Exploring the History of Golf Course Design

by

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Golf’s future is in question. Fewer people are participating, environmental restrictions are altering construction and maintenance practices, and improved equipment technologies have necessitated longer golf holes increasing management and playing costs. There is a lack of research examining the influence that golf course architecture has had on the evolution, and current state, of the game of golf. This study explored connections between the evolution of golf architecture and external influences such as technology, media, social trends, the economy and allied professional fields. A decade-by-decade breakdown revealed 10 eras and 8 schools of design. This process led to the recognition of two high points in the evolution of golf course architecture, one pre-WWII and one on-going since 1995. Questionnaires were sent to 35 leading designers, from which aggregate findings were compared to writings of 35 pre-WWII designers. Themes were distilled which suggested a correlation between both high points of design practice.
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1. Introduction

"The longer you can look back, the farther you can look forward." – Winston Churchill, March 2, 1944, Royal College of Physicians, London (Langworth, 2008)

1.1. Background

The game of golf is not a new one. The “Royal and Ancient Game” has sufficient history to justify its title. The first reference to the sport, as played in Scotland, can be traced back to March of 1457 when the Parliament of King James II issued a decree banning golf in support of archery training. This indicates that the game was popular enough at the time to necessitate law to regulate its play. As such, the origins of the game stem from much earlier and likely has roots in other “stick and ball” type games which were played throughout the British Isles and Continental Europe, including the Dutch game of Colf or Kolven (Pinner, 1988) (Browning, 1955).

When law forced golfers out of the cities and onto the commons beyond, the inherent attributes of the coastal terrain helped to foster the game. The citizens of Aberdeen, St. Andrews and Leith on Scotland’s East Coast were the primary offenders, and it is no surprise that these locations offered ideal ground on which to play the game – links land. The well-drained soils, undulating topography, naturally occurring hazards, and ever-present winds advanced the original strategy and challenge of the game. It would be here on the links of Scotland that the game would formalize and remain in a relatively consistent form over the next 400 years (Hamilton, 1998).

However, the game of golf did not evolve in isolation, it has been profoundly influenced by social and economic factors over time. Scotland in the early 1800s was a
largely agricultural nation. Farming was the primary industry in the interior and throughout the Highlands, while fishing was the major occupation in coastal areas (BBC, 2014). The game was likely spread by early fishermen and merchants, who used the water to reach nearby towns. On arrival, they would venture from the harbours across the ever-changing sandy shorelines, links land, to reach the populous beyond. Their interactions with golfers, or playing of the game, on these trips would have stimulated interest in the blossoming sport and is believed to be the method by which the game initially spread along the eastern coast of Scotland. A shift in this trend would come with the arrival of the industrial age (Hamilton, 1966).

When Queen Victoria came to power in 1837, very few rail lines had been opened in Scotland. Further, those which were in operation were primarily used to benefit emerging industries, like the transportation of coal. However, with the 1840s came “railway mania” throughout the British Isles and the construction of thousands of miles of track ensued. Ordinary business-minded individuals were discovering new sources of wealth and the modernization of the working world created the advent of leisure time. When the concept of leisure time became fashionable in Scotland, where the game of golf had been played by royalty for centuries, golf was well positioned to take advantage. The first known examples of golf course architecture occurred during this time (BBC, 2014).

In 1842, Allan Robertson (Appendix A.1), accompanied by his apprentice Old Tom Morris (Appendix A.2), completed a ten-hole layout for the Carnoustie Golf Links. In 1848, Robertson was hired by the Royal & Ancient Golf Club of St. Andrews to serve as head professional and keeper of the greens. During his tenure, Robertson widened the playing corridors through the removal of gorse and other scrub brush, enlarged the
putting surfaces, and designed and built the now famous 17th or Road Hole. He also refined the hazards, re-turfed putting surfaces, and instituted white (outward) and red (inward) flags. Between 1851 and 1852, Old Tom Morris laid out and constructed a 12-hole course at Prestwick. He built hazards, including the use of railway ties, and turfed the green sites. He would continue to make modifications to the course, over the following 12 years, while serving as keeper of the greens. Following Robertson’s death in 1859, Old Tom Morris returned to St. Andrews in 1865 where he continued the process of widening the fairways and greens of the Old Course. In 1866, Old Tom Morris built the current 18th green. Four years later, in 1870, he added the 1st green, allowing for the current counter-clockwise direction of play. While courses had existed well prior to the 1840s, it was these predetermined modifications to the natural environment, for the betterment of golf, which define these acts as the earliest expressions of golf course architecture (Browning, 1955) (Shackelford, 1999).

By 1875, almost all of Scotland’s railway network had been constructed and was in operation, linking most major towns and small villages to one another. These lines were typically constructed where the natural topography allowed for easy construction. As such, many of these early tracks were routed through coastal areas where the terrain was less severe. The arrival of rail connected previously isolated links courses and its golfers with the rest of the British Isles. As illustrated in Figure 1.1, by 1875 all major golf courses were connected (even to London) through the rail system. St. Andrews became the centre of the new golfing world. Discounted rates and golf travel packages soon followed to draw tourists from the larger cities. Subsequently, golf became more affordable and accessible, resulting in the first golf boom in history (BBC, 2014).
Figure 1.1

Established rail lines and golf courses in 1875 (Nation Library of Scotland, 1875).
The second advancement of the industrial age was the invention of the gutta-percha ball. It is believed that the first “gutty” ball was created by Reverend Dr. Robert Adams Paterson in 1848. He melted gutta-percha packaging, which is a dried gum resin from the Malaysian guttiferous tree, to create golf balls. The ball was cheaper to manufacture and was more durable than the established feathery golf ball. However, the initial reaction to the new ball was mixed as the smooth gutty was not clearly superior to the feathery; and, many well-known golf professionals, including Allan Robertson of St. Andrews, made a majority of their income off the production of the feathery ball. However, it was soon realized that the gutty ball performed better after repeated use, as the surface became nicked and rough. Soon, moulds were used to create regular grooves on the surface of the gutty, drastically increasing performance and accuracy. By 1860, the gutty was good enough and popular enough to replace the feathery as the main ball in golf. Combined with the proliferation of rail, the gutty helped lower costs associated with the game and popularized golf with the masses (Scottish Golf History, 2016).

Golf continued to grow in popularity throughout the late 1800s, resulting in numerous commissions to create more courses. These opportunities were almost exclusively given to the top golf professionals of the day, players like Old Tom Morris and Tom Dunn (Appendix A.3). The quality of these early efforts varied greatly, depending on the selected sites, but allowed for quick growth in the game. In 1901, two courses opened in the “Heathlands” southwest of London which would change golf course architecture. When the Willie Park Jr. (Appendix A.11) designs at Sunningdale and Huntercombe opened for play, they stood in stark contrast to the geometric Victorian style designs that had dominated inland golf over the previous half century (Cornish and
Whitten, 1981). The two courses had large rolling greens, bold contouring, and manmade hazards which appeared to be natural. Golf architecture quickly became a new discipline, the study of which would captivate some of the most brilliant minds of pre-war Britain. The “Heathland Era” of golf represents the work of some of the first notable practitioners of golf course architecture. This group effectively laid the groundwork for the “Golden Age of Golf Course Design” following the First World War (Shackelford, 1999).

However, when Coburn Haskell, an American, invented a wound rubber-cored golf ball in 1898, the game would change again (Scottish Golf History, 2016). The Haskell ball arrived in Britain in 1900 and was in common use within a decade. However, it would be after WWI when the ramifications would become fully evident. This new ball travelled much further than previous technologies and rendered many layouts obsolete. As such, golf course architects were hired to modify existing courses to conform to new perceived standards. Many lamented this new technology, professing it was a contradiction to the traditions of the game. In his 1928 publication Scotland’s Gift, C.B. MacDonald (Appendix A.4) provides an entire chapter on “standardization” for the golf ball, and sites the Haskell ball as a major negative influence on the game (MacDonald, 1928). One year prior, in 1927, golf writer and course architect Max Behr (Appendix B.5) penned an article for The Country Club Magazine titled “The Ball Problem”, in which he expounds his frustrations with equipment advancements and highlights the negative implications he observes affecting golf architecture and maintenance.
“What we are witnessing today is not any high degree of skill in stroking the ball, but the mere control of physical power in hitting it. The deterioration of skill brought about by the present ball has caused a mischievous repercussion throughout the length and breadth of golf. The inordinate distance the ball can now be driven has caused in golf architecture a very definite infirmity of principle as all deductions from quantity values are apt to induce. Quantity must be opposed by quantity. Consequently the size of our greens and the width of our fairways have become restricted, and the rough made damnable. Instead of being an art where the medium penalty is used to create ideas calling for intelligent application of skills, golf architecture has become a system of penology. Thus instinct is met by instinct, and under the stimulus of impulse the mind is subject to the delusion that two wrongs can make a right. Little is being done to curb instinct; our fairways are mere troughs through which it is allowed to vent itself. We are locking up this wild desire for distance just as we cage wild animals.

And a further effect, especially noticeable in the United States, is the demand to keep the greens in a soft condition. The golfer cannot stop the ball so the greens must. This has caused over-watering which has seriously damaged the health of the turf. Indeed the evil ramifications caused by the present ball could fill a book.

The question before the golfers of the world is plain as a pike-staff. Are they going to be sportsmen and accept a ball that requires skill to propel, or, in their infantile worship of mere distance, are they going to be downright game-hogs” (20-21)? (Shackelford, 2005)
Contemporary golf course architects have not resolved these problems. In fact, many of the issues faced by the game’s earliest designers are largely similar to those faced by current designers. Equipment technologies are still advancing each year and player opinions dictating maintenance and design standards are stronger than ever. Modern environmental policies, water limitations and pesticide restrictions have further complicated the business of course design. The result, as Max Behr had earlier feared, is that golf architects have spent too much effort battling non-essential influences and golf, as a result, has suffered for it (Shackelford, 2005). Golf architecture has spent the last 70 years battling ever improving player accuracy and distance at the expense of design economy and environmental sensibility.

Modern golf courses (post WWII) have typically resulted from an extensive process of earth-moving. Countless architects seem to impose their “style” onto any site, regardless of the inherent attributes of the existing landscape. As a result, considerable maintenance effort and cost are used to maintain patterns against nature’s processes (Foreman, 2014). Ultimately, the most significant impacts have affected the game of golf as a whole. Evidence of this fact can be seen in the recent annual decline of golf participants in both the U.S. and Europe (Figure 1.2 and 1.3). Golf as a game is supposed to be fun, and it is up to the golf course architect to solve the overarching issues facing the game through the application of time-honoured design principles (Shackelford, 2005).
Figure 1.2


Figure 1.3

Pinehurst Resort in North Carolina boasts nine golf courses, four of which were tailored to suit the sandy land by legendary golf course architect Donald Ross (Appendix A.18). Course No. 2 at Pinehurst is the most famous and stands as Ross’ masterpiece. However, over time evolving standards and tastes saw many alterations to its appearance, even though the hole strategies were largely intact. Starting in 2012, the design duo of Bill Coore and Ben Crenshaw (Appendix A.46 and A.48) were hired to restore the course back to its original look and feel. In 2014, the U.S. Open was held at Pinehurst No. 2 and showcased the recent restoration work to the world. Gone were the deep rough areas, replaced with natural sand hazards and native plant species. Viewers were shocked to see brown, dry fairways instead of the lush green fairways typical of the PGA Tour for decades. However, Mr. Coore and Mr. Crenshaw had simply returned the course to how it was meant to be played (Farren, 2012).

Coore and Crenshaw sought to use the original irrigation system, a single line system running down the centre of the playing corridor, to locate the intended angles of play. Through this undertaking they would discover that the original system was still operational and that they could maintain the course in the same fashion imagined by Donald Ross some hundred years earlier. This design process would further allow them to remove all non-original rough areas and reinstate the natural sandy areas with native wiregrass species. The result was a reduction in 14.65 ha (36.2 acres) of maintained area over the almost 60 ha (150 acre) course, while at the same time widening some fairways by as much as 50 percent. Further, reports revealed that with 12.3 percent less rainfall in 2011, compared to 2010, Pinehurst No. 2 used 26.1 percent less water due to the return to the original design (Farren, 2012). However, when asked about their intentions, Coore
and Crenshaw noted that they “were not environmental crusaders” but that they simply wanted to restore the classic course to its intended design (Farren, 2012). This evolution begets the questions, how did this change happen? And, why has golf architecture not continuously progressed through the application of accumulated knowledge and experience?

1.2. Problem Statement

Currently, there is a lack of research examining the influence that golf course architecture has had on the evolution, and current state, of the game of golf. External influences, such as changing social and economic trends, have helped to shape different eras in golf course architecture. However, these eras are considered to have differing levels of perceived success. While professional practice seeks to further a particular field, the interests of the individuals engaged in that profession, and the public interest, it is unclear how, if and/or when golf course architecture has functioned as such (HRPA, 2015). Without a solid understanding of golf architecture’s past, it is difficult to make proactive decisions influencing the future of golf through golf course architecture.

1.3. Study Goal and Objectives

The goal of this study was to identify evolutionary patterns within the field of golf course design. To achieve this goal, there were several underlying objectives:

1. document the current issues facing the game of golf
2. contextualize the current issues facing the discipline of golf course architecture
3. define and rationalize the evolution of golf course architecture
4. compare and contrast the high points of design practice
5. rationalize the low points of design practice
6. define professional practice and contrast professional practice in golf course architecture with allied professional fields

1.4. Rationale

A comprehensive understanding of how and why the field of golf course architecture has developed over time, could have major implications on future decision making. Understanding the influences which resulted in different eras of golf course architecture could ensure higher levels of design excellence moving forward. With a clear vision of the past, the field of golf course architecture could be better positioned to influence issues facing the game, including player participation and design sustainability (both environmental and economic).
2. Literature Review

2.1. Overview

The purpose of this section is to summarize the current body of knowledge pertaining to the evolution of golf course architecture, and its influence on the current state of the game of golf. As such, this literature review has been divided into three main sections for analysis. Firstly, a summary of relevant publications discussing professional practice has been studied. Secondly, literature pertaining strictly to the study and discipline of golf course architecture has been reviewed and contextualized. Lastly, works discussing the current issues facing the game of golf have been revealed. These findings have been summarized to reveal gaps within the existing literary framework.

2.2. Professional Practice

A professional practice is characterized by the effective integration of both design and research. In the publication Landscape Architecture Research: Inquiry, Strategy, Design, by Deming and Swaffield, a professional practice is defined as “a branch of knowledge or teaching that displays a systematic and ordered study based upon clearly defined models and rules of procedure.” It is also proposed that a professional practice should possess some variant of the following 7 characteristics: 1) reference or parent disciplines; 2) a distinctive mandate, paradigm, or worldview; 3) a specialized body of knowledge that produces and maintains its own literature; 4) a set of disciplinary principles and practices; 5) sub-themes and study concentrations; 6) an active research or theory development agenda (for professional disciplines this is often based on empirical or practical problems related to the mandate); and, 7) specialized educational programs, gatekeeper, and regulatory/advocacy groups. It is further suggested that professional
practices emerge over time as “unique, defined, recognizable, and distinct.” The most important function of a professional practice is the assemblance and maintenance of a specialized body of knowledge. Professional practices are sustained and advanced through mandated professional education, professional societies, conferences, and peer-reviewed journals, among other things. The body of knowledge should be seen as the DNA of the practice, as it should be both self-replicating and evolutionary (Deming and Swaffield, 2011).

2.2.1 Professional Practice in Allied Fields

Golf course architecture has origins in fine art, architecture, planning, engineering, surveying, agriculture, horticulture and, of course, landscape architecture. These reference or parent disciplines have influenced the evolution of golf course architecture. Landscape architecture is typically recognized as the modern parent discipline for golf course architecture. This notion is strengthened by the literature of the earliest golf course architects who cited the works of several prominent landscape architects. For example, in 1928 golf course architect Charles Blair MacDonald references the work of landscape architect (or landscape gardener) Humphrey Repton in his book *Scotland’s Gift*. As such, the discipline of landscape architecture should be used as the standard against which to compare the discipline of golf course architecture.

The International Federation of Landscape Architects (IFLA), which was founded in 1948, currently represents 71 national associations and approximately 25,000 landscape architects worldwide (IFLA, 2016). The mission statement of the IFLA states that it, “will promote the landscape architecture profession within a collaborative partnership of the allied built-environment professions, demanding the highest standards
of education, training, research and professional practice, and providing leadership and stewardship in all matters.” These directives are carried out at the national level by member organizations. In the United States this organization, founded in 1899, is called the American Society of Landscape Architects (ASLA). In Canada the national organization, founded in 1934, is called the Canadian Society of Landscape Architects (CSLA). In the United Kingdom the national organization, granted Royal Charter in 1997 and founded in 1929 as the Institute of Landscape Architects, is called the Landscape Institute (LI). Finally, in Australia the national organization, founded in 1966, is known as the Australian Institute of Landscape Architects (AILA). The IFLA supports the adoption of minimum standards and aims to provide both leadership and networks to support the development of the profession globally (IFLA, 2016).

