no trouble identifying Sharp Park as a MacKenzie design. Golf writer Geoff Shackelford, who has written extensively about MacKenzie, said of Sharp Park, “Certainly no municipal-course design has ever come close to matching the overall package of beauty and affordable links-style golf.”

When Brad Klein was asked in an interview what course he believed would benefit most in restoration, “I’d have to go with Sharp Park Golf Course in California,” he replied. “[D]espite some re-routing of holes there’s this amazing array of Alister MacKenzie work along marsh edges, dunes and in terms of alternate shot paths that the public would find fascinating.”

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Association

Sharp Park was opened as a sea-side municipal course in 1932 and has remained the same from then until today. It has always been owned and operated by the city of San Francisco. The artificial seawall added in 1941 detracts from views of the ocean but does not detract from the feeling of playing golf on an ocean-side golf course.

Summary

If we return to the three questions from National Register Bulletin 3, we can apply the integrity issues to these three questions. To what degree does the landscape convey its historic character? There are 12 of the original holes as designed by MacKenzie is 1932, including the historically significant two Lido holes on either side of the lagoon. There are four holes as designed by Fleming from the changes in 1941. The course still has the feeling of the course from its period of significance, both as a rare municipal course designed by MacKenzie and also as a ocean-side linksland course.

To what degree has the original fabric been retained? There has been some loss of integrity to the golf course, partially though failure to poor maintenance practices and partially due to budget issues. The setting for the course has been adversely affected by Highway 1 and apartment building on the north side of the course. Many of the sand bunkers were grassed over, but still exist as grass depressions. The middle lagoon is currently dry, but that is because of the current California drought. It still exists as a hazard and still affects the play on the holes bordering the lagoon.
Are changes to the landscape irrevocable or can they be corrected so that the property maintains integrity? The setting of the course cannot change. Highway One will continue to separate the MacKenzie holes from the Fleming holes on the east side of the course. The lagoon will return to being a water hazard if the California drought ends. The sand bunkers could be returned to their original location and design.

Considering the historical significance of the course as the only seaside municipal course MacKenzie ever worked on in North America, the contributions of his associates, the two historically important Lido holes, there appears to be sufficient integrity of the character-defining features of both MacKenzie and Fleming to qualify for the National Register of Historic Places under Criteria C.
CHAPTER SEVEN: SUMMARY

Now that all the work has been completed and the preservationist is confident the golf course has sufficient integrity for the period of historic significance, the final step is for the preservationist to fill out the required form(s) and file it with the State Historic Preservation Office. The National Parks Service has a website to help with the completion of the National Register of Historic Places Registration form NPS 10-900: National Register of Historic Places Program: Fundamentals. Each individual state has details on how to fill out the form for that state with the State Historic Preservation Office.

The National Parks Service is currently going through a review process to determine needed changes to better handle landscape nominations called the National Register Landscape Initiative (NRLI). The NDLI is looking at both the nomination process and the documentation process. The Initiative is also tasked to examine if changes are needed to the Section 106 process when dealing with historic landscapes. Discussions are taking place and no results have been announced yet.

With many of these Golden Age of golf course architecture courses reaching their centennial, it would be a valuable promotional tool for the golf course and for the traveling golfer to know what courses retain enough integrity to the original design to warrant listing on the National Register of Historic Places. The detailed nomination documentation could be made available to the public on the golf course websites, with

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296 http://www.nps.gov/nr/national_register_fundamentals.htm#start
297
information about restoration or renovation efforts and histories of the course and course architect.

There are companies that currently specialize in restoring Golden Age architecture golf courses. These companies are often hired by a golf course to determine the changes needed to restore or renovate the golf course more in the original designers philosophy. Typically, they rely on the golf course to supply them with the needed historic documentation. It would help if someone trained in searching local archives and with knowledge of the Golden Age to help with research.

An interesting company that is doing golf history research is Golden Age Research, headed by Phil Young. Sometimes the research is in preparation for work on the course, sometimes for course histories. Courses quickly change, and as Young writes in his mission statement:

Golf courses are actually living things. They grow and evolve over time. Just as a youngster comes into the world giving great joy to its parents and going through many growing spurts and challenges to their parenting skills and determination to see them become adults of which one can take pride, so too are the golf courses upon which we play this most wonderful game.

Golf at its basic is a very simple game. It is a game that grew out of hitting something round with something long into a hole. The earliest golf course designers in Scotland understood this simplicity and tried to keep the courses as simple as the game. As the game gained in popularity, concessions had to be made for the crowds, but still retaining the simplicity. When the game arrived in North America it was attempted to

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retain the simple aspect of the game, but apply it to the different environments of the New World. The Golden Age of golf course architecture was the height of this effort. However, later in the United States there was an effort to get away from the simplicity and into a more Americanized version of the game, with emphasis on big, bold, and fair. In the last few decades part of the golf world has seen the harm of the big, bold and fair concept, the cost and the harm to the environment and want a return to simple concepts. Golf architecture historians can help with this process, showing what in these art works retain the work of the master, and what was added after the era of significance of their work.

We know a building designed by Frank Lloyd Wright has had to change to reflect the times, but we do not have the same appreciation for the work of Alister MacKenzie and the need for his works of art to change with the times. It will be up to golf preservationists to make clear to the golf world how a course can change but retain the design philosophy of the original artist.
APPENDIX 1: GLOSSARY

The majority of the following definitions are taken from:
Davies, Peter. *The Historical Dictionary of Golfing Terms: From 1500 to the Present.*

**Amphitheater** *n.*, is used for a putting green situated in a bowl-shaped hollow.

**Approach:** *v.* & *n.*, To aim or play a relatively short shot from off the putting green onto it.

**Apron** *n.*, The narrow zone of close-cut grass surrounding a putting green, cut shorter than the fairway and nearly as short as the green.

**Architect** *n.*, A designer of golf courses.

**Architecture** *n.*, The theory and practice of golf course design or the nature of a design of a particular golf course.

**Back** *adj.*, *adv.* & *n.*, Designated the last nine holes of an eighteen-hole golf course.

**Bail out phr. v.,** To retrieve or improve with good approaching or putting, or both.

**Balata** *n.*, A hard, resilient substance derived form the gum of the bully or balata tress of northeastern South America and the West Indies, and used to make the covers of rubber-cored golf balls.

**Ball** *n.*, The hard and resilient spheroidal projectile used in golf.

**Ballmaker** *n.*, A maker of golf balls.

**Barranca** *n.*, A typically rocky gulley or watercourse, incorporated as a hazard on golf courses in Spanish-speaking places.

**Bent** *n.*, Chiefly Scottish, a clump or tuft of long course grass on a golf course.

**Bermuda** *n.*, A grass, *Cynodon doctylon*, native to southern Europe, widely introduced in warm parts of the world and used on golf courses where bent grass will not grow.
Blast v. & n., To play the ball from sand, normally with a wedge, hitting the sand behind and under the ball; play an explosion shot.

Blind adj., Hidden from the player by intervening ground.

Borrow v. intrans., in putting across a slope, to compensate for the slope by aiming somewhat uphill.

Bunker n., A sandpit, or a flattish area of sand, often edged with an embankments, occurring naturally on old linksland courses, later generally constructed artificially.

Caddy or caddie n., A person who carries the clubs for a golfer, gives other assistance, and may under the Rules give advice about the game.

Car path or cart path n. A hard-paved road or track on a golf course for golf carts.

Carry v. & n., to play clear over a hazard or obstacle.

Chip n. & v., A short, moderately lofted approach shot with backspin.

Club or golf club n. & v. Any of the various implements used in golf to strike the ball, consistently essentially of a thin shaft with a grip for holding it and a clubhead of wood or iron.

Clubmaker n. A maker of golf clubs.

Cop or cop bunker n., A knoll or bank regarded as a hazard or obstacle.

Cross-bunker n. A hazard situated astride a fairway.

Divot n. A piece of turf cut from the ground by the clubhead in the making of a stroke.