In the same way that Deming and Swaffield would describe professional disciplines in 2011, earlier, in 1955, Caplow summarized 5 steps forming a progression from a craft to a profession, they are: 1) establishment of a professional association; 2) undergo a name change; 3) adopt a code of ethics; 4) licensure; and, 5) development of accreditation for educational facilities (Caplow, 1955). The ASLA was the first to complete this process and served as the model for all future associations. However, the steps were followed in a different order. Frederick Law Olmsted and Calvert Vaux were two of the first to use the title “landscape architect” in 1863. This was followed by the formation of the ASLA and adoption of a code of ethics in 1899. Then, in 1900, university education was first instituted at Harvard University. Soon, accreditation procedures followed and the enactment of licensure laws were passed in a majority of states (IFLA, 2016) (Taylor, 2010).
2.2.2 Professional Practice in Golf Course Architecture

The discipline of golf course architecture is currently represented by four major and separate associations. Firstly, the American Society of Golf Course Architects (ASGCA) was founded in 1946 as stands as the first organization of golf course architects. Secondly, in 1989 the Society of Australian Golf Course Architects (SAGCA) was formed. Thirdly, in 2000 the European Institute of Golf Course Architects (EIGCA) was established. The EIGCA resulted from the amalgamation of the British Association of Golf Course Architects (1972, later re-named the British Institute), the French Association of Golf Course Architects (1983), and the European Society of Golf Course Architects (1989). Lastly, the Japanese Society of Golf Course Architects (JSGCA) was established in 1993. However, in 2008 a group of Scottish golf course architects felt that Scotland, as the home of golf, should have its own devoted body “representing the golf course architecture profession in Scotland.” As such, the organizational structure within the discipline has been blurred (Cornish and Whitten, 1993).

Further, while these associations have achieved phases 1 and 2 of Caplow’s 5 steps, there is little evidence that steps 3, 4 and 5 are (or will) completed as prescribed by Caplow. The various codes of ethics differ between each association and often include wording negating the importance or strictness of the code. Further, there are no established repercussions for violating the code of conduct. As such, it is more accurate to call them “general rules” than a “code of ethics.” Equally, the ASGCA, the SAGCA, and the JSGCA have done little toward the establishment of any form of licensure or development of accredited educational facilities. While the EIGCA currently offers a “vocational qualification in golf course design” this program is not required to obtain
membership. It seems that on-site project involvement, together with existing member sponsorship, is the only real way to secure membership in these associations. According to Caplow’s 5 steps, the field of golf course architecture is operating as a craft, yet calling itself a profession.

Just prior to WWII, an unincorporated new group formed in London called the International Society of Golf Course Architects (ISGCA). Unfortunately, this association would not survive the war, as it had been intended to serve as an international body overseeing the interests of golf architecture worldwide. The ISGCA could have severed a role similar to that of the IFLA in landscape architecture, an important role given that golf course architects themselves tend to work without borders.

2.3. Golf Course Architecture

Although more than 15,000 books, and many more articles, have been written on the subjects of playing golf (swing mechanics and playing strategy), the game’s greatest players, and the game’s rich history, by comparison, very little has been written on the subject of golf course architecture (Valuable Book Group, 2015). Further, of those publications focused on golf course design, much has concentrated on maintenance and individual course designs. This review is focused strictly on writings expounding the science and art of golf course design or construction.

2.3.1 The Literature of Golf Course Architecture

For this research, two principal sources were used to summarize the landmark literature in golf course architecture. Firstly, published in 2006, the book Golf Course Design: An annotated bibliography with highlights of its history and resources by
Geoffrey S. Cornish (Appendix A.37) and Michael J. Hurdzan (Appendix A.44) provided an excellent summary of the significant works between 1889 and 2002. Secondly, a survey of leaders in the golf industry was utilized, as published by Valuable Book Group LLC., to confirm and add to this list. This list has been summarized by date, and is published in this study as Figure 2.1 (Cornish and Hurdzan, 2006) (Valuable Book Group, 2015).

The first publication to contribute to the emerging field of golf course design was *The Golfing Annual, 1887-1888 (Volume 1)* released in 1888. With this work, editor C. Robertson Bauchope, with assistance from Walter G. Simpson and Horace G. Hutchinson (Appendix B.1), provided the first detailed review of golf courses in the British Isles. Hole-by-hole analysis was provided and illustrated graphics provided the first routing plans for many golf courses. Further, a summary of existing clubs is provided and recent works completed are reviewed. In 1889, in Volume 3 of *The Golfing Annual* series, Horace G. Hutchinson contributed the 12-page article, *How to Layout Links and How to Preserve Them*. This work provided the first written word on golf course design and maintenance. It also advanced Horace G. Hutchinson’s role as the authority on golf course architecture worldwide (Banchope, 1888) (Banchope, 1889).

The next book to convey the significance of one golf course over another was *Golf* by Horace G. Hutchinson, published in the British Isles in 1890, as Volume 14 in the Badminton Library of Sports and Pastimes series. Chapter 13 of this work is titled “Some Celebrated Links”. In it, among other courses, Hutchinson praises the links courses of St. Andrews, Musselburgh, North Berwick, Carnoustie, Prestwick and Westward Ho! for their superiority. He even goes so far as to site some superlative hole
<table>
<thead>
<tr>
<th>Year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1890s</td>
<td>1888 – The Golfing Annual, Volume 1 edited by C Robertson Bauchope (first of 23 editions)</td>
</tr>
<tr>
<td></td>
<td>1889 – How to Layout Links and How to Preserve Them by H.G. Hutchinson (in Vol. 3 of The Golfing Annual)</td>
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<td></td>
<td>1890 – Golf by Horace G. Hutchinson</td>
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<td></td>
<td>1891 – Famous Golf Links by Horace G. Hutchinson</td>
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<tr>
<td>1895</td>
<td>Golf in America: A Practical Manual by James Lee</td>
</tr>
<tr>
<td>1896</td>
<td>The Game of Golf by Willie Park Jr.</td>
</tr>
<tr>
<td>1897</td>
<td>How to Play Golf by H.J. Whigham</td>
</tr>
<tr>
<td>1897</td>
<td>Country Life Magazine is founded, with Horace G. Hutchinson as Golf Editor</td>
</tr>
<tr>
<td>1900s</td>
<td>1901 – Practical Golf by Walter J. Travis</td>
</tr>
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<td></td>
<td>1903 – Concerning Golf by James Low</td>
</tr>
<tr>
<td></td>
<td>1905 – Layout of Golf Courses and Putting Greens by Martin H.F. Sutton</td>
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<tr>
<td></td>
<td>1908 – Golf Greens and Greens-Keeping by Horace G. Hutchinson</td>
</tr>
<tr>
<td>1908</td>
<td>American Golfer Magazine is founded, with Walter J. Travis as Editor</td>
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<tr>
<td>1910</td>
<td>Golf Courses of the British Isles by Bernard Darwin</td>
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<tr>
<td>1910</td>
<td>The Book of the Links: A Symposium on Golf by Martin H.F. Sutton</td>
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<tr>
<td>1914</td>
<td>Golf Illustrated &amp; Outdoor America is founded, with Max H. Behr as Editor</td>
</tr>
<tr>
<td>1915</td>
<td>Fifty Years of Golf by Horace G. Hutchinson</td>
</tr>
<tr>
<td>1920</td>
<td>Some Essays on Golf-Course Architecture by Colt, Alison and MacKenzie</td>
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<tr>
<td>1920</td>
<td>Golf Architecture by Dr. Alister MacKenzie</td>
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<tr>
<td>1921</td>
<td>USGA Green Section founded (a periodical “promoting the betterment of golf courses”)</td>
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<tr>
<td>1926</td>
<td>The Links by Robert Hunter</td>
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<tr>
<td>1927</td>
<td>Golf Architecture in America by George C. Thomas Jr.</td>
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<td>1927</td>
<td>Art in Golf Course Architecture by Max H. Behr</td>
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<tr>
<td>1927</td>
<td>Scotland’s Gift: How America Discovered Golf by C.B. MacDonald</td>
</tr>
<tr>
<td>1929</td>
<td>The Architectural Side of Golf by Wethered and Simpson</td>
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<tr>
<td>1938</td>
<td>Fifty Years of American Golf by H.B. Martin</td>
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<tr>
<td>1944</td>
<td>Golf Between Two Wars by Bernard Darwin</td>
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<tr>
<td>1948</td>
<td>The Story of American Golf by H.W. Wind</td>
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<tr>
<td>1950</td>
<td>Golf Course Design, Construction and Upkeep by Martin A.F. Sutton</td>
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<td>1951</td>
<td>Essay in the New Yorker on modern golf and Robert Trent Jones by H.W. Wind</td>
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<tr>
<td>1952</td>
<td>A History of Golf in Britain by Bernard Darwin</td>
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<td>1954</td>
<td>The Complete Golfer by H.W. Wind</td>
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<tr>
<td>1959</td>
<td>Golf is my Game by Robert Tyre Jones Jr.</td>
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<td>1974</td>
<td>Golf Course Developments by Rees Jones and Guy Rand</td>
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<td>1981</td>
<td>The Golf Course by Cornish and Whitten</td>
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<tr>
<td>1990s</td>
<td>Driving the Green by John Strue</td>
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<td></td>
<td>The Anatomy of a Golf Course by Tom Doak</td>
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<td></td>
<td>The Architects of Golf by Comish &amp; Whitten</td>
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<td></td>
<td>The Confidential Guide to Golf Courses by Tom Doak</td>
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<td></td>
<td>The Spirit of St. Andrews by Dr. Alister MacKenzie (the &quot;lost manuscript&quot;)</td>
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<td></td>
<td>The Course Beautiful by A.W. Tillinghast, compiled by Wolfe &amp; Trebas (part 1 of 3)</td>
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<td></td>
<td>Golf Has Never Failed Me by Donald J. Ross (the &quot;lost manuscript&quot;)</td>
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<tr>
<td>1996</td>
<td>The Captain: George C. Thomas Jr. and his Golf Architecture by Geoff Shackelford</td>
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<tr>
<td>1996</td>
<td>Golf Course Architecture: Design, Construction and Restoration by Dr. M. Hurstman</td>
</tr>
<tr>
<td>1997</td>
<td>Golf Architecture Magazine is founded, with Neil Crafter and Paul Mogford as Editors</td>
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<tr>
<td>1997</td>
<td>Masters of the Links: Essays on the Art of Golf and Course Design by G. Shackelford</td>
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<td>1998</td>
<td>Golf Course Design by R.M. Graves &amp; G.S. Cornish</td>
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<tr>
<td>1998</td>
<td>Aspects of Golf Course Architecture I, 1899-1924 by F.G. Hawtree</td>
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<tr>
<td>1999</td>
<td>Aspects of Golf Course Architecture II, 1924-1971 by F.G. Hawtree</td>
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<tr>
<td>1999</td>
<td>The Golden Age of Golf Course Architecture by Geoff Shackelford</td>
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<tr>
<td>2000</td>
<td>The Toronto Terror: The Life and Works of Stanley Thompson by J.A. Barclay</td>
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<tr>
<td>2001</td>
<td>Discovering Donald Ross: The Architect and his Golf Courses by Bradley S. Klein</td>
</tr>
<tr>
<td>2002</td>
<td>Evangelist of Golf: The Story of Charles Blair by MacDonald by George Balto</td>
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<tr>
<td>2003</td>
<td>Grounds for Golf by Geoff Shackelford</td>
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<tr>
<td>2005</td>
<td>Golf Course Architecture Magazine is founded, with Adam Lawrence as Editor</td>
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<tr>
<td>2005</td>
<td>The Future of Golf: How Golf Lost its Way and How to get it Back by G. Shackelford</td>
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<tr>
<td>2008</td>
<td>Bunkers, Pits &amp; Other Hazards by F.L. Richardson and M.K. Fire</td>
</tr>
<tr>
<td>2006</td>
<td>Golf Course Design: An Annotated Bibliography with Highlights of its History and Resources by Comish &amp; Hurstman</td>
</tr>
<tr>
<td>2012</td>
<td>Wide Open Fairways: A Journey Across the Landscapes of Modern Golf by B.S. Klein</td>
</tr>
<tr>
<td>2013</td>
<td>Sand and Golf: How Terrain Shapes the Game by George Waters</td>
</tr>
<tr>
<td>2014</td>
<td>A Difficult Par: Robert Trent Jones Sr. and the Making of Modern Golf by J.R. Hansen</td>
</tr>
</tbody>
</table>

**Figure 2.1**

Landmark Publications in Golf Course Architecture

characteristics, including reference to “The Redan” hole at North Berwick and the “Alps” hole at Prestwick. This publication was an immense success and cemented Hutchinson’s reputation as an expert on all things golf (Hutchinson, 1890).

In 1896, famed professional golfer and budding course architect Willie Park Jr. released his first book *The Game of Golf*. In it, he reveals some of the first insights into what should be considered when laying out a golf course. Through this initial written introduction to the field of golf course architecture, Willie Park Jr. is able to impart several key principles:

1) “it is not possible to lay down ideal distances, because so much depends on the nature of the ground;”
2) “the links are to be laid out for the use of a certain class of golfer, if all are beginners it is a mistake to make the course too difficult at first, as it will diminish their pleasure;”
3) “tees should be placed on level parts of the course and should be placed far enough back from obstruction to enable the ball to rise over it in the course of its flight;”
4) “provision should be made for changing of teeing ground frequently, to prevent the turf on them being worn out;”
5) “the variety of places on which greens can be formed is infinite, and the more variety that can be introduced the better;”
6) “the putting-greens should be as large as possible and should be of a slightly undulating character;”
7) “there should not be any hazard out of which the ball cannot be extricated at the loss of one stroke, and all hazards should be visible to the golfer when he stands at his ball before playing his stroke;”
8) “when there are natural bunkers, it may be possible to place the holes so that these can be made use of, but otherwise they must be formed;”
9) “the placing of hazards is a matter of great difficulty, and their positions should be such that a golfer who is playing a good game should never visit them;”
10) “the positions of hazards should be varied;” and,
11) “effort should be made to place the
hole in such a position that it can be seen in playing the approach.” Many of these
guidelines would provide the basis for later writings by other golf course architects (Park
Jr., 1896).

In 1897, Horace Hutchinson joined *Country Life Magazine* in England as the Golf
Editor. He secured this position because of his excellent record in amateur golf and his
pioneering publications on golf history and course architecture. While his personal
publications would somewhat decrease, apart from *Golf Greens and Greens-Keeping*
(1906) and *Fifty Years of Golf* (1919), he would use his new role to guide the
advancement of the field of golf course architecture in England.

In 1903, Woking Golf Club member John L. Low (Appendix B.2) published his
seminal book, *Concerning Golf*. In it, the chapter titled *Concerning the Links* gives the
reader a clear understanding of his design principles. While not penned specifically as a
numbered list, these principles were later defined and circulated throughout the golfing
world. They have been summarized as: 1) “A golf course should provide entertainment
for the high and medium handicapper while at the same time present a searching and
difficult test for the accomplished golfer;” 2) “The one aim of inventors is to reduce the
skill required for golf. Golf architects must wage a battle against inventors by designing
courses that emphasize golfing skills over equipment;” 3) “The shortest, most direct line
to the hole, even if it be the centre of the fairway, should be fraught with danger;” 4)
“The architect must allow the ground to dictate play;” 5) “The fairway must be oriented
to both the tee and the green, thereby stressing the importance of placing the teeshot in a
position from which the green can be approached with safety;” 6) “Bunkers should be
used sparingly by the architect;” 7) “Whenever possible putting greens should be of the
low, narrow plateau type, with the plateau tilting away, not toward the player. No green should be higher at the back than it is at the front, for that gives a player confidence. Only half the flagstick should be seen from where the approach shot should be played;”

8) “A course should never pretend to be, nor is it intended to be, an infallible tribunal of skill alone. The element of chance is the very essence of the game, part of the fun of the game;” 9) “All really good golf holes involve a contest of wits and risks. No one should attempt to copy a great hole because so much may depend on its surroundings as well as some features miles away in the background which influences and effects the play of the hole. If the terrain is suitable, some of the character of the original might be incorporated elsewhere;” 10) “Inequalities in putting green surfaces should not be exaggerated. A tilt from front to back or left to right or vice versa is sufficient. There should always be a special position for the flagstick on important days;” and, 11) “Committees should leave well enough alone, especially when they have a really fine course” (Graves and Cornish, 1998). The influence of this publication, in combination with Willie Park Jr.’s earlier work titled The Game of Golf, on the evolution of golf course architecture cannot be overstated (Low, 1903).