Dogleg n. A fairway embodying a sharp turn, or a hole that has such a fairway.

Fairway n., The stretch of closely mowed ground that is the main avenue from the tee to green on a hole.

Featherie or feathery n., the old feather-stuffed leather-covered ball.

Fescue n., Any grass of the genus Festuca, widely used on golf courses, especially for rough.

Flagstick n., A stick or pin with a marker showing the position of the hole.
Forcaddy or forecaddie n., a person employed to go ahead of players to mark the lie of balls in play.

Gorse n., A spiny evergreen shrub.

Grain n., The direction in which the blades of grass on a putting green predominantly point or lie.

Grainy adj., Having strong grain.

Green committee n., A committee of members of a club responsible for the maintenance and management of the course.

Gutta n. Gutta percha, or gutta percha ball.

Gutty or guttie n. A gutta percha ball.

Hazard n., Any obstruction or difficult feature of a golf course, considered part of the inherent challenge of the course.

Hog's back or hogback n., A ridge of ground, or a hole having a ridge on the fairway.

Hole n., the small excavation into which the ball is played.

Inland adj., Of a course not situated by the sea.

Layout n. A golf course, especially when considered in term of architecture.

Loop n. A round of golf.

Meadowland n. of a golf course consisting of rich grassland.

Nine n. A nine-hole course, or a sequence of nine holes in an eighteen-hole or larger course.

Out-of-bounds phr. & n., lying out of the area defined as the course, and so not to be played.

Park or parkland adj., Of a course laid out in rich grassland with little rough.

Penal adj., designed primarily to punish poor shots.

Plateau n., A flat-topped hillock, or a putting green situated on one.
**Pot bunker** *n.* A deep, usually small bunker with steep sides.

**Public links** *n.*, Links open to the public.

**Punchbowl** *n.*, A hollow between two hills, used to describe a green situated in a hollow.

**Rabbit** *n.*, An amateur golfer of little accomplishment.

**Read** *v. trans.*, To scrutinize and interpret the contour and texture of a putting green.

**Readable** *adj.*, A putting green or aspect of put that can be read.

**Rough** *n.*, Ground on a course what the grass and other vegetation is considered heavier than on the fairway.

**Round** *n.*, An entire circuit of the holes on a course.

**Rubber-cored** *adj.*, A ball having a core of rubber; specifically, having an interior formed of strip rubber wound around the center. A Haskell ball.

**Sand** *n.*, The sand in a bunker or bunkers, of or related to playing from bunkers.

**Shallow** *adj.*, Relatively narrow from top to bottom.

**Short hole** *n.* A par-three hole (a one-shotter)

**Snake** *n.*, A serpentine putt.

**Splash** *v. & n.*, To play the ball with an explosion shot, or similar shot from rough.

**Stimpmeter** *n.*, is a 36-inch long piece of metal with a notched end to hold the golf ball and a V-shaped groove for the ball to roll down. The ball begins rolling down the stimpmeter when it reaches a 20-degree angle. The person using the stimpmeter will roll three golf balls in one direction, and then go to the spot where those balls finished and roll three more golf balls back to the spot where he or she previously rolled. He or she then takes the average of all measurements to determine the green speed in feet and inches.

**Strategic** *adj.*, Golf course architecture designed to challenge a thinking response from the player rather than merely to punish bad shots.

**Superintendent** *n.*, An official in charge of the maintenance of a golf course.
Swale *n.* A gently contoured depression or hollow on a fairway or putting green.

Teeing ground *n.*, The place from which the play of the hole is begun, now defined under the rules.

Through the green *phr.* Anywhere on the generally clear part of the course other than the teeing ground and putting green.

Tiger *n.* A strong player.

Tight *adj.* A narrow fairway; having a narrow fairway.

Tournament *n.*, A public competition in which a number of golfers compete formerly.

Trap or sand trap *n.*, A hazard, a bunker that has sand.

Turn *n.*, The halfway point in a round, after nine holes have been played.

Unplayable *adj.*, A lie of the ball that is too difficult to be worth trying to play as it lies, so the player must opt for relief and penalty under the Rules.

Water hazard *n.*, A body of water or channel defined under the rules as a hazard.

Whins *n.* Gorse bushes.

Yardage *n.* Distance through the green, or length of a hole or course, traditionally given in yards.
## APPENDIX 2: TABLES

Table 1: Significant Golden Age Golf Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Designer</th>
<th>Opening year</th>
<th>Location</th>
</tr>
</thead>
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<tr>
<td>Pinehurst Resort No. 2</td>
<td>Donald Ross</td>
<td>1903-1948</td>
<td>North Carolina</td>
</tr>
<tr>
<td>Alwoodley Golf Club (with H.S. Colt)</td>
<td>Alister MacKenzie</td>
<td>1907</td>
<td>England</td>
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<td>Whitemarsh Valley</td>
<td>George C. Thomas, Jr.</td>
<td>b1907</td>
<td>Pennsylvania</td>
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<tr>
<td>The National Golf Links</td>
<td>Charles B. Macdonald</td>
<td>1911</td>
<td>New York</td>
</tr>
<tr>
<td>Brae Burn Country Club</td>
<td>Donald Ross</td>
<td>1912</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Merion Golf Club East Course</td>
<td>Hugh Wilson</td>
<td>1912</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>Merion Golf Club West Course</td>
<td>Hugh Wilson</td>
<td>1913</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>Piping Rock</td>
<td>Charles B. Macdonald</td>
<td>1913</td>
<td>New York</td>
</tr>
<tr>
<td>St. Louis Country Club</td>
<td>Charles B. Macdonald</td>
<td>1914</td>
<td>Missouri</td>
</tr>
<tr>
<td>Wannamoisett Golf Club</td>
<td>Donald Ross</td>
<td>1914</td>
<td>Connecticut</td>
</tr>
<tr>
<td>The Greenbrier (Old White)</td>
<td>Charles B. Macdonald</td>
<td>1915</td>
<td>West Virginia</td>
</tr>
<tr>
<td>Mid-Ocean Golf Club</td>
<td>Charles B. Macdonald</td>
<td>1914</td>
<td>Bermuda</td>
</tr>
<tr>
<td>San Francisco Golf Club</td>
<td>A.W. Tillinghast</td>
<td>1915</td>
<td>California</td>
</tr>
<tr>
<td>The Creek</td>
<td>Charles B. Macdonald</td>
<td>1915</td>
<td>New York</td>
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<tr>
<td>Westhampton</td>
<td>Seth Raynor</td>
<td>1915</td>
<td>New York</td>
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<tr>
<td>Scioto</td>
<td>Donald Ross</td>
<td>1916</td>
<td>Ohio</td>
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<tr>
<td>Cobbs Creek Municipal</td>
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<td>Pennsylvania</td>
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<tr>
<td>Interlachen</td>
<td>Donald Ross</td>
<td>1919</td>
<td>Minnesota</td>
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<td>Somerset Hills Golf Club</td>
<td>A.W. Tillinghast</td>
<td>1917</td>
<td>New Jersey</td>
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<td>The Links</td>
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<td>Inverness Golf Club</td>
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<td>Brook Hollow Golf Club</td>
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<td>Texas</td>
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<td>Kirtland</td>
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<td>Chicago Golf Club</td>
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<td>Oak Hill (36 Holes)</td>
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<td>Winged Foot Golf Club</td>
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<td>California</td>
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<td>Ojai Valley Inn</td>
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<td>Yeaman’s Hall</td>
<td>Seth Raynor</td>
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<td>Bel-Air Country Club</td>
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<td>Fisher’s Island</td>
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<td>Baltimore Country Club</td>
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<td>Orchard Lake Country Club</td>
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<td>Michigan</td>
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<td>Quaker Ridge Golf Club</td>
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<td>Yale University (consultant to Raynor)</td>
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<td>Huntington Valley</td>
<td>William Flynn</td>
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<td>Los Angeles Country Club</td>
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<td>Philadelphia Country</td>
<td>William Flynn</td>
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<tr>
<td>Club</td>
<td>Architect</td>
<td>Year</td>
<td>Location</td>
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<td>Riviera Country Club</td>
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<td>Cypress Point Golf Club (with Robert Hunter and Marion Hollins)</td>
<td>Alister MacKenzie</td>
<td>1928</td>
<td>California</td>
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<td>Pebble Beach (redesign)</td>
<td>H. Chandler Egan</td>
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<td>California</td>
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<td>The Valley Club of Montecito (with Robert Hunter)</td>
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<td>Pasatiempo (with Marion Hollins)</td>
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<td>Ridgewood Country Club</td>
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<td>The Country Club</td>
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<td>Augusta National (with Bobby Jones)</td>
<td>Alister MacKenzie</td>
<td>1932</td>
<td>Georgia</td>
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<td>Pacific Grove (front nine)</td>
<td>H. Chandler Egan</td>
<td>1932</td>
<td>California</td>
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<td>Crystal Downs (with Perry Maxwell)</td>
<td>Alister MacKenzie</td>
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<td>Michigan</td>
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<td>Bethpage State Park</td>
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<td>1935</td>
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<td>Southern Hills</td>
<td>Perry Maxwell</td>
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Table 2: Golf courses currently on the National Register of Historic Places