John Low’s initial renovation work at Woking, in collaboration with Stuart Patton, and Willie Park Jr.’s visionary designs at both Sunningdale and Huntercombe, were still new in 1903. Horace Hutchinson, as Golf Editor at Country Life Magazine, saw to it that these innovative inland works were showcased to all of the golfing world. The Game of Golf and Concerning Golf became the early textbooks for golf course architecture and many ‘Golden Age’ designers sited these works as a major influence.
As such, it is not surprising to see these influences in later golf course architecture publications.

In 1920, design partners Harry Colt (Appendix A.13) and Charles Alison (Appendix A.25) published *Some Essays on Golf Course Architecture*. While not numbered, eleven guidelines can be discerned from the chapter titled *Golf in the Nineties*, which outlines key questions that the “suburban golfer” must ask in regards to “the framework and construction of the course”. These questions ask whether: 1) “every green is so placed as to take the fullest possible advantage of every natural feature which the land affords;” 2) “anything has been done artificially to increase the interest of approach play by means of slopes and hollows at any hole which is dull by nature;” 3) “every bunker is placed and constructed in such a manner as to give the maximum of excitement and minimum of pain to golfers of every handicap;” 4) “the course calls for an ample variety of strokes, and whether it is well-planned in relation to the prevailing wind;” 5) “it has two starting-points, so that players may get away quickly on crowded days;” 6) “whether advantage is taken of all available space, so that the line of play to one hole does not border too closely on that to another;” 7) “the surface of the putting-greens is undulating without being freakish;” 8) “there are an ample number of positions in which holes can be cut, and whether it is possible to lay the ball dead to these from any part of the green;” 9) “every artificial feature blends with its natural surroundings;” 10) “every bunker creates the maximum of impression on, and gives the maximum thrill to, the mind of the golfer who is seeking to avoid it;” and, 11) “the aspect of all the constructional work increases the pleasure and stimulates the interest of the golfer who views it.” Colt would use these guidelines to become the first non-professional golfer to
work as a golf course architect and would greatly advance the business of golf course architecture in the British Isles. Charles Alison, as Colt’s design partner, would take these philosophies to the continents of Europe and Asia, where he would pioneer golf architecture (Colt and Alison, 1920).

Also in 1920, Dr. Alister MacKenzie (Appendix A.16) released Golf Architecture, in which he too penned his own guidelines. Similar to the work of Park, Low, Colt and Alison, MacKenzie authored 13 essential features of the ideal golf course. They are: 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 forward 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 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 a portion of a stoke shall always have an alternate route open to him;” 9) “there should be infinite variety in the strokes required to play the various holes – interesting brassy shots, iron shots, pitch 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 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;” and, 13) “the course should be equally good during the winter and summer, the texture of greens and fairways should be perfect, and the approaches should have the same consistency as the greens.” MacKenzie would effectively use these guidelines to become the most prominent golf course architect in the United States (MacKenzie, 1920).

In 1923, Canadian golf course architect Stanley Thompson (Appendix A.30) produced a pamphlet titled General Thoughts on Golf Course Design. In it he too stated his guidelines for golf course design and construction. They were: 1) “apart from the general suitability of the terrain for golf, the deciding factor should be the chemical and physical nature of the soil, as the proper selection will save the club thousands of dollars in construction and maintenance;” 2) “one hundred and thirty acres is sufficient to lay out a course on. Less than this should not be used, unless the peculiar character of the land permits, as the course is then apt to be confined and cramped, as well as dangerous.

Anything in excess of 130 acres will permit the architect to work in landscape features. This is an item that cannot be overlooked, for the fascination of golf is not due solely to the science of the shots, but rather to the aesthetic effect of environment;” 3) “nature must always be the architect’s model. The lines of bunkers and green must not be sharp or harsh, but easy and rolling. The development of the natural features and planning the artificial work to conform to them requires a great deal of care and forethought;” 4) “streams, ponds, and even open ditches, if properly made, give variety, not only to the
play, but the aspect of the course;” 5) “the actual course should be over 6,000 yards in length, but not much in excess of 6,500, as it then becomes too strenuous;” 6) “the most successful course is one that will test the skill of the most advanced player, without discouraging the “duffer,” while adding to the enjoyment of both;” 7) “every shot in the game should be planned and the holes should be so arranged that each one is different from the following one. There should be three or four short holes not, however, near the beginning or the end. There should be six or seven good two-shotters, with alternate tees for lengthening or shortening of the holes as the ground is hard or soft or the direction of wind, to preserve their values. The rest should be apportioned between pitch and iron shots for the second. Beware of three-shotters, unless there is some special natural feature demanding them;” 8) “the starting holes should be comparatively easy, so as not to congest the course; the finishing ones should be long (long was later removed in a 1933 version) and difficult, for they are often the deciding ones in a match and no one should win a match on an easy hole;” 9) “the fewer the blind shots the better;” 10) “the bunkers around the green should always be visible when around striking distance;” 11) “the placing and contouring of greens requires serious consideration, as they must blend into the surrounding terrain. Seventy per cent of the putting surface should be available for the placing of the hole;” 12) “drainage must at all costs be taken care of;” 13) “a green should face the shot, but should never recede from the player for the very reason that it will be invisible;” 14) “the first and tenth tee should be at the clubhouse, as on crowded days both nines can be used for the first hour;” and, 15) “as considerable play takes place in the late afternoon, if possible do not face too many holes into the west, because of irritation of the sun” (Barclay, 2000). Many of Thompson’s principles are simply
modifications of those expressed previously by Park, Colt, Alison and MacKenzie. Thompson had begun his career in golf working around these men and was obviously heavily influenced by their ideals and writings.

In 1928, architect Charles Blair MacDonald published Scotland’s Gift: How America Discovered Golf. Through his book, MacDonald relays the origins of the game to the reader and discusses the true nature of his beloved pastime. While no precise list is penned, a “design code” was later transcribed from MacDonald’s 1928 publication by Robert M. Graves and Geoffrey S. Cornish in their book Golf Course Design. As adapted from Scotland’s Gift, MacDonald is believed to have had the following nine design principles: 1) “there can be no really first-class golf course without good material to work with. The best material is sandy loam in gently undulation, breaking into hillocks in a few places. Securing such land is really more than half the battle. Having such material at hand to work on, the completion of an ideal course becomes a matter of experience, gardening, and mathematics;” 2) “the courses of Great Britain abound in classic and notable holes, and one has to study them and adopt their best and boldest features. Yet in most of their best holes there is always room for improvement;” 3) “nothing induces more to the charm of the game than perfect putting greens. Some should be large, but the majority would be of moderate size, some flat, some hilly, one or two at an angle, but the great majority should have natural undulations, some more and others less undulating. It is absolutely essential that the turf be very fine so that the ball will run perfectly true;” 4) “whether this or that bunker is well-placed has caused more intensely heated arguments (outside the realm of religion) than has ever been my lot to listen to. Rest assured, however, when controversy is hotly contested over several
years as to whether this or that hazard is fair, it is the kind of hazard you want and it has real merit. When there is unanimous opinion that such and such a hazard is perfect, one finds it commonplace. I know of no classic hole that does not have its decriers;” 5) “to my mind, an ideal course should have at least six bold bunkers, at the end of two-shot holes or very long carries from the tee. Further, I believe such holes would be improved by opening the fair green to one side or the other, giving short or timid players an opportunity to play around the hazards if so desired, but of course properly penalized by loss of distance for so playing. Other than these bold bunkers, no other hazard should stretch directly across a hole;” 6) “what a golfer most desires is variety in the one-, two-, and three-shot holes, calling for accuracy in placing the ball not alone in the approach but also from the tee. Let the first shot be played in relation to the second shot in accordance with the run of the ground and the wind. Holes so designed permit the player to, if he so wishes, take risks commensurate to the gravity of the situation;” 7) “tees should be in close proximity to previous greens. This walking 50 to 150 yards to the next tee mars the course and delays the game. Between the hole and next teeing ground people sometimes forget and commence playing some other game;” 8) “hills on a golf course are a detriment. Mountain climbing is a sport in itself and has no place on a golf course. Trees in the courses are also a serious defect, and even when in close proximity prove a detriment;” and, 9) “glaring artificiality of any kind detracts from the fascination of the game” (Graves and Cornish, 1998). MacDonald’s guidelines were just the most recent in a long lineage dating back Willie Park Jr. and his 1896 publication *The Game of Golf*.

This evolution of thought and understanding culminated before WWII in what many historian consider one of the pinnacle decades of golf architecture literature – the
1920s. In addition to MacDonald’s work, landmark publications such as The Links (1926) by Robert Hunter (Appendix B.3), Golf Architecture in America (1927) by George C. Thomas Jr. (Appendix A.19) and The Architectural Side of Golf (1929) by H.N. Wethered and T. Simpson (Appendix A.22) are cited by many of today’s top architects as hugely influential works (Valuable Book Group, 2015). These books in particular, took golf architecture from an art form toward a profession based on reasoning and normative practice. As luck would have it, the Great Depression and onset of WWII seems to have displaced this literary progression. As shown in Figure 2.1, significant publications between 1930 and 1990 were much more limited. Further, many of these writings were historically based and simply sought to summarize previous works.

Not until 1981, when Geoffrey Cornish and Ron Whitten (Appendix B.8) released The Golf Course, did the field of golf course architecture produce its next significant work. This effort, for the first time, summarized the evolution of the discipline, identified eras within its progression, and provided profiles of the most influential practitioners in the field of golf course design. However, with so little else having been done to pave the way, The Golf Course, though a comprehensive volume, had some deficiencies. Hence, in 1993, it was updated to reflect new knowledge, and additional work within the field. This revised book was published under the new title The Architects of Golf. This work, along with the publication of several other related books, became the obsession of legendary Canadian golf course architect Geoffrey S. Cornish. His last book, titled Golf Course Design: An Annotated Bibliography with Highlights of its History and Resources and published in 2006 with Michael J. Hurdzan, focused on the literature of golf course architecture. Geoffrey Cornish was clearly a leader in writing about the evolution golf
course architecture. He saw the importance in writing about the discipline’s literature, leading practitioners and eras of design.

Though passionate until the end, Geoffrey Cornish passed away in February of 2012 at the age of 97. When his last work was published in 2006 he was in his 92nd year. As such, his understanding of the evolution of golf course architecture was defined by the era in which he worked and studied, the “Modern Age.” Similarly, his ability to comprehend the start of a new era would have been difficult. However, Chapter 11, of his 1992 publication *The Architects of Golf*, is focused on the work of Pete Dye and it concludes with a single paragraph about a new trend toward “low-profile architecture” (166-167). It suggests that architects like Tom Doak (Appendix A.52), Michael Hurdzan and the team of Bill Coore and Ben Crenshaw were creating “something different from anything built by Dye, Nicklaus, Fazio, Hills or the Jones boys.” It mentions courses which “were designed to fit the lay of the land with as little earth movement as possible.” What Cornish and Whitten were describing is now known as the “Minimalist Movement” in golf course architecture, which was largely ignored, and unnamed, until the opening of Sand Hills in 1995 (Shackelford, 2005). Because his sequel, *The Architects of Golf*, was not again updated, likely due to Cornish’s age and the time required, the literature on the evolution of golf course architecture does not include a detailed study of this transition or the reasoning for it. Further, as is frequently argued with most forms of history written by those of that period, can history ever be objective? Even if the personal bias of the writer can be overcome (which many doubt), it is still inevitable that what is written will be influenced by the tastes and prejudices of that specific era or creative movement. At worst, no two historians can agree on what really happened, and at best an agreement in
one generation will fail to survive the views of the next. This argument is sometimes referred to as “historical scepticism” (Blake, 1955). For these reasons, it is important to have continual advancement and reflection pertaining to the body of literature defining a discipline (Cornish and Whitten, 1992).

While much has been written since 1990, the majority of this work has been dedicated to individual architects and courses. While this focused number of publications (refer to Figure 2.1) has boosted knowledge within the field of golf course architecture, and has celebrated the works and lives of many forgotten designers, effectively turning them into luminaries, only a handful of works have progressed the art and science of golf course design or construction. *The Anatomy of a Golf Course* (1992) by Tom Doak, *Golf Course Architecture: Design, Construction and Restoration* (1996) by Dr. Michael Hurdzan, and *Grounds for Golf* (2003) by Geoff Shackelford (Appendix B.11) represent the works that most would consider the modern “textbooks” of golf course design and construction (EIGCA, 2016). However, while these books frequently site key projects, individual golf holes, and designers of the past to represent design ideals, there is no significant connection or rationalization of the influences which shaped these designers and their projects. Only one book, *The Golden Age of Golf Course Design*, which was published in 1999 by Geoff Shackelford, sought to define the evolution of golf course architectural practice over time. However, Shackelford’s research was era specific, focusing on the top designers practicing between 1911 and 1937. Moreover, emphasis was again placed on the influence of the individual architect, or a group of architects, on a specific project or region of work, instead of the broader influences affecting multiple eras of design practice.
To be considered a professional practice, Caplow and others would argue that golf course architecture must be a vocation with a defined body of knowledge employed by a recognized body of persons. As demonstrated by this review of the existing body of knowledge in golf course architecture, currently, the discipline does not fulfill either of these requirements.

2.3.2 The Practitioners and Products of Golf Course Architecture

Books alone do not fully represent the literature of golf course design. Magazines have been hugely important to the evolution of golf course architecture. Before the onset of WWII, many of these publications were overseen by an editor, who was not just a writer, but who was also prolific in design practice and/or theory. In the case of Horace Hutchinson, the first editor of a regular publication on golf, his experience in design practice pre-dated his role at Country Life Magazine. Similarly, Walter J. Travis (Appendix A.10) was the founder and editor of the American Golfer Magazine in 1908. Though, like Hutchinson, Travis had already been active in golf design starting with Ekwanok in 1899. Lastly, when Golf Illustrated & Outdoor America was founded in 1914, Max H. Behr was made editor. Unlike Hutchinson and Travis, Behr would use his writing experience to later transition from writing to design. Regardless, those at the helm of the major golf publications were informed practitioners in the field of golf course architecture. Unfortunately, these publications, like the industry of golf itself, would lose momentum during WWII, causing some of these publications to fold.

Following WWII, this trend changed. While prolific golf writers emerged, such as Bernard Darwin (Appendix B.4) and Herbert Warren Wind (Appendix B.7), their focus shifted to the playing of the game and its golfing stars, golf architecture became
secondary. This trend increased as golf equipment began to advance more rapidly, and more and more space was devoted to the tools of the game. Hence, those practicing golf course architecture were left to their own devices and little critique was made of their works.

In 1950, the magazine *Golf Digest* was founded in the United States. In 1966, the magazine released the first ever golf course rankings. What would later become “America’s 100 Greatest Golf Courses”, and would later spurn other lists such as the “World’s 100 Greatest Courses”, “America’s 100 Greatest Public Golf Courses”, and the “100 Best Golf Courses Outside the United States,” in fact started under a different name. Until 1985, this list was titled, at different times, both “America’s 100 Most Testing Courses” and “America’s 100 Greatest Tests of Golf.” As such, public opinion and perceived success were focused on course “toughness” (Kerr-Dineen, 2014).

Golf Digest rankings are created based on the feedback of selected panelists who submit scores for courses on seven different criteria, using a ten-point system. These seven criteria are: 1) shot values; 2) resistance to scoring; 3) design variety; 4) memorability; 5) aesthetics; 6) conditioning; and, 7) ambience. A golf course needs a minimum of 45 evaluations to be eligible for ranking. However, it is not prohibited for courses to invite and coddle panelists. Further, the criteria is more focused on course toughness, setting and maintenance than overall design quality. Nearly all other course rankings have followed this method. The result has been an industry where success is dependent on catering to these criteria.

Similarly disconcerting, is the fact that panelists can be anyone. Golf Digest’s panel consists of 660 people, all of whom “have a keen interest in architecture” and are
“either golf professionals or low-handicap amateurs”. There are no golf course architects on the panel (perceived conflict of interest) and there is no requirement for a minimum knowledge of golf course architecture. Furthermore, the most important prerequisite as a panelist is one’s ability to play the game. However, when one looks at the history of golf architecture it is clear that many of its top designers were not excellent golfers. Alister MacKenzie and Seth J. Raynor (Appendix A.21) were both infrequent golfers and excellent architects. It is likely that a lack of professional structure and public education has resulted in this disconnect.

In 2013, *Golf Course Architecture Magazine*, a U.K. based publication, released the first and only Top 100 list based on the opinions of the golf course architects themselves. The fundamental reason for this effort was the belief that golf course architects “have a unique perspective on what makes a course great.” Further, the editors cite numerous criticisms of other publications in which golfers judge courses principally on factors such as “turf conditions or quality of service in the clubhouse.” Results from this survey show, as illustrated in Figures 2.2 and 2.3, that there are clearly two high points in the discipline’s history and that there are key practitioners responsible for this work. The first high point, commonly referred to as the “Golden Age”, occurred around the 1920s and a second era is suggested to be occurring now. Most fascinating, however, is that the era following WWII sees a reduction in the quality of work, even though technology and knowledge should be building upon that of the past, as is suggested in the aforementioned literature on professional disciplines. This may reflect the overwhelming influence of “toughness” in golf course architecture due to invention of course rankings (Golf Course Architecture Magazine, 2013).
Figure 2.2

Proof of the “Golden Age of Golf Course Design” and evidence of a trend toward a potential second (Golf Course Architecture Magazine, 2013).

Figure 2.3

The most influential golf course architects (GCAM, 2013).
Finally, as previously referenced, a professional practice is characterized by the effective integration of both design and research practices. As shown in Figure 2.4, there is a strong correlation between the publication dates of the field’s landmark literature and the decades in which the most “Top 100” golf course in the world were produced. This illustrates that when golf course architecture operated most successfully, its practitioners most resembled that which is prescribed in the literature of professional practice. It is also interesting to note that golf writers are once again becoming active in design efforts, examples include Geoff Shackelford, Bradley S. Klein (Appendix B.9), and George Bahto. However, there is no literature to suggest how and why this has (or is) occurred. More so, resolving these gaps within the overall body of knowledge of golf course architecture would assist in the completion of the final steps toward a professional discipline, specifically the development of licensure and accreditation/establishment of educational facilities.
Data for the 2010s only accounts for 2010-2014. As such, totals will likely be higher.

**Figure 2.4**

Relationship between the production of landmark publications and design excellence in the field of golf course architecture, as represented by most “Top 100” courses (Golf Course Architecture Magazine, 2013) (Cornish and Hurdzan, 2006).
2.4. Issues Currently Facing the Game of Golf

The earliest golf courses evolved in Scotland and were primarily designed by nature. They had considerable red-brown mixed grasses, and shrub areas or unusual features were retained for players to navigate (Cornish and Whitten, 1988). Modern golf courses have typically resulted from an extensive process of earth-moving. Modern day golf course architects have imposed their style onto any site, regardless of the inherent attributes of the existing landscape. Considerable maintenance effort and cost are used to maintain patterns that conflict with natural processes (Foreman, 2014). Typical problems include: 1) excessive water use; 2) excessive fertilizer use; 3) excessive pesticide use; and, 4) habitat loss during construction (Foreman, 2014). These increased costs are a direct result of the current design process, or lack of one, and have resulted in higher green fees and fewer people entering the sport (Shackelford, 2003).

In his book, *The Future of Golf in America: How Golf Lost Its Way in the 21st Century and How to Get It Back*, Geoff Shackelford reveals how golf has been kidnapped by equipment manufacturers and knowingly deregulated by its governing bodies, all in an effort to monetize the game. Shackelford notes that the slumping golf industry has responded to unregulated technology by lengthening and narrowing courses, a very expensive operation. The costs associated with these ‘quick fixes’ have resulted in increased green fees, maintenance costs and lengthy playing times. The result has been a decline in the number of golfers in North America (Shackelford, 2006).

However, this battle against technology is not a new one. The great architects of the Golden Age of Golf Course Design (1911-1937) encountered the same issues with the invention of the dimpled golf ball and steel shafts. Architects such as Alister MacKenzie,
Harry Colt and George Thomas Jr. wrote about the changes they were seeing in the game and a different vision for the game being crafted in North America versus that which had evolved in Scotland. These architects believed the game was being diluted from its “sportier” heritage into a game of exact distances. Their writings and courses employed strategies to mitigate the effects of technology on the game. Courses from this era, or eras, have since stood the test of time and compose the majority of the Top 100 golf courses in the world. However, this greatness has not precluded them from being altered in the name of modernization (Shackelford, 2006).

Shackelford blames the United States Golf Association (USGA), whose “job it is to regulate in a way that balances the role of equipment to keep existing courses relevant and costs from skyrocketing,” for the current issues in golf. He feels that we are hiding our courses in unnecessary rough, trees, new back tees, and other trappings that fail to improve the sport, purely in an effort to combat that which relates to less than 1% of golfers – professional level skill and distances. He states that “control of golf should not have been turned over to the manufactures who have little interest – long or short term – in the sport’s history, tradition, playing characteristics, or future.” He shows that the future of golf can still be prosperous and argues that golfers must be the ones to understand the issues and make the necessary changes (Shackelford, 2006).

However, what Shackelford fails to recognize is the burden of responsibility which should be placed on to golf course architecture. While he notes that many thoughtful players, course architects, and writers have struggled to have their voices heard above the discord of advertisements which flaunt “progressive” developments in equipment, golf architecture, course management, and maintenance practices, he fails to
recognize that it is not the individual that will resolve these issues. Golf course architecture needs to complete all 5 steps towards a professional discipline, in order for the whole of the field to be unified to combat these issues. Issues such as changing environmental standards, construction practices, maintenance standards, media influence, and social norms cannot be confronted unless the discipline itself has debated and rationalized them first.

2.5. Summary

This literature review has covered the prominent writings in the field of golf course architecture, has summarized the current issues facing the game, and has provided a definition of professional practice, both in golf architecture and in allied fields of design. While the issues facing the game of golf have been well described in recent publications, and the general structure and responsibilities of a professional practice have been outlined well in the literature of allied fields, it is clear that golf architecture lacks the necessary professional structure to deal with the ongoing issues confronting the game of golf. Further, a lack of literature defining the evolution of the discipline, from origins to present day, provides little insight to how and why golf course architecture operated best.

Although literature in the field of golf course architecture has existed since 1888, this work has been frequently limited to individual architects, their design principles, and their portfolios of work. It is important to mention that many of the Golden Age architects described their design guidelines in frequent publications. These designers often built upon the ideas and writings of those who influenced them, however because of self-promotion in a competitive business, these influences were seldom made public.
Similarly, when looking back on the evolution of golf architecture, historians have provided little evidence as to why design trends and innovations occurred.

However, one significant work, titled *The Architects of Golf*, which was published by Geoffrey S. Cornish and Ronald E. Whitten in 1992 (as an updated edition of *The Golf Course* published in 1981), attempted to outline the significant eras and key figures in the evolution of golf course architecture. Eras such as the Heathland Era, Golden Age of Golf Course Design and the Contemporary Age are discussed. Unfortunately, this work was last updated in 1992 and, while the evolution of the discipline is linked to some major political and social events, the effort does not convey the importance of the architect’s inspirations, both external and internal to the field. Similarly, this work does not provide a deep understanding of the relationships between architects and instead profiles them separately with individual biographies. Further, this work is now almost 25 years old and misses an entire era (and maybe more) of golf course architecture, now commonly referred to as the “Minimalist Movement.” Finally, there has been evidence that this minimalist movement might be a second highpoint, or Golden Age, of golf course design. If so, golf course architecture should seek to understand the relationships between these two eras. With so many gaps in its own evolution, and disparities in its own structure, how can golf course architecture expect to make informed decisions for the future?
3. Method

3.1. Research Design

This study used a qualitative approach to gain a better understanding of the relationship between the issues impacting the future of golf and the evolution of golf course architecture. Firstly, the scholarship of integration was used to explore connections between the evolution of golf course architecture and external influences such as technology, media, social trends, the economy, and allied professional fields. The goal of this process was to identify and rationalize design eras in this evolution. Secondly, the evolution of golf course architecture, and specifically the identified eras in design, were compared to each other, and then contrasted against a generally accepted definition of professional practice from the literature. To begin to understand the effects of these relationships on the practitioners of golf course architecture, a two-pronged approach compared design influences and principles from various eras. “Luminary” golf course architects provided insight to their design principles in their frequent writings. The scholarship of integration process allowed their influences to be revealed through the creation of detailed profiles. A questionnaire method created a platform for selected “Contemporary” architects, who are practicing visionaries of the second highpoint in golf course architecture, to provide direct written comments on their design influences and principles. This method was specifically chosen over alternative options, such as key informant interviews, as it allowed participants to contemplate the questions, and strategically craft their answers, as the Luminary architects did through their publications. Aggregate findings from Contemporary questionnaires were compared to aggregate results from compiled Luminary publications to determine similarities and differences.
Finally, connections were made between design influence and design practice to create recommendations for future research and professional practice in golf course architecture. This research design has been graphically represented in Figure 3.1.

Figure 3.1
General procedure of methodology.
3.2. **Scholarship of Integration**

The scholarship of integration is defined by Boyer (1990) as “serious, disciplined work that seeks to interpret, draw together, and bring new insight to bear on original research.” Integration itself is defined as the making of “connections across the disciplines, placing the specialties in larger context, illuminating data in a revealing way” (Boyer, 1990). Further, the Scholarship of Integration also means interpretation, and fitting one’s own research (and/or the research of others) into larger intellectual patterns (Boyer, 1990). For this study, timelines and profiles were created from original research in an effort to identify relationships and trends internal and external to the field of golf course architecture.

A decade by decade analysis of the evolution of golf course architecture was completed through timeline analysis. Timelines tracking economic changes, major social events, allied professional design eras, technological advancements (golf, construction and maintenance equipment), the influence of media, and eras within the field of golf course architecture were created and compared, decade by decade, in order to understand connections across disciplines, illuminating the causes for change in golf course architecture. Further, as the evolution of golf has been primarily a factor of British versus North American ideals, the geographic regions of the United Kingdom, the United States, and Canada were selected as the areas of analysis.

Profiles were created for the discipline’s most prolific designers in an effort to identify connections and relationships. These individuals were selected based on the quality of their portfolios. To determine who were the pre-eminent designers in the field of golf course architecture over time it was necessary to use some form of golf course
ranking. Similar to the timeline analysis, it was necessary to reduce the scope of this inquiry to the significant geographic regions of North America (United States and Canada) and the British Isles (England, Scotland, Ireland and Wales). As most printed magazines do not offer area by area analysis, it was necessary to utilize the “only independent website dedicated to the best golf courses of the World” – Top 100 Golf Courses (Top 100 Golf Courses, 2016). From this process 35 “Luminary” designers and 35 “Contemporary” designers were selected for analysis. Criteria for selection included that an architect had at least two projects ranked within the Top 100 golf courses between both North America and the British Isles. Profiles were completed for all 35 luminary designers. Further, profiles were created for 3 other significant visionaries (had less than two Top 100 courses but were noted by other selected architects as “influential”), 17 contemporary designers, 11 instrumental golf writers, and 5 influential owners of golf courses or developments. As the most detailed and relevant information from Contemporary designers was achieved through the questionnaire method, profiles for these designers were deemed redundant. Other profiles were created when the scholarship of integration method revealed that further information was necessary. These profiles, 70 in total, are provided as Appendix A, B, and C of this study. Questionnaires were sent to all 35 contemporary architects to identify their design influences and principles.

3.3. Questionnaires

A short set of open-ended questions was developed and utilized through the mail questionnaire method. Two major reasons for the use of a mail survey method, were: 1) there is a much lower cost for completing them; and, 2) procedures for mail surveys are
often deemed simple enough that individuals can conduct their own (Dillman, 1991). However, while mail questionnaires are often the most practical and economical method of obtaining data, some investigators hesitate to employ them because they tend to yield a low percentage of returns and relatively incomplete responses (Levine and Gordon, 1959). As such, much research was completed to maximize response rate, in ways consistent with obtaining quality responses. An example of this, and one utilized in this study, is the Total Design Method (TDM) by Dillman. The TDM uses “social exchange theory to guide the careful integration of specific procedures and techniques.” This approach suggests that questionnaire recipients are most likely to response if they expect that the “perceived benefits of doing so will outweigh the perceived costs of responding”. Thus, every aspect of the questionnaire design was based on three principles: 1) the reduction of perceived costs (e.g. making the questionnaire appear easier and less time-consuming to complete); 2) increasing perceived rewards (e.g. making the questionnaire itself interesting to fill out by adding interest-getting questions); and, 3) increasing trust (e.g. by use of official stationery and sponsorship) (Dillman, 1991).

These three guiding principles were applied to improve the questionnaire’s design and administration. To address principle one, the reduction of perceived costs, the questionnaire was broken down into three distinct sections for clarity. Questions were crafted to be relatively simple and loaded questioning or negative wording was avoided. Secondly, the questionnaire was limited to 9 questions (1a, 1b, 1c, 1d, 2a, 2b, 2c, 2d, and 3) and an estimated completion time of 30 minutes. Thirdly, whenever possible, the questionnaire was made into a fillable PDF form and was emailed to potential participants. This was done for every participant under the age of 50 in an effort to
reduce time and increase response rates through ease of use. Lastly, for more senior respondents, who may not be as comfortable with a computer, the questionnaire was mailed. This mailing included a return envelope and postage.

To address principle two, increasing perceived rewards, the questionnaire was formatted to encourage self-reflection. People are naturally interested in themselves (Ward, 2013). As such, the survey was designed for practitioners, who have made a living out of self-promotion, with questions focused on the individual. By allowing for open-type responses, typical to their normal conversations with clients or colleagues, it was anticipated that the most detailed responses would be achieved.

Lastly, to address principle three, increasing trust, the University of Guelph logo was put onto a crafted introductory letter. This letter introduced the potential participant to the survey, detailed time and response expectations, and made it clear that participation was voluntary and any or all questions could be ignored should the individual feel uncomfortable. It was also clearly stated that participation in the study would be confidential and results would be published in aggregate format only. A coding system was used to remove names and addresses from participant responses. Finally, it was deemed that ethics approval was not required for this study as the information being requested is frequently propounded by golf course architects to promote themselves.

Two versions of the questionnaire were distributed to selected participants to more accurately tailor the questions to their portfolios. These questionnaires are included as Appendix D. The only difference between the two versions of the questionnaire can be found in the wording of question number three. For golf course architects who focused primarily on new-build courses, wording was selected to tailor this question to
their portfolio of work. Further, where a designer’s portfolio focused more on renovation work, wording was utilized to reflect this.

3.4. Data Analysis

Returned questionnaires from each participant were first stripped of any personal identification, as only a coding system was used to distinguish between questionnaires. From these responses, aggregate findings were created using themes. Themes were developed by quantifying the frequency of a particular response throughout all questionnaires. Frequency graphs were developed from the responses and interpreted as an indicator of the level of importance for each theme per each question. This portion of the analysis represents purely the “Contemporary” golf course architects.

A similar process was also conducted for “Luminary” golf course architects. However, as these architects are deceased, the scholarship of integration method was used to distill information on design principles and influences. These findings were treated in the same manner as those from Contemporary golf course architects to create an aggregate summary.

3.5. Summary

Questionnaires with open-ended questions were chosen to investigate the relationship between design influence and design process for contemporary golf course architects. The scholarship of integration method is used to provide a comparable analysis for luminary golf course architects. Themes and frequency graphs were used to compare aggregate findings between both contemporary and luminary golf course architects. An exploratory approach allowed the researcher to draw larger connections
between the evolution of golf course architecture and the current issues facing the game of golf.
4. Results

4.1. Overview

In his book *How Buildings Learn*, published in 1994, Stewart Brand explains how buildings adapt and evolve over time. Brand identifies three factors which often force buildings to change, they are: 1) technology; 2) money; and, 3) fashion. He claims that more than any other human artifact, buildings improve with time, if allowed to. He then asks the question, “how do buildings come to be loved?” He concludes that the simplest answer is age. However, to achieve a longstanding age, a design must survive. Brand proposes that in order to survive, the design must be able to adapt (Brand, 1994).

Brand stresses the value of an organic kind of design, which can be altered and expanded easily to evolve into a building’s ideal form. While looking back through architectural history, Brand found a point when architects began considering themselves artists causing a steady decline within the profession. What he dubbed “Magazine Architecture” resulted from this progression, as owners and designers cared more about the appearance and “wow factor” than the final purpose and function of the building itself. The long-term function and maintenance of the products of the design process are not the focus of the magazines and, as a result, are given a lower priority. Many similar relationships can be found within the evolution of golf course architecture. However, as suggested by Steve Sailer in his 2005 article *From Bauhaus to Golf Course*, “golf architecture’s acceptance has been held back by a lack of persuasive historical accounts that could make sense of its profusion of styles."