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<td>Fruitlands/Augusta National Golf Club</td>
<td>Augusta, GA</td>
<td>1979</td>
<td></td>
<td>Criteria A and Criteria C. Primarily for the clubhouse, but golf course is included despite the severe integrity issues. The integrity issues of the golf course are not addressed in the forms for the National Register.</td>
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<tr>
<td>Keweenaw Mountain Lodge and Copper Harbor</td>
<td>Copper Harbor</td>
<td>1980</td>
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<td>Criteria A an example of government-funded work project to boost the local</td>
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<tr>
<td>Golf Course</td>
<td>MI</td>
<td>economy.</td>
<td>1984</td>
<td>Does not say on form, but text makes it appear to be Criteria A.</td>
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<tr>
<td>------------------------------------------------</td>
<td>-------------</td>
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<td>------</td>
<td>---------------------------------------------------------------</td>
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<tr>
<td>Oakmont Country Club Historical District</td>
<td>Ardmore, PA</td>
<td></td>
<td></td>
<td></td>
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<td>City Park Golf</td>
<td>Denver, CO</td>
<td></td>
<td>1986</td>
<td>Criteria A for local significance as part of the Denver Park and Parkway System</td>
</tr>
<tr>
<td>Hartford Golf Club Historic District</td>
<td>West Hartford, CT</td>
<td></td>
<td>1986</td>
<td>Historic District</td>
</tr>
<tr>
<td>Golf, Gun &amp; Country Club</td>
<td>Fairhope, AL</td>
<td></td>
<td>1988</td>
<td>Criteria A and Criteria C for Clubhouse</td>
</tr>
<tr>
<td>Menomonee Golf Club</td>
<td>Menomonee, WI</td>
<td></td>
<td>1988</td>
<td>Clubhouse</td>
</tr>
<tr>
<td>Merion golf Club, East and West Course</td>
<td>Ardmore, PA</td>
<td></td>
<td>1989</td>
<td>Criteria A, Criteria B, and Criteria C.</td>
</tr>
<tr>
<td>Mequnticock Golf Club</td>
<td>Rockport, ME</td>
<td></td>
<td>1993</td>
<td>Criteria A and Criteria C. Early nine-hole course in Maine. Little about integrity of the course.</td>
</tr>
<tr>
<td>Shinnecock Hills Golf Club</td>
<td>Southampton, NY</td>
<td></td>
<td>2000</td>
<td>Criteria A as oldest formalized club in the United States</td>
</tr>
<tr>
<td>Le Mars Municipal Park and Golf Course</td>
<td>Le Mars, IA</td>
<td></td>
<td>2001</td>
<td>Criteria A and Criteria C. Nine hole golf course built by the WPA. Criteria C only applies to the built structures, not the golf course</td>
</tr>
<tr>
<td>Lakeside Municipal Golf Course</td>
<td>Shreveport, LA</td>
<td>2005</td>
<td>Criteria A for local significance.</td>
<td></td>
</tr>
<tr>
<td>Municipal Golf Club</td>
<td>Asheville NC</td>
<td>2005</td>
<td>Part of historic district</td>
<td></td>
</tr>
<tr>
<td>Longue Vue Club and Golf Course</td>
<td>Penn Hill Township, PA</td>
<td>2005</td>
<td>Clubhouse</td>
<td></td>
</tr>
<tr>
<td>Cape Arundel Golf Club</td>
<td>Kennebunkport ME</td>
<td>2009</td>
<td>Criteria A and Criteria C. Redesigned in 1927 by Walter Travis. Faithful and little altered from Travis’ design.</td>
<td></td>
</tr>
<tr>
<td>Temple Terrace Golf Course</td>
<td>Temple Terrace, FL</td>
<td>2012</td>
<td>Criteria A in the area of Community Planning &amp; Development and Entertainment/Recreation and Criteria C in the area of Landscape Architecture as an excellent surviving example of the work of a returning nines course design by noted golf course architect Tom Bendelow</td>
<td></td>
</tr>
<tr>
<td>Dunedin Isles Golf Club</td>
<td>Dunedin, FL</td>
<td>2014</td>
<td>Criteria A and Criteria C. Originally designed by Donald Ross. (no documentation)</td>
<td></td>
</tr>
</tbody>
</table>