The evolution of the field of golf course architecture has, like many other allied professional practices, been heavily influenced by external factors. Like those suggested
by Brand for building architecture, golf course design is, and has been, affected by technology (maintenance, construction and playing equipment), money (economy) and fashion (social trends and eras within allied professional fields). Further, the influence of media on design is more profound than many realize.

This section summarizes the larger influences and events which have shaped the evolution of golf course architecture and its practitioners. Relationships in and on the discipline are revealed through the methods outlined in the previous section. Firstly, a decade by decade analysis is completed using the Scholarship of Integration. Timelines and profiles have been created to inform this synthesis of information. This material will be referenced in the following subsections and is included as both figures (timelines) and appendices (profiles). Secondly, questionnaires will be utilized to contrast the influences, personal journeys and design processes of selected Luminary and Contemporary golf course architects. Finally, a summary of key results illustrates the importance of this study’s findings and the larger implications on golf course architecture.

4.2. Scholarship of Integration – The Evolution of Golf Course Architecture

4.2.1. Pre-1830s

While the exact origins of golf are unknown, the game was already popular when the University of St. Andrews was formed in 1413 (Fore Tee Video, 1997). Evolving on the links land of the eastern coast of Scotland, golf was largely a winter sport played when the native grasses were at their shortest. These undulating sandy areas provided the most superlative playgrounds upon which the game of golf would slowly evolve over many centuries. Initially, golf courses were a product of the natural environment.
Courses varied greatly depending on the suitability of the land. Golf was sustained on sites ideally suited for the game (Fore Tee Video, 1997).

The first written evidence of golf dates back to March 6, 1457 when the Scottish parliament of King James II produced an act prohibiting the playing of both golf and football, as these sports were thought to interfere with compulsory military training for the wars against the English. The Scottish people proved reluctant to relinquish golf and more acts needed to be passed to regulate its play. In 1470, King James III reaffirmed the ban on golf. Similarly, in 1491, King James IV enforced the ban on golf again through the Scottish parliament. However, in 1502 the Treaty of Glasgow between England and Scotland was signed ending the ban on golf. Interestingly, that same year King James IV would make the first recorded purchase of golf equipment from a bow-maker in Perth.

The first golf clubs would have been fashioned by a bow-maker, or other wood craftsman, from a single tree branch, likely Thornwood or Beech (Magnusson, 2000).

Golf would continue to evolve on land ideally suited for the game. However, this natural style would continue to be influenced by external events (Figure 4.1). Golf's popularity quickly spread throughout the 16th century due to its royal endorsement. King Charles I popularised the game in England and Mary Queen of Scots introduced the game to France while she lived there as the young bride of Francis II. In fact, it is believed that the term “caddie” stems from the name given to her helpers, who were the French Military, known as cadets. This was during the time of Reformation when England was Protestant, France was Catholic and Scotland was torn between the two religions (Magnusson, 2000).
Figure 4.1

The Natural School of golf course architecture, pre-1830s (Shackelford, 2003).
Between the signing of the Treaty of Paris (later the Auld Alliance) in 1295, and the Treaty of Edinburgh in 1560, Scotland shared a close alliance with France, stemming from mutual conflicts with the English. Although principally a military and diplomatic agreement, the alliance also extended into the lives of the Scottish people. Building architecture, law, language and cuisine were all affected by French culture. In 1567, James VI, who was raised Protestant, came to power as King of Scotland in lieu of his mother, Mary Queen of Scots. In 1603, with the death of Queen Elizabeth I of England, James VI of Scotland, a decedent of Henry VIII through his great-grandmother Margaret Tudor, became this first King of both Scotland and England, unifying the Crowns. Under Protestant control, Scotland’s people were again heavily influenced by differing social norms and tastes (Magnusson, 2000).

Similarly, with a Scottish born King commanding the English thrown, Scottish culture was exported throughout England. However, while the Crowns of England and Scotland were now held by James, the two countries would not be fully united for another 100 years with the old hatred between them still strong. This meant that most Scots tended to keep their own company in London. Records indicate that golf was played by King James, known as both King James VI of Scotland and King James I of England, at Royal Blackheath Golf Club near London even before the club was officially founded in 1608 (Magnusson, 2000).

In 1604, King James negotiated the Treaty of London, ending hostilities with Spain. Finally at peace with its main rival, British attention shifted from capitalizing on the success of other nation’s colonial accomplishments to the business of establishing its own overseas colonies. The game of golf would slowly spread throughout the British
Empire, including what would become Canada, the United States, South Africa, India and Australia. However, this process would take some 200 years and the resulting layouts were rudimentary at best (James, 1997).

The next century and a half (1600-1750) saw little change in the game itself. The cradle of golf was still Scotland, as the links land best suited the game. Further, the game’s long history and popularity allowed the passing of knowledge between father and son, or mentor and protégée, concerning the golf swing and the making of golfing equipment. The poem *The Goff* by Thomas Matheson, dated 1742, provides the earliest description of golfing implements. Clubs were made in two pieces. Firstly, the shaft was made of Hazel or Ash. Secondly, the head was made from a hardwood like Beech, Holly, Dogwood or Blackthorn. Finally, the two pieces were glued and bound. The process of golf ball making was, perhaps, even more challenging as “feathery” balls were hand manufactured starting with three pieces of leather. These pieces were stitched together and turned inside out leaving a small slit through which the feathers were inserted. The feathers and leather were combined wet and, as they dried, the feathers expanded and the leather shrank, creating a two-way pressure and a tight ball. Great club and ball makers of the day wisely located their businesses at the best sites for golf. This included Douglas Goulay of Bruntsfield, James McEwan of Leith and Musselburgh, and Hugh Philp and Robert Forgan of St. Andrews (Fore Tee Video, 1997).

However, it was during The First Industrial Revolution, which occurred throughout the British Isles from 1760 to 1840, that the game of golf began to quickly change (Hoppit, 2011). Before the advent of the Industrial Revolution, most people resided in small, rural communities where daily existence revolved around farming. Life
for the average person was difficult, as incomes were meager, and malnourishment and disease were commonplace. People produced the bulk of their own food, clothing, furniture and tools. Most manufacturing was done in homes or small, rural shops, using hand tools or simple machines. The Industrial Revolution brought about a greater volume and variety of factory-produced goods and raised the standard of living for many people, particularly for the middle and upper classes. For golf, a sport associated with royalty, this meant greater interest from the growing middle class and those interested in elevating their social status. Soon, the growth of private social clubs became more prevalent, starting with The Honourable Company of Edinburgh Golfers (established in 1744 on the Links of Leith), The Society of St. Andrews Golfers (established in 1754), and The Honourable Company of Golfers at Blackheath (the first golf club established outside of Scotland, founded in 1766) (Cornish and Whitten, 1993).

The emerging popularity of the game of golf soon fostered many opinions concerning the future of the game and its courses. Sometime in the 1700s, although it is not known precisely when, greens were installed at St. Andrews and particular attention was focused on their upkeep. In 1764, feeling the first four holes were too short, members agreed that the twenty-two hole layout should be reduced to eighteen holes, where each of the nine holes was played twice in a round (Cornish and Whitten, 1993). Without the existence of golf course architects, early course alterations were made through a democratic method. This system would be short lived as talented golf professionals soon emerged and were seen as the first experts on the subject.

In a similar way, the Industrial Revolution and British Imperialism would play significant roles in defining the evolution of golf, starting in 1825 when American
Hickory started to be imported and used for shafts (Fore Tee Video, 1997). Soon after, the earliest iron heads emerged. These implements were hand forged and were used almost exclusively to extract golf balls from cart tracks. These ruts were common place on the original links courses, as public right-of-ways frequently crossed the corridors of play. Golfers refrained from using these clubs for too many shots as the iron heads would cause great damage to the feathery golf balls through repeated use (Hoppit, 2011).

4.2.2. 1830s

The early 1830s saw an end to the Landscape Garden Style and Picturesque School of landscape design (Figure 4.2), which had originally started in France but soon established in Britain, beginning in 1792 (Mann, 1993). The history of urban public parks started with the liberation of Nature and the birth of English garden art. The English term ‘park’ originally referred to the deer parks of the social elite. The romantic picturesque gardens emerged because of the growing middleclass of the industrialised world. The urban park became the social melting pot where people could gather to enjoy their new found leisure time, surrounded by nature and fresh air. In this same way, golf courses offered the same escape and the game itself began to attract more devotees (Mann, 1993).

In 1832, growing popularity prompted The Society of St Andrews Golfers to institute the practice of cutting two cups into each of the common greens. This change, effectively creating eight double greens and two single greens, allowed 18 unique holes to exist and permitted numerous matches to occur at once, as players could now pass each other via the outward and inward nine holes of play. Two years later, in 1834, King William IV was persuaded to recognize St. Andrews links to be “Royal and Ancient.”
Figure 4.2 – Timeline of external influences on golf course architecture, 1830s

NOTE: This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

The Society of St. Andrews Golfers quickly capitalized on this opportunity and widely proclaimed St. Andrews to be the “Home of Golf” and the society itself to be the foremost authority on the game. From this, the eighteen-hole layout would become the standard for all later courses.

Prior to this, Leith Links, home to the Honourable Company of Edinburgh Golfers, was generally considered to be the Home of Golf. This is because in 1744, a committee of the Gentlemen Golfers of Edinburgh drafted the first 13 rules of golf to compete for a silver golf club, which was presented by the City of Edinburgh. However, the club disbanded at Leith Links in 1831, owing mostly to financial shortages and likely augmented by the short five-hole layout. Without its most significant patrons, Leith Links soon deteriorated and was formerly turned into a park in 1888 as part of the Leith Improvement Plan for Edinburgh. In 1836, just five years later, the Honourable Company would re-establish at the Old Course at Musselburgh, and its then eight-hole layout. The Company would relocate again in 1891 to Muirfield, a sixteen-hole layout (extended to eighteen-holes the next year for the Open Championship). However, due to the popularity of the game the Company was forced to share Musselburgh with several other clubs. As such, they also played the West Links at North Berwick during the summer months. St. Andrews, Musselburgh and North Berwick, also known geographically as the East Lothian and Fife regions of Scotland, became the centre of the golfing world at this time (Scottish Golf History, 2016).

The growing golf industry allowed, for the first time, skilled entrepreneurs to gain fame. Though the Robertson family had been active in St. Andrews for three generations, starting with Peter Robertson, and were considered by many to be the finest
feathery ball makers in the British Isles (and therefore the world) at the time, the family’s real fame and fortune did not emerge until the late 1830s to 1840s. This is because it was, in fact, the playing skills of Allan Robertson (Appendix A.1), a third-generation ball maker, which gave the family business international recognition. It was later penned by golf architect C.B. MacDonald, in his 1927 publication *Scotland’s Gift*, that “Allan was never beaten” when playing for money. Though his fame in golf would not reach its peak until the 1840s and 1850s, Robertson used his early successes in challenge matches at St. Andrews to grow his business. Accordingly, in 1835, Allan Robertson hired a new apprentice to work in his feathery ball shop in St. Andrews. Tom Morris, later known as Old Tom Morris (Appendix A.2), was hired at the age of 14, and it is said that the two were never beaten when playing as partners (Cornish and Whitten, 1993).

4.2.3. 1840s

When Queen Victoria came to power in 1837, very few rail lines had been completed in Scotland. Further, those which were in operation were primarily used to benefit emerging industries, like the transportation of coal, iron and cotton (Figure 4.3). However, with the 1840s came “railway mania” throughout the British Isles and the construction of thousands of miles of track ensued (BBC, 2014). The already growing middle class now had increased access to previously remote leisure activities, like golf. The influx of money to the sport quickly pitted golfer against golfer to determine who was best and the rail system allowed people from as far as London to travel to Scotland in a single day to watch the matches. Though the game was still an elitist, gentleman’s game, primarily due to the high cost of hand crafted clubs and balls, where the main form
Figure 4.3 – Timeline of external influences on golf course architecture, 1840s

NOTE: This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

of competition was challenge matches, usually backed by noblemen or wealthy businessmen, the large purses attracted the best golfing talent from throughout the British Isles. Many of these men were average working class professionals from within the budding golf industry. Golf professionals made a living playing for wagers, caddying, making clubs and balls, and teaching golf lessons. The most famous of these early golfers was Allan Robertson of St. Andrews.

In 1843, Robertson defeated Willie Dunn Sr. of Musselburgh in a grand match challenge. The two golfers played 20 rounds over 10 days, with Robertson winning two rounds up with one round to play. His playing successes greatly benefited his feathery ball making business, and in his best year (sometime in the mid-1840s) his shop produced some 2,500 hand-made golf balls, most of which were exported to England and America. Robertson’s successes as a golfer also prompted commissions to consult on the laying out of new golf courses. In 1842, Robertson, accompanied by his apprentice and playing partner Old Tom Morris, completed his first known design work when he laid out ten new holes in Barry, Angus, Scotland. This course would eventually become the famous Carnoustie Golf Links. In 1848, Robertson was hired by the Provost, Sir Andrew Playfair, to upgrade the course at St. Andrews. Interestingly, that same year, David Robertson, brother of Allan, immigrates to Australia where he helps to establish the Australian Golf Society and lay out some of the earliest courses (Cornish and Hurdzan, 2006).

Between 1848 and 1850, Robertson worked to complete several alterations at St. Andrews, they are: 1) he widened the course through the removal of gorse and other scrub bushes; 2) he widened and re-turfed the double greens into more than 100 yard-
wide playing surfaces; 3) he created the now-famous 17th hole or Road Hole; 4) he formalised many hazards (bunkers); and, 5) he instituted white (outward) and red (inward) flags to improve safety. While many of these changes were completed in an effort to simply better the course for increased play, the result of widening the playing corridors represents, though likely quite by accident, the first major example of strategic design in the evolution of golf course architecture. By widening the playing corridors, Robertson created options for the golfer. Instead of having to always play over difficult hazards, the added width allowed golfers to choose their own path to the hole, taking on as much or as little danger as they so wished in order to gain an advantage (Cornish and Whitten, 1993).

In 1846, Prime Minister Robert Peel rescinded the Corn Laws of the British Empire, using the Irish Potato Famine, which had started the year prior in 1845, as leverage. The Corn Laws were established on the assumption that the price of food regulated the rate of wages. The common belief at the time was that the price of labour in other countries was so low that the price of commodities must be kept up in Britain to prevent wages going down to the same level. However, the price of these commodities soon became so excessive that it accounted for a greater proportion of people’s wages. As such, these greater prices effectively diminished the population’s ability to purchase the necessities. The benefits of the Free Trade era in Britain were immediate, as goods became cheaper to produce, and domestic products became more competitive in the international markets. This, in turn, increased exports and prosperity. Similarly, imports became more abundant, especially unique materials to benefit Britain’s industrial economy (Schonhardt-Bailey, 2006).
Golf was also affected by the changing times, and in 1848 the gutta-percha ball was introduced and quickly replaced the more costly and less durable feathery. The new gutta-percha was made from the dried gum resin of the Malaysian guttiferous tree, an imported benefit of the Free Trade era (Scottish Golf History, 2016). Whereas the feathery golf ball cost approximately four shillings to manufacture, the new gutta-percha ball was just one-quarter that cost at only one shilling (Cornish and Whitten, 1993). The initial reaction to the new ball was mixed as the smooth “gutty” was not clearly superior to the established feathery. Further, many well-known golf professionals, including Allan Robertson of St. Andrews, made a majority of their income off the production of the feathery ball. Robertson is known to have been in outright opposition to the new technology, even going so far as to make his apprentices vow to never use the ball. However, it was soon realized that the gutty ball performed far better after repeated use, as the surface became nicked and rough. The improved durability and cost associated with the new ball would eventually outweigh any opposition.

4.2.4. 1850s

The Great Exhibition of 1851 marked the peak of Britain’s economic dominance. A vast range of domestic products were displayed for both foreign and local visitors. The spectacle was showcased in the Crystal Palace, a monumental architectural achievement in London’s Hyde Park. Industrialism and Victorian ideals were all-encompassing as the middle class of Britain fought to climb the social ladder (Figure 4.4). Entrepreneurial skill, and the idea of “enterprise,” played a major role in the development of the early
Figure 4.4 – Timeline of external influences on golf course architecture, 1850s

NOTE: This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

nineteenth century economy. These initial entrepreneurs organized production, brought together capital (their own or that of others), and controlled labour. They selected the geographical sites of operation, the technologies needed, the raw materials required, and found markets for their products. These individuals often combined the roles of financier, capitalist, work manager, and merchant. Golf is not precluded from this association, as golf professionals typically made a living in the same entrepreneurial manner. As such, when technology came along which altered long standing practices, it was important for the golf professional to “read the writing on the wall” and adapt as necessary.

In 1851, Allan Robertson fired Old Tom Morris on the spot after witnessing him use the new gutty ball in a match at St. Andrews. The break pushed Morris out of St. Andrews and into a position as head greenkeeper and professional at Prestwick Golf Club. At Prestwick, Morris designed, constructed and maintained the eighteen-hole golf course. His design was revolutionary, as two loops of nine holes were utilized for the first time, each sequence playing in opposite directions (clockwise and counter-clockwise) to add to the variety and the influence of the wind. During his time at Prestwick, Old Tom developed greenkeeping techniques that are still used today. He noticed that “top dressing” the turf with sand improved conditions, and soon employed his small staff to sand as much of the course as possible. He also introduced horse drawn mowers to fairway maintenance and push mowers to green care. In addition to his maintenance duties, Morris operated his own golf equipment business selling gutties and clubs. He also made some profits giving instruction to players and was known to facilitate many of the earliest golfing events (Malcolm and Crabtree, 2008).
In 1854, “Challenge Matches” rose to even greater prominence when Willie Park Sr. of Musselburgh publically challenged Allan Robertson, Tom Morris or Willie Dunn to a match for an £100 purse. George Morris, Old Tom’s brother, accepted the challenge match but was soundly beaten. Allan Robertson had turned down the challenge, as was his right, given the customs of the day and the fact that he was considered the greatest player of the time. Old Tom then tried to win back the Morris family’s honour over a 36-hole match, but also lost to Willie Park Sr. These would be the first of many matches between the Park and Morris families. Though Park Sr. fuelled controversy through his aggressive self-promotion, his challenges lead to increased interest in golf rivalries, more press coverage, and larger matches and tournaments. All these factors would assist in advancing the professional game and increasing the incomes of those involved (Cook, 2007).

When Allan Robertson died in 1859, Old Tom Morris was influential in initiating the first Championship event in 1860, an event held at Prestwick, and even struck the very first shot of the tournament. The event, which would later morph into the Open Championship, was held in order to determine the next “Champion Golfer,” a title long held unequivocally by Allan Robertson. The Open Championship is now the oldest tournament in golf and would become the stage from which many professional golfers would gain international fame, and in doing so would help grow the sport (Malcolm and Crabtree, 2008).

Although the gutty ball had caused a major disagreement between two of the world’s finest golfers (and earliest practitioners of golf course architecture), the new rubber-covered ball quickly revolutionized golf. Even Allan Robertson eventually came
around, and is recognized as the first person to break 80 at St. Andrews in 1858, with his round of 79 using the gutty ball. Professional golfers soon began to experiment with different club designs and materials, something only made possible by the more durable gutty. While records indicate that there were only seventeen golf clubs in Scotland in 1857, the majority of which played their golf over a handful of ancient links courses, evolving technologies and changing social trends would increase this total to seventy-three by 1888 (Cornish and Whitten, 1993).

4.2.5. 1860s

The first “Professional Championship” was held at Prestwick Golf Club in Ayrshire, Scotland in 1860. In a proposed competition for a “Challenge Belt,” letters were sent to St. Andrews, Musselburgh, Edinburgh, Perth and Blackheath, inviting players referred to as "respectable caddies" to represent their home clubs in a tournament to determine the new Champion Golfer. Clubs in Scotland and England were invited to nominate up to three of their best players to compete. Eight golfers contested the event. The pairings were Tom Morris Sr. (Prestwick) with Robert Andrew (Perth), Willie Park Sr. (Musselburgh) with Alexander Smith (Bruntsfield), William Steel (Bruntsfield) with Charlie Hunter (Prestwick), and George Daniel Brown (Blackheath) with Andrew Strath (St Andrews). Willie Park Sr. won the 36-hole event with a total score of 174. Old Tom Morris finished second with a total score of 176 (Joy, 2003).

In 1861, the Professional Championship was again played at Prestwick, however the event was opened to amateur golfers in addition to professionals. Thus, The Open Championship was officially born. Following the success of the first event, a larger pool of 18 contestants was formed. This time, Old Tom Morris won the event with a total
score of 163, beating Willie Park Sr. by 4 strokes. Old Tom Morris would defend his championship the following year, in 1862, winning by 13 strokes over Willie Park Sr. The Open quickly strengthened the golfing rivalry between the Morris and Park families, resulting in many wonderful displays of golf that continue for more than a decade (Cook, 2007).

After Willie Park Sr. secured a victory at the 1863 championship, Old Tom Morris would again capture the title in 1864. The event was finally won by someone else in 1865 when Andrew Strath of St. Andrews won at Prestwick. However, by this time Old Tom Morris and Willie Park Sr. were seen as the world’s best golfers, and in competitive matches Morris had the winning advantage. Hence, in 1865, as the day’s best golfer and the legendary greenkeeper/designer of the course at Prestwick, Old Tom Morris was invited to return to St. Andrews to fill the vacant role of head greenkeeper and professional. Old Tom Morris would remain in this position for 40 years, using his name and abilities to further St. Andrews reputation as the “Home of Golf” (Cook, 2007).

In 1866, Willie Park Sr. would again win the Open title, but would finish second to Old Tom Morris the following year at Prestwick. However, in 1868, a new pair of hands would raise the Challenge Belt when Young Tom Morris, the son of Old Tom Morris, would win the event at the age of 17. Young Tom Morris still remains the youngest winner of the Open Championship. The young golfing phenom would defend his title the next two years, in both 1869 and 1870, becoming the first player to win the event three years in a row. In doing so, as per the approved rules, he became the Champion Golfer and the Challenge Belt became his official property. The quality of the matches during this decade and the intense family rivalries, combined with the extensive
railway system completed between London and Scotland (including Prestwick) by the 1870s (Figure 1.1), greatly increased the popularity of golf and turned the lowly golfing professional into an international celebrity (Figure 4.5) (Cook, 2007).

4.2.6. 1870s

In 1870, Tom Dunn (Appendix A.3), son of Willie Dunn Sr., moved from Scotland to England to work at the London Scottish Golf Club at Wimbledon. The Dunn family name was well known throughout the golfing world, due to the golfing exploits of Willie Dunn Sr., and Tom used this fact to his advantage, capitalizing on the booming golf industry in England at the time. Tom likely got the position in London due to the fact that his father and uncle, Jamie Dunn, had laid out and built the original course at Wimbledon in 1865 while working at Blackheath Golf Club, where they also altered several holes. In 1871, Tom extended the golf course to eighteen holes, as it was originally, but had been reduced to just seven overtime. Tom Dunn would remain at the club as head greenkeeper and professional until 1880, at which point he returned to Scotland and resumed his previous role as head greenkeeper and professional at North Berwick (Seaton, 2016).

In 1871, the Open Championship was cancelled, as there was no trophy to award the winner. Though Prestwick had organized and hosted The Open from 1860 to 1870, in 1871 it was jointly agreed that The Royal and Ancient Golf Club of St Andrews and the Honourable Company of Edinburgh Golfers would collaborate with Prestwick to conduct the annual event. However, when Young Tom Morris won his fourth title in 1872 at Prestwick, and technically his fourth consecutive due to the cancelled event in 1871, he was awarded a medal as the intended trophy had not been completed. In 1873, the Claret
Figure 4.5 – Timeline of external influences on golf course architecture, 1860s

NOTE: This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

Jug was first presented at The Open, when Tom Kidd won the event at the Old Course at St Andrews. This would be the first time the event was hosted on a course other than Prestwick (Cook, 2007).

In 1872, Charles Blair MacDonald (Appendix A.4) travelled from Chicago to Scotland to attend St. Andrews University. Through his uncle, a member of the Royal and Ancient Golf Club, MacDonald was first exposed to golf. Old Tom Morris not only provided MacDonald with his first clubs, but also instructed the young man on the principles and fundamentals of the game. His chief playing partner and friend was the famous Young Tom Morris. MacDonald would take this education back with him to America where, later in the 1890s, he would lay the foundations for America’s Golden Age of Golf Course Design (Bahto, 2002).

In 1874 and 1875, the Open Championship was won by the Musselburgh brothers Mungo Park I and Willie Park Sr., respectively. These wins, combined with those of Willie Park Sr. previously, simultaneously bolstered the Park name to significant fame and strengthened the already solid golfing traditions of Musselburgh. The 1880s would lead to many opportunities for the Parks as golf course designers, and would also see the emergence of Musselburgh as the dominant golfing force through the procurement of some excellent young golfing talent (Stephen, 2005).

In 1875, during a match between the father and son team of Old and Young Tom Morris, and the brothers Willie Park Sr. and Mungo Park I, Young Tom Morris obtained a telegram informing him that his pregnant wife had gone into a difficult labour. On arrival home by ship, Young Tom was informed that both his wife and child had been lost. He was only twenty-four years of age. Broken hearted, the young golfing prodigy
took to the bottle and died four months later, on Christmas Day, of a pulmonary hemorrhage. After his son’s death, a subdued Old Tom Morris carried on in his role as custodian of the greens for the Royal and Ancient (R&A) at St. Andrews, but cut back on his money-matches. He would go on to contest at nineteen more Open Championships, and played in his last in 1895 at the age of 74. Further, in 1879, Old Tom was commissioned to layout the Machrihanish Golf Club. This would be the return of Morris to design and would revive a design career that would span another 25 years, until his retirement in 1904 (Cook, 2007).

In essence, the 1870s lead to the establishment of three dominant names in golf – Morris, Park and Dunn. However, select individuals also emerged at this time, those who had the necessary means/status and passion for golf, which could shape their own opportunities in the emerging field of golf course design. Laidlaw Purves, the son of a Scottish physician, was one such individual. Educated at Edinburgh University in law, Purves began to study medicine while working as lawyer. His medical studies would take him to Australia, Berlin, Leipzig, Vienna, Utrecht and Paris. Finally, after completing his European medical training he settled in London. Having learned golf at Bruntsfield Links in Edinburgh as a teen, Purves was troubled at the state of golf in London when he arrived in the 1870s, as there were only four clubs of merit in the entire country. Though Westward Ho! and Hoylake were deemed excellent layouts, they were too far from London to be accessed regularly. Further, Blackheath and Wimbledon were poor substitutes for Scotland’s links courses, and these clubs were overrun with members as a result of growing interest in the game. In 1877, Purves discovered Sandwich, southwest of London. Though it took until 1887 to secure the funding, members and
purchase of the land, Purves eventually laid out the course that would become Royal St. Georges (MacWood, 2008).

The 1870s also resulted in the establishment of the first golf clubs in North America, specifically Canada. The Royal Montreal Golf Club was formed in 1873 and the Royal Quebec Golf Club was formed the following year in 1874. In 1876, the Toronto Golf Club was established on the Fernhill property, later to relocate in 1911. These three courses likely predate the establishment of any known clubs in the United States because of three main factors (Figure 4.6). Firstly, the American Revolution of 1776 severed ties with Britain, limiting the influence of British culture on the emerging American way of life. Secondly, the American Civil War, which occurred from 1861 to 1865 (Figure 4.5), would have consumed the American people with other priorities. Finally, in Canada, longstanding colonial influences from British and French cultures, both of which were playing golf before the 1830s, would have assisted with the popularity of the game. Similarly, immigration from England surged in the 1830s as lower class workers were made redundant by the rapid industrialisation of Britain. Perhaps more significantly for golf, some 170,000 Scots, encouraged by the British government, crossed the Atlantic between 1815 and 1870 (Bumsted, 2013). These immigrants represented a cross-section of the Scottish population. Most were farmers and artisans, although large numbers of business and professional people also made the journey to the “New World.” These middle class individuals, and those who would climb the social ladder of their new Canadian home, would likely have imported and popularised the prevalent leisure activities of their homeland, notably golf. The United States would not see the emergence of its first golf clubs until the mid-1880s, namely
**Figure 4.6 – Timeline of external influences on golf course architecture, 1870s**

**NOTE:** This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

Dorset Field Club in Vermont (1886), Foxburg Country Club in Pennsylvania (1887), and St. Andrew’s Golf Club in New York (1888) (Cornish and Hurdzan, 2006).

4.2.7. 1880s

Golf course architecture in the 1880s continued to be heavily influenced by the men from two places – St. Andrews and Musselburgh. Old Tom Morris had now served as the head of The Home of Golf for fifteen years. Now in his early 60s, Old Tom’s reputation as the wise “Grand Old Man of Golf” began to form. His achievements in The Open, innovations in turfgrass maintenance, and early successes as a designer, had made him the face of the golfing industry, and someone whom people would travel long distances to be able to say they had met and spoke of golf. Golf professionals themselves were no different, and Old Tom attracted many young men seeking to establish their own fortune and fame (Cook, 2007).

In 1880, Bob Simpson (Appendix A.8) of Elie moved to St. Andrews to apprentice with club maker Robert Forgan. In doing so, he would seek out Old Tom Morris and establish a friendship. This relationship was likely further strengthened in 1884 when Bob’s brother Jack Simpson would claim the Open Championship at Prestwick, a course near and dear to Old Tom. Further, Douglas Rolland, a cousin of the Simpson brothers and also from Elie, would tie for second with Willie Fernie. This was important because Elie, located just 13 miles south of St. Andrews, is also within the County of Fife. Starting in 1880, Musselburgh native Bob Ferguson would win three consecutive Open Championship titles in 1880, 1881 and 1882. In 1883, Willie Fernie of St. Andrews would defeat Bob Ferguson in a playoff, at Musselburgh no less, to prevent Ferguson from winning his fourth consecutive Open Championship. Old Tom would
have considered this a great victory for both his family and the County of Fife, as only his deceased son had achieved the feat of winning four consecutive titles. This pride may be represented by Old Tom’s six-hole addition at Prestwick in 1883. Jack Simpson’s, Douglas Rolland’s and Willie Fernie’s domination at the 1884 Open Championship at Prestwick would have re-established Fife as the dominant region in Scotland, on a course recently extended by the Grand Old Man of Golf himself (Simpsons of Carnoustie, 2016).

In 1886, this rapport enabled Bob Simpson to aid in the re-design of Balgownie Links, later known as Royal Aberdeen, under the direction of Old Tom. Further, in 1888, Bob would again assist Old Tom in the redesign of Carnoustie, where he was greenkeeper and professional. However, in addition to himself, Bob also employed the services of his younger brother Archie Simpson (Appendix A.8) to help with the work. Archie worked on the construction team at Balgownie Links and would later, in 1894, become its greenkeeper, a position he would hold for 17 years. In 1887, Archie would begin his solo career in golf course design with the creation of Nairn. Archie would use these early successes and mentorship to become the most famous golf course architect of the Simpson brothers. This pattern was continued in 1889 when James Braid (Appendix A.15) of Elie, nephew of Douglas Rolland, would leave home for the first time to apprentice in St. Andrews as a joiner (Darwin, 1952) (Simpsons of Carnoustie, 2016).

Although the County of Fife would reclaim its position as the dominant region in golf by the mid-1880s, the three consecutive wins by Bob Ferguson at the Open Championship between 1880 and 1882 furthered Musselburgh’s already deep rooted golfing passions. Four golfers emerged from Musselburgh at this time who would soon
use these successes to inspire their own golfing futures, they were: 1) Willie Park Jr. (Appendix A.11); 2) Willie Dunn Jr. (Appendix A.3); 3) Willie Campbell (Appendix A.9); and, 4) David Brown. Of these men, only David Brown would not pursue a career in golf course design. In 1886, David Brown would win his first and only Open Championship when the event was played at Musselburgh. In 1886, Willie Park Jr., son of the famous Willie Park Sr., would lay out his first course at Innerleithen, Scotland. The following year, in 1887, Park Jr. would win his first Open Championship at Prestwick, re-establishing Musselburgh’s reputation and positioning East Lothian as the dominant region in Scotland. In 1889, Willie Park Jr. would again capture the Open title with a victory at Musselburgh. In 1889, Willie Campbell was offered the role of head golf professional at Ranfurly Castle, where he completed his first design work with the completion of a nine-hole course. In 1888, Willie Dunn Jr. would partner with his more established brother, Tom Dunn, to create the famous Golf de Biarritz in France. Willie Dunn Jr., would later work as head professional at Westward Ho! in England and Biarritz in France before moving to America to continue his career in golf (Seaton, 2016) (MacWood, 2008) (Cornish and Whitten, 1993).