Table 3: American Motor Vehicle Production

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Value ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>600</td>
<td>1,290,000</td>
</tr>
<tr>
<td>1903</td>
<td>10,576</td>
<td>16,000,000</td>
</tr>
<tr>
<td>1904</td>
<td>13,766</td>
<td>24,500,000</td>
</tr>
<tr>
<td>1905</td>
<td>20,787</td>
<td>42,000,000</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Year</th>
<th>Daily Fee Facilities</th>
<th>Municipal Facilities</th>
<th>Private Facilities</th>
<th>Total Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1906</td>
<td>23,000</td>
<td>50,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1907</td>
<td>42,694</td>
<td>105,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1908</td>
<td>49,952</td>
<td>83,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1909</td>
<td>114,891</td>
<td>135,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1910</td>
<td>200,000</td>
<td>225,000,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


**Table 4: Facilities and Courses/United States**

<table>
<thead>
<tr>
<th>Year</th>
<th>Daily Fee Facilities</th>
<th>Municipal Facilities</th>
<th>Private Facilities</th>
<th>Total Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1931</td>
<td>700</td>
<td>543</td>
<td>4,448</td>
<td>5,691</td>
</tr>
<tr>
<td>1934</td>
<td>1,006</td>
<td>566</td>
<td>4,158</td>
<td>5,725</td>
</tr>
<tr>
<td>1937</td>
<td>1,070</td>
<td>637</td>
<td>3,489</td>
<td>5,196</td>
</tr>
<tr>
<td>1939</td>
<td>1,199</td>
<td>699</td>
<td>3,405</td>
<td>5,303</td>
</tr>
<tr>
<td>1941</td>
<td>1,210</td>
<td>711</td>
<td>3,288</td>
<td>5,209</td>
</tr>
<tr>
<td>1946</td>
<td>1,076</td>
<td>723</td>
<td>3,018</td>
<td>4,817</td>
</tr>
<tr>
<td>1949</td>
<td>1,108</td>
<td>750</td>
<td>3,068</td>
<td>4,926</td>
</tr>
<tr>
<td>1952</td>
<td>1,246</td>
<td>751</td>
<td>3,029</td>
<td>5,026</td>
</tr>
<tr>
<td>1955</td>
<td>1,534</td>
<td>877</td>
<td>2,807</td>
<td>5,218</td>
</tr>
<tr>
<td>1958</td>
<td>1,904</td>
<td>855</td>
<td>2,986</td>
<td>5,754</td>
</tr>
</tbody>
</table>