Having been born in Musselburgh, Tom Dunn was clever to use this association to benefit his own career starting in the 1880s. However, having grown up at Blackheath in London, his formative years, and likely his understanding of golf, was not shaped by the links courses of Scotland. Tom learned golf course design, maintenance and construction from his father and uncle during the creation of the original layouts at Blackheath and Wimbledon. As such, Tom’s own style reflected this simplicity and was very basic and functional, involving little or no construction. However, like many
designers of this era, his primary goal was to satisfy the growing numbers taking up the game and increase his own sales of golf clubs through the establishment of more golf courses. Tom Dunn’s work as a designer was later harshly criticised. Without the unique natural characteristics of the links land of Scotland to inspire design, these new inland courses evoked characteristics similar to that of the prevalent landscape design style of the era, the Victorian Style (Figure 4.7). Symmetric and calculated layouts became the early trend, as hundreds of clubs were formed in England (Figure 4.8) (Seaton, 2016) (MacWood, 2008).

Tom Dunn claimed to have created some 137 layouts over his career, many of which serviced the needs of the growing golfing population of London. Dunn’s use of Victorian principles, which mainly occurred on sites where he did not have strong natural features, is likely directly related to his London upbringing and exposure to Victorian Styles in landscape architecture and architecture. This pattern was widely copied, and even exported to the United States, as Scottish golfing professionals sought to capitalize on the rapidly expanding golf market. Golf courses were simply viewed as the playing fields from which the golfing professionals could make their real income through the sale of golfing equipment (Seaton, 2016) (MacWood, 2008).

Professional golf by the mid-1880s had progressed greatly since the first Open Championship in 1860. Though amateur golfers were permitted to play in the Open Championship, starting in 1861, the event had never been hosted outside of Scotland and had always been dominated by Scottish golf professionals. As such, in 1885, The Royal Liverpool Golf Club founded The (British) Amateur Championship. The first event was
Figure 4.7 – Timeline of external influences on golf course architecture, 1880s

NOTE: This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

Figure 4.8

Natural School (pre-1830s) compared to the Victorian or Penal School (1870s-1890s)

(Shackelford, 2003).
won by Scotland’s Allan Macfie with a 7&6 win over England’s Horace G. Hutchinson (Appendix B.1). However, in 1886, Hutchinson would win the event when played on the Old Course at St. Andrews. Hutchinson was a wealthy and educated man, who had studied law at Oxford. In 1886, Hutchinson published his first book titled *Hints on the Game of Golf*. Though not about golf course design, this book proved to be Hutchinson’s entrance into the field of writing, though this work comes as little surprise, as it had become quite fashionable for Britain’s social elite to write about their hobbies. In 1887, Hutchinson would win his second Amateur Championship, and was widely recognized as an authority on the game. As such, in 1888, Hutchinson laid out his first golf course. The design would become known as Royal Eastbourne, and would become notorious for its wild greens (MacWood, 2001). In 1889, having now dabbled in design, Horace Hutchinson penned his first article on the subject of golf course architect titled *How to Layout Links and How to Preserve Them*, a 12-page synopsis published in C. Robertson Bauchope’s *The Golfing Annual*. This is the first known example of writing on the subject of golf course design, a fact that can be explained with the understanding that certainly all the Scottish golf professionals were less educated men (MacWood, 2001).

4.2.8. 1890s

In 1890, Horace G. Hutchinson would achieve his best career finish in the Open Championship, finishing in sixth place at Prestwick Golf Club. Wisely capitalizing on his successes, Hutchinson published what would arguably become his most successful book, *Golf*, later that same year. Feeling fulfilled with his accomplishments in golf, Hutchinson did what most socialites did at the time and decided to find a new and exciting hobby to captivate his attentions. So, in 1890, Hutchinson moved to London and
began a serious study in painting and sculpture. His mentor for the next year would be renowned artist George Frederick Watts (Figure 4.9), a popular English artist. However, unlike most other artists of his age, Watts was uniquely multi-disciplinary and worked in both paintings and sculpture. Watts was a figure head of the Symbolist movement in Britain, which originated in France, Russia and Belgium during the 1860s and 1870s. Symbolist painters used mythological and dream imagery to convey deeper meanings than were being expressed through the Victorian aesthetic, which was largely one-dimensional (Figure 4.10) (Oxford Index, 2016).

Among the English speaking artists of the time, the closest counterparts to Symbolism were Aestheticism and the Pre-Raphaelites. Whereas the Aesthetic Movement was loosely focused on placing aesthetic values over social-political themes, the Pre-Raphaelites were much more structured. Also known as the Pre-Raphaelite Brotherhood, the Pre-Raphaelites were originally a group of seven painters, poets and critics with a shared set of principles. John Everett Millais, William Holman Hunt, and Dante Gabriel Rossetti established the Pre-Raphaelite Brotherhood in 1848. The group's intention was to reform art by rejecting what it considered the mechanistic approach first adopted by Mannerist artists who succeeded Raphael and Michelangelo, hence the name “Pre-Raphaelite.” The group associated their work with John Ruskin, a leading English art critic, draughtsman, watercolourist, writer, thinker and philanthropist. All of Ruskin’s writings emphasised the connections between nature, art and society. These writings were greatly important to not only the Pre-Raphaelites, but also the work of William Morris, the socialist and Arts and Crafts Movement pioneer (MacCarthy, 2012) (Eve, 2013).
Figure 4.9
George Frederick Watts and Mary Seton Watts (Watts Galley, 2016).
Figure 4.10 – Timeline of external influences on golf course architecture, 1890s

**NOTE:** This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

Interestingly, in 1850, George Frederick Watts assisted Sara Prinsep in securing a 21-year lease on a house from another acquaintance Lord Holland. The house, later to become known as “Little Holland House,” was a large stately dwelling in an idyllic rural setting, located just off Kensington High Street near Hyde Park in London. What started as a three-day stay, soon turned into a 21-year residency for Watts. Watts soon became like family and used his artistic skills to elevate the social gatherings of the home. Soon, Little Holland House became well known for its “saloon” parties. The home became a mecca for the changing artistic scene in London. The Pre-Raphaelites looked to Watts for guidance as he was one of the few artists celebrated by Ruskin, as he wrote in *The Stones of Venice* (1851-53):

“We have, as far as I know, at present among us, only one painter, G.F. Watts, who is capable of design in colour on a large scale. He stands alone among our artists of the old school, in his perception of the value of breadth in distant masses, and in the vigour of invention by which such breadth must be sustained; and his power of expression and depth of thought are not less remarkable than his bold conception of colour effect. Very probably some of the Pre-Raphaelites have the gift also: I am nearly certain that Rossetti has it, and I think also Millais; but the experiment has yet to be tried.” (Eve, 2013)

In 1856, Watts had several visitors to his studio at Little Holland House, namely William Holman Hunt and Dante Gabriel Rossetti. Perhaps more importantly, was the fact that historians suggest that Ruskin himself pressed Rossetti to convince Edward Burne-Jones, a former apprentice of both Ruskin and Rossetti, to live with Watts. Ruskin feared that the influence of Rossetti and Morris, who had all been living at Red Lion Square also in London, was becoming unhealthy for Burne-Jones’ artistic future. Ruskin
believed that Burne-Jones would benefit from Watts’ influences in contrast to the “narrow medievalism” emanating from Red Lion Square (MacCarthy, 2012) (Eve, 2013).

Throughout the 1860s, Watts became famous for his portraits, often emphasising emotion through rich colour, a trait similar to the work of Rossetti. His subjects for these works included Arts & Crafts pioneer William Morris and, Watts’ future wife, actress Ellen Terry. Terry was 30 years Watts’ junior, and the couple divorced after she eloped with another man after less than a year of marriage. During the 1870s, Watts’ style shifted to incorporate more Classic traditions. Watts hoped to trace the evolving "mythologies of the races" in a grand synthesis of the day’s prevailing spiritual ideas with modern science, particularly Darwinian evolution. In the early 1870s, with the lease on Little Holland House coming to an end, Watts commissioned a new house nearby in London. In 1886, at the age of 69, Watts was remarried to Mary Seton Watts (nee Mary Seton Fraser Tytler) (Figure 4.9) a Scottish craftswoman, designer and social reformer. The pair would have been well established in the London studio when Horace G. Hutchinson began his studies in 1890 (MacCarthy, 2012).

Although his studies under the great G.F. Watts would only last one year, due to recurring illnesses which would plague him his entire life, this time clearly had a lasting effect on Hutchinson. In 1920, Hutchinson would pen his last book titled Portraits of the Eighties, in which he would recognize the work of George Watts, William Morris and the Pre-Raphaelites (including, most prominently, J.E. Millais and E. Burne-Jones). Hutchinson even describes his own “Watts worship” in a story relating an event at Tate Britain (Gallery) of London. Further, he articulates that posterity is funny and no one can
ever predict how time will judge them, but proceeds to declare that Watts will rank “with the immortals” (Hutchinson, 1920).

Hutchinson would spend the winter of 1890 in France, as it was believed that the warmer weather would aid in his recovery. The idea obviously worked as his abilities increased and his new location soon allowed him to recapture his love for golf. After spending the winter months playing golf over the links course at Biarritz, Hutchinson published another book, titled *Famous Golf Links*, in 1891. Also in 1891, Frederick Watts bought land near Compton in Surrey. Both Watts and his wife moved to the area and built a home and studio. In Compton, Mary Seton Watts would establish the Compton Potter Arts Guild and the Compton Arts and Crafts Guild. It is likely that Hutchinson would have spent some time here with the couple before Watts’ death in July of 1904.

In 1892, Hutchinson would create his most celebrated course at Royal West Norfolk. Proud of the work completed he observed “its distinguished features are the absence of artificiality and the great variety to be found in the holes” (MacWood, 2001). In 1897, Hutchinson would become first golf editor of the new periodical *Country Life* magazine, based in London. From this position, Hutchinson would help dictate the next two decades of golf course architecture in Britain. The magazine covered the pleasures and joys of rural life, and enticed Britain’s growing urban middleclass with visions of a better life. As a contributing editor of the weekly golf column *On the Green*, Hutchinson hand selected those he respected to contribute. Hutchinson brought on Scotsman A.J. Robertson, a talented writer and former editor of *Golf Illustrated* and a young Bernard Darwin (Appendix B.4) from the *Evening Standard*. Further, Hutchinson invited
numerous talents to contribute, including architects Herbert Fowler (Appendix A.5) and Harry Colt (Appendix A.13), greenkeeper Peter Lees, and top players like J.H. Taylor (Appendix A.17) and James Braid. While Hutchinson provided articles on all aspects of the game, he used his literary soapbox to publicize the works of the emerging naturalistic golf course designers and generally promoted his vision of golf course architecture (MacWood, 2001).

In 1898, Hutchinson was instrumental in establishing The Oxford and Cambridge Golfing Society, commonly referred to as The Society. Hutchinson served as The Society’s first president, and was joined by friend John Low (Appendix B.2) as captain, Arthur Croome as secretary, and H.S. Colt as a committee member. Bernard Darwin played in the first match following The Society’s establishment. Members qualify by virtue of their participation in the University Golf Match, a tradition which pre-dated The Society with the first match played in 1878 at Wimbledon Common. These relationships, formed between Hutchinson and the other members of The Society, have been largely taken for granted in the history of golf course architecture. Hutchinson’s playing history, social status, and role with Country Life magazine would have commanded great respect. Moreover, the impacts that Low, Colt and Darwin would have on golf architecture in the 1900s cannot be understated (MacWood, 2001).

Hutchinson’s influence is further exemplified through his relationship with Old Tom Morris, which was cultivated during his playing years as an amateur. Hutchinson’s unorthodox playing style reminded the Grand Old Man of his lost son (MacWood, 2001). As such, Hutchinson was deeply connected to the Old Course at St. Andrews and was the first English Captain of the Royal and Ancient Golf Club in 1908. Similarly,
Hutchinson’s friend John Low had served on the R&A Committee on the Rules since its formation in 1897, becoming chairman in 1913 and continuing in that role until his retirement in 1921. Interestingly, Hutchinson’s comments about artificiality and variety in design, regarding his work at Royal West Norfolk (1892), are soon echoed by Willie Park Junior in 1896 with his book *The Game of Golf*. This book serves as the first writing from a professional golfer on golf course architecture in a chapter titled *Laying Out and Keeping Golf Links*. Likely not by coincidence, the title of Park’s chapter is very similar to that of the article penned by Hutchinson in 1889 for *The Golfing Annual*, titled *How to Layout Links and How to Preserve Them*. Further, Park’s ideas would be extended by John Low in his book *Concerning Golf*, published in 1903. Again, a lack of artificiality and variety in the design are key factors behind the proposed principles of golf course architecture. Further, the importance of the Old Course at St. Andrews and the idea of strategic design are initially proposed. Hutchinson’s influence on the evolution of golf course architecture in the 1890s is significant, and it is most likely that his time immersed in the shifting artistic community of London in 1900 played a major role in his ideas on design.

The relationships of Old Tom Morris are also essential to the evolution of golf course architecture in the 1890s. In 1892, Old Tom Morris returned to Dornoch to expand the existing layout to 18 holes. His presence spurred the interest of a young Donald Ross (Appendix A.18) who would move to St. Andrews the following year to apprentice under Morris as a greenkeeper. In 1893, Ross moved back to Dornoch to serve as an apprentice. The following season, Ross was made head professional, club maker and greenkeeper at the Dornoch Golf Club. In 1899, Ross would move to the
United States with a position at the Oakley Country Club near Boston. Here he would complete his first design through the re-modelling of the club’s existing 11-hole layout, completed previously by Willie Campbell (Klein, 2001).

Another disciple of Old Tom Morris who was influential in the 1890s was Charles Blair MacDonald. In advance of the World's Columbia Exposition of 1893 Macdonald got a chance to foster some real interest in golf. Chicago was eager to show it was a world class city and it was deemed essential that golf be made available to the visiting dignitaries from Great Britain. Hence, Macdonald was presented with his first opportunity to layout a golf course. In the spring of 1892, MacDonald laid out his first golf course, a 7-hole routing at Lake Forest, located just north of Chicago. The land was owned by United States Senator Charles Farwell. Later that summer, MacDonald completed his second project. The layout, a 9-hole design, would become the Chicago Golf Club. In 1893, MacDonald would lengthen the layout to 18-holes. The Chicago Golf Club would serve as the first 18-hole layout in the United States. Shortly thereafter, MacDonald, not fully pleased with his design, set about building a new course for the Chicago Golf Club. MacDonald financed the project, purchased the necessary 200 acres of farmland, built himself a home adjacent to the course, recruited the membership, and oversaw every aspect of the design and construction. The course opened for play in 1895 (Bahto, 2002).

Charles Blair MacDonald was not the only American working to improve the face of golf in the United States in the 1890s. Devereux Emmet (Appendix A.6), being an avid sportsman and member of the upper class of Long Island, was asked to layout a 9-hole golf course as part of Alexander Stewart’s planned city design of Garden City in
New York. After an extended trip to Scotland, a trip he made almost every autumn in order to sell hunting dogs throughout the British Isles, Emmet completed the Island Golf Links in 1897. In 1899, Emmet extended his existing layout to 18 holes. The new expanded course was renamed the Garden City Golf Club. Emmet’s early success on Long Island would soon foster a friendship between himself and Charles Blair MacDonald, one that would have immense implications for golf architecture in the United States starting in the 1900s (Smith, 1987) (Shackelford, 1999).

In 1894, Harry Shapland Colt would assist his mentor Douglas Rolland, who had taught Colt golf as a young boy at Worcestershire Golf Club, in the design of a new golf course at Rye in the south of England. Colt had attended Cambridge University for law, where he had captained the golf team and won the R&A Jubilee Vase in both 1891 and 1893. It is believed that Colt became a member of the R&A through his friend John Low, who had been a year ahead of Colt at Cambridge. In 1895, although practicing law as a partner in the firm of Sayer & Colt, Harry Colt became the honorary secretary of the Rye Golf Club. In 1897, both Colt and Low would become two of the first members of the Royal and Ancient Rules of Golf Committee. In 1898, the pair would join Horace Hutchinson in founding The Oxford and Cambridge Golfing Society. These men’s many personal connections, including Colt’s association to St. Andrews and Old Tom Morris through Douglas Rolland, likely helped evolve current thinking on golf course architecture. Rye Golf Club would become (and still is) the home of The Society. The club traditionally hosts the annual University Golf Match every five years, like the Old Course at St. Andrews does for the Open Championship (Hawtree, 1991).
In 1894, Old Tom Morris was asked to layout the links at Cruden Bay, located north of Aberdeen on the west coast of Scotland. Morris was assisted by Archie Simpson. The course was commissioned by the Great North of Scotland Railway Company and was fully opened in 1899 as part of the recreational facilities offered by the Cruden Bay Hotel. An inner loop of nine holes, known as the “ladies course,” was also completed at the same time (Malcolm and Crabtree, 2008).