**Table 5: Maximum Yardage Changes to Golf Courses**

<table>
<thead>
<tr>
<th>Golf Course</th>
<th>1926 yardage</th>
<th>Current yardage</th>
<th>Addition</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Golf Links of America</td>
<td>6,163</td>
<td>6,873</td>
<td>710</td>
<td>11.52</td>
</tr>
<tr>
<td>Garden City</td>
<td>6,417</td>
<td>6,911</td>
<td>494</td>
<td>7.70</td>
</tr>
<tr>
<td>Merion-East</td>
<td>6,515</td>
<td>6,846</td>
<td>331</td>
<td>5.08</td>
</tr>
<tr>
<td>Pine Valley</td>
<td>6,446</td>
<td>6,999</td>
<td>552</td>
<td>8.58</td>
</tr>
<tr>
<td>Oakmont</td>
<td>6,572</td>
<td>7,255</td>
<td>683</td>
<td>10.76</td>
</tr>
<tr>
<td>The Country Club of Brookline</td>
<td>6,350</td>
<td>7,033</td>
<td>683</td>
<td>10.76</td>
</tr>
<tr>
<td>Harbour Town (open in 1969)</td>
<td>6,655</td>
<td>7,101</td>
<td>446</td>
<td>6.70</td>
</tr>
</tbody>
</table>

Table 6: Holes designed by Macdonald based on traditional holes.

<table>
<thead>
<tr>
<th>Hole</th>
<th>Original</th>
<th>Comments</th>
<th>Best example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leven</td>
<td>Leven Links, Scotland</td>
<td>Short par 4, 330-360, large fairway bunker to challenge golfer, with longer route around.</td>
<td>17th National Golf Links</td>
</tr>
<tr>
<td>Redan</td>
<td>North Berwick, Scotland</td>
<td>Par-3 190-215. Deep sandpit guards green orientated at 45-degree angle from tee.</td>
<td>4th at National Golf Links</td>
</tr>
<tr>
<td>Biarritz</td>
<td>Biarritz Golf Club, France</td>
<td>Par-3 220-245. Enormous green with a deep swale, often with a framing bunker short.</td>
<td>9th at Yale</td>
</tr>
<tr>
<td>Alps</td>
<td>Prestwick Golf Club, Scotland</td>
<td>Par-4 400-425 yards. Deep cross-bunker fronting green. Depressed or punch bowl green.</td>
<td>3rd hole at National Golf Links</td>
</tr>
<tr>
<td>Eden</td>
<td>St. Andrews, Scotland</td>
<td>Par-3 160-170 yards. Hill bunker left, Strath bunker right. Cockleshell bunker frames the green. Green severely tilted back to front.</td>
<td>Chicago 13th</td>
</tr>
<tr>
<td>Narrows</td>
<td>15th Muirfield, Scotland</td>
<td>Mid-length par-4 Heavily bunkered left, right and rear. Green sloped severely back to front, with fall-off back of the green.</td>
<td>15th at National</td>
</tr>
<tr>
<td>Road Hole</td>
<td>St. Andrews, Scotland</td>
<td>Long par-4 or short par-5. Dog-leg right with best approach from the right. Triangular shape green with deep pot bunker on left side of green</td>
<td>7th at National Golf Links</td>
</tr>
<tr>
<td>Bottle</td>
<td>Sunningdale, England</td>
<td>Par-4 of varying length. Dramatic fairway bunkers on right side, best angle for approach.</td>
<td>8th at National Golf Links</td>
</tr>
<tr>
<td>Cape</td>
<td>Machrihanish, Scotland</td>
<td>Par-4 varying length. Carry across a water hazard diagonally. Closer to the water, the better approach to undulated green.</td>
<td>5th at Mid-Ocean</td>
</tr>
<tr>
<td>Long</td>
<td>St. Andrews, Scotland</td>
<td>Longest hole on course, Best chance is challenging large Hell bunker on second shot.</td>
<td>9th at National</td>
</tr>
</tbody>
</table>
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