The influence of Old Tom Morris and St. Andrews would again play a factor in the evolution of golf course architecture when Albert Warren Tillinghast, a Philadelphia socialite, first visited Scotland in 1896. Tillinghast took lessons from Old Tom and quickly fell in love with the game of golf and the town of St. Andrews. Tillinghast would make a point of returning to St. Andrews for several years to visit with his friend Old Tom Morris. At this time, it was very common for socialites to regale their friends with stories of their travels, and a common thread amongst golfers was a desire to visit St Andrews and learn from the Grand Old Man of Golf himself. Tillinghast would have likely followed suit, and his friendship with Old Tom and time in Scotland are what almost certainly lead to his first design opportunity in 1898. At Frankford, located just outside Philadelphia, Tillinghast would layout his first course. While the design was undeniably rudimentary, and unfortunately no longer exists, it would stoke the fires of creativity (Cornish and Whitten, 1993).

Thomas Bendelow (Appendix A.12) was a Scottish born golf designer who had grown up on Balgownie Links, now Royal Aberdeen Golf Club, and was introduced to golf at an early age by his father. Bendelow would make several trips to St. Andrews as a teenager. In 1892, Bendelow married and immigrated to the United States, specifically
New York. Trained as a typesetter, Bendelow secured a job at the New York Herald. In 1885, Tom replied to an advertisement by a family seeking golf lessons from a qualified instructor. Although he had never formally instructed, Bendelow replied to the posting and was soon hired by the Platt family. Mr. Platt happened to be a co-founder of Standard Oil, and in addition to the lessons, Bendelow was asked to layout a short 6-hole course on the grounds of the Platt family estate on Long Island. Although the course was likely very simple in form, it would later become part of the Nassau Country Club in 1896. In 1898, Bendelow got his break when the New York City Park District employed Bendelow to redesign and manage the Van Cortlandt Park, in the Bronx. This was the country’s first eighteen hole municipal golf course. Bendelow would redesigned the existing nine holes, added a second nine holes, and supervise the construction and maintenance of the course (Bendelow, 2006).

Bendelow’s early work would pre-date the later “Scottish Invasion” at the turn of the century, which would result in a major influx of Scottish golf professionals to North America. As such, Bendelow was well positioned to capitalize on the many opportunities available at the start of the 1900s. Unfortunately, Bendelow’s disconnection for the changing Scottish and English golfing community would mean that his methods of design would be typical of the earlier professional golfers of the 1870s, 1880s and early 1890s. As a result, Bendelow has since garnered the nickname “The Johnny Appleseed of Golf” due to his portfolio of some 400 to 600 courses over a 35-year span in the United States. However, though rudimentary in nature these courses served to rapidly spread the game of golf, and the simple and functional layouts kept costs low. Bendelow’s design career
would not achieve greater architectural significance until following the First World War and the introduction of British design ideas fostered earlier (Bendelow, 2006).

Lastly, in 1898, an equipment advancement would occur which would again change the game of golf. The Haskell ball, designed and patented by Coburn Haskell an American, is the first rubber-cored golf ball. The ball consisted of a solid or liquid core wrapped tightly with rubber threads covered with a layer of gutta-percha or balata (type of rubber substance made from sap). The hand winding of the rubber threads was soon mechanized and the outside covering was initially stamped with a Bramble pattern (a design used prior to dimpling which started 1908). The new golf balls looked just like Gutties but gave the average golfer an extra 20 yards from the tee. This technology would arrive in Britain in 1900, resulting in two major effects. Firstly, golf professionals began to experiment with dimple patterns and club designs. Secondly, the added distances reached by the new ball meant that courses and designers were now forced to re-think overall length and feature placement (Scottish Golf History, 2016).

4.2.9. 1900s

The 1900s (Figure 4.11) might be the most underappreciated decade in the evolution of golf course architecture, as the relationships and external artistic influences from the previous decade have now coalesced to form a new vision for the future, based on a finer understanding of golf’s roots. This new era has been dubbed the Arts & Crafts School or the Early Strategic School of golf course design (Figure 4.12). As people grew tired of the penal Victorian style of golf course design, which had plagued inland golf in Britain from the 1870s to 1890s, architects began to questions why the earliest links courses, like the Old Course at St. Andrews, had never lost their allure and intrigue to
### Figure 4.11 – Timeline of external influences on golf course architecture, 1900s

**NOTE:** This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).


<table>
<thead>
<tr>
<th>Year</th>
<th><strong>Events</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>Rubber-core “Haskell” ball invented in U.S. and adopted universally (GEA)</td>
</tr>
<tr>
<td>1901</td>
<td>The first radio receiver, successfully received a radio transmission (SOC)</td>
</tr>
<tr>
<td>1902</td>
<td>Liquid-cored golf ball (GEA)</td>
</tr>
<tr>
<td>1903</td>
<td></td>
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<tr>
<td>1904</td>
<td>‘Wizard’ wound ball (GEA)</td>
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<tr>
<td>1905</td>
<td></td>
</tr>
<tr>
<td>1906</td>
<td>B. Holt, manufacture of steam engines and combines, converts one of his machines into a track-type tractor or ‘crawler’ (CM)</td>
</tr>
<tr>
<td>1907</td>
<td>B. Darwin becomes the first daily golf writer, writing for both <em>The Times</em> and <em>Country Life</em> (MED)</td>
</tr>
<tr>
<td>1908</td>
<td>Dimpled golf balls (GEA)</td>
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<tr>
<td>1909</td>
<td></td>
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</tbody>
</table>
Figure 4.12

Victorian or Penal School (1870s-1890s) compared to the Early Strategic or Arts & Crafts School (1900s-1910s) (Shackelford, 2003).
both the advanced and beginning golfer. The answer, revealed in this decade through the work of a select few, would be “strategy”. Several men realized that the Old Course never lost its luster because it played different each day. The randomness of the ground and features (including hazards) created an infinite variety of angles and lies on which one would experience shots. As a result, much thought was needed to outwit the inherent problems posed by nature herself. It had become apparent that the Old Course was the ultimate strategic design, with an architectural character worth emulating on all projects (Shackelford, 2003).

In 1901, in an area called “the heathlands” located southwest of London, Willie Park Jr. increased the standard for inland golf course architecture in Britain when he opened both Sunningdale (Old) and Huntercombe to rave reviews. Willie Park Jr. was one of the first to select a site densely covered with brush because of the quality of the material underneath. Park understood that sand was a common thread linking all classic golf courses, and he exploited this feature when he found the heathlands of England. The two courses had large greens with rolling contours and bold, manmade hazards which appeared to be natural. These two projects secured Park’s success, allowing him to become one of the first full-time golf course architects (Cornish and Whitten, 1985).

However, Park was not alone in working to better the field of golf course architecture at the start of the 1900s. John Low was contemplating the design of his home club of Woking in 1901. Whereas Park was focused on site selection and naturalness of design, Low was assessing the design merits of each of the holes at Woking, which had been laid out in the Victorian style by Tom Dunn in 1893. In 1901, John Low worked with Woking’s greenkeeper Stuart Patton to revise the fourth hole.
The pair added two central “Principal’s Nose” style bunkers, reminiscent of the 16th hole at the Old Course at St. Andrews, and created a tilted green. Woking member Tom Simpson (Appendix A.22) was apparently so taken with the hole’s new strategy that he spent an entire day studying it, and later became a golf course architect himself. Low and Patton would continue to rework Woking throughout the early part of the 1900s. Their efforts became the toast of London’s golfing community and their principles were well published by the likes of Hutchinson and Darwin. Further, in 1903, John Low would publish his ground-breaking book Concerning Golf. In it, Low would elaborate on his strategic design principles, providing the first written summary of such for golf course architecture. His theories regarding hole routing and hazard placement would become widely circulated. Low’s work (strategy) combined with Park’s work (naturalness and site selection) would greatly advance the evolving discipline of golf course architecture in Britain at the start of the 1900s. Interestingly, these major changes for golf course architecture were occurring in the same geographical region to which Hutchinson’s artistic mentor George Frederick Watts, and his wife, had relocated to in 1901. Compton and Woking are both located in Surrey, while Sunningdale is just eight miles away from Woking (though the Sunningdale Golf Club’s property officially straddles the Surrey County limits) (Advocate, 1929).

In 1901, Harry Colt, a mutual friend of both Horace Hutchinson and John Low through the Oxford and Cambridge Golfing Society, applied for the position of secretary at Willie Park Jr.’s Sunningdale course. Colt was awarded the job and it was from this base that he gradually developed his career as a golf course architect. Colt would make continuous improvements to the Sunningdale course until his departure in 1913 to focus
on his booming golf course architecture business. In 1906, Colt was commissioned to layout a course at Stoke Poges, now Stoke Park, in Buckinghamshire. It would be here that Colt would meet his future partner Charles Hugh Alison (Appendix A.25). Alison would assist with construction and would be made secretary of the club once the course was completed in 1908. With both men stationed as secretary at different clubs, the pair would continue to collaborate on a variety of projects, including Kingsthorpe (9 holes) in 1908 and Northampton County in 1909 (Hawtree, 1991).

In 1907, Colt would be asked to provide input on the proposed design work of a young aspiring golf course architect for a new golf club in Leeds. Dr. Alister Mackenzie (Appendix A.16) was one of fourteen founding members of the Alwoodley Golf Club and had been elected to the club’s Green Committee. He was also appointed as the club’s first Honorary Secretary. In addition to his managerial roles with the club, MacKenzie saw an opportunity to start a career in design. Alister offered his services and presented a layout and series of drawings for the course. Due to his lack of experience, the founding members called in Harry Colt to offer a second opinion. Colt walked the property with MacKenzie and even stayed at his house. The pair shared many similar views on design and a bond was formed. Colt gave the club his approval and MacKenzie was left to complete his work. In 1908, as a result of the success of Alwoodley, MacKenzie was asked to layout 18-holes for a new course at Moortown near Leeds. While a friendship between both MacKenzie and Colt had been formed, a partnership between the two would not occur until after World War I (Burt, 2008).

Throughout the 1900s, Horace G. Hutchinson was still dabbling in golf course architecture, in addition to his ongoing role as golf editor at Country Life magazine. In
1904, Hutchinson would complete layouts for the Isles of Scilly Golf Club (9-holes) in England and Le Touquet Golf Club in France. Both courses were completed with the assistance of John Henry Taylor and Willie Fernie. In 1906, Hutchinson would lay out Harewood Downs with J.H. Taylor. Taylor had been a lifelong friend of Hutchinson’s and had grown up working at the Hutchinson estate. Taylor was exposed to golf at Westward Ho! (Royal North Devon) where he frequently caddied for Hutchinson as a boy. In 1894, Taylor won one his first Open Championship, winning by five strokes over Douglas Rolland at Royal St. George’s. Taylor would win the Open three more times in 1900, 1909 and 1913. As such, he was also sought after for his design prowess, solely due to his playing abilities. However, through Hutchinson he had an early mentor who was connected to the pulse of the changing golf scene in Britain. By the end of the decade Taylor’s playing fame had resulted in more commissions. In 1909, he would complete the original course at Hainault Golf Club. Known as the Upper Course, the design was simple, with no sand or water hazards. The 18-hole layout was purpose-built to serve as the first municipal course in England (Cairns, 2006). Frederic George Hawtree (Appendix A.27) provided most of the technical knowhow for the construction, creating the foundations for the future partnership of Hawtree & Taylor following the war (Cairns, 2015) (Cornish and Whitten, 1993).

However, J.H. Taylor was not the only professional golfer still using his playing abilities to secure work as a golf course architect. In fact, Taylor would be dubbed one of Britain’s “Great Triumvirate” of golfers from this era that would all use their fame to forge design careers. The trio, comprised of J.H. Taylor, Harry Vardon (Appendix A.14), and James Braid, would cumulatively win The Open Championship sixteen times in the
twenty-one tournaments held between 1894 and 1914. In the five tournaments in this span The Triumvirate did not win, one or more of them would place second. With the “Vardon Invasion” tour of the United States in 1900, they became the first international golfing stars (apart from maybe Old Tom Morris). Vardon would complete a layout at Woodhall Spa in 1903 and would consult at Royal County Down in 1908. Sadly, tuberculosis would plague Vardon for much of the decade, limiting his ability to play and also work as a golf course architect. James Braid would complete layouts at Kirkistown Castle Golf Club in 1902 and Barnehurst Golf Club in 1903. In 1904, Braid moved to the newly opened Walton Heath Golf Club, a Herbert Fowler design opened that same year, where he served as head professional for the remainder of his life. Braid would focus on playing golf for much of the 1900s, before retiring from competition in 1912 to focus on golf course design (New Work Encyclopedia, 2008) (Darwin, 1952).

The effect of Herbert Fowler on the later work of James Braid is likely under appreciated. Although the two never partnered, Fowler was made Director of the club when it opened and Braid would remain in his position for more than 45 years. One can only assume that Braid appreciated the design. Herbert Fowler has been dubbed one of “The Heathland Quartet.” Along with Willie Park Jr., Harry Colt and John Frederick Abercromby (Appendix A.7), Fowler’s work in the heathland’s southwest of London in the 1900s and early-1910s would help redefine golf course architecture in Britain prior to WWI. In 1908, Herbert Fowler completed a renovation at Royal North Devon, a layout originally completed by Old Tom Morris. In 1908, Abercromby worked to complete the Worplesdon Golf Club in Surrey. Unfamiliar with golf course architecture, Aber consulted Willie Park Jr. during the initial phases of the design. In 1909, Aber partnered
with Willie Park Jr. again to create Coombe Hill Golf Club, also in Surrey. Again, it was the relationships between these men that spurred on the evolving ideas of the decade (Cornish and Whitten, 1993).

Golf course architecture of the early-1900s in the United States was a continuation of the practices of the 1890s. Victorian and penal designs were still prolific, as expanding the market was more important to golf professionals than finding sites ideally suited for the cause. However, the mid- and late-1900s would see the progress of several individuals who would drastically alter the practice of golf course architecture in the United States, building to even greater contributions starting in the early-1910s.

Firstly, in 1899, Donald James Ross would leave his position at Royal Dornoch to move to the United States. In 1901, Ross would be persuaded to move to Pinehurst, North Carolina to work as the winter golf professional at the Tufts family’s new resort. On arrival, Ross set to work revising the existing layout of Course No. 1 at Pinehurst Resort. In 1907, Ross would complete a second course for the resort, now famously known as Pinehurst No. 2. However, while Ross would add an additional two courses at the resort in 1910 (No. 3) and 1919 (No. 4), the Pinehurst area would become his home and he would spend a lifetime perfecting his layouts, especially Course No. 2 (Klein, 2001).

The next important contributor to the evolution of golf course architecture in America in the 1900s was Charles Blair MacDonald. Having already studied golf at St. Andrews under Old Tom Morris in the 1870s, MacDonald was well aware of the ideals of the Scottish game. In 1900, after having completed several golf course designs in Chicago, MacDonald moved to New York. Almost immediately, MacDonald began a
quest to create the finest golf course outside of the British Isles. His vision was based around his idea of “transatlantic translation,” whereby he would take the principles of the greatest holes in Scotland and work them into a site in the United States. From 1902 to 1904, Macdonald took extended trips to Europe to study the best courses. He combined detailed field study and surveying, with interviews of 30 prominent golfing figures in Britain, to define the elements which attributed to the greatness of the day’s best golf holes (Bahto, 2002). This process is likely the first example of evidence-based design in golf course architecture, a practice only recently applied to the field of landscape architecture in North America (Brown and Corry, 2011). In 1906, MacDonald would return to the United States with detailed ideas for his ideal course. In 1907, he would hire Seth Raynor (Appendix A.21), an engineer, to survey his chosen site on Long Island. Construction would begin that same year, on what would become the National Golf Links of America. Construction would not be completed until the following decade (Bahto, 2002).

The last significant contributor to the evolution of golf course architecture in America in the 1900s was George Clifford Thomas Jr. (Appendix A.19). In 1904, Thomas completed his first design with a nine-hole layout at Marion in Massachusetts. Soon after, he would complete an 18-hole layout on his family’s suburban estate near Philadelphia. The course was named Mount Airy Country Club and was purchased in 1908 by a local group of golfers. In 1910, Thomas completed Spring Lake Golf and Country Club in New Jersey. This would be his last major commission before the onset of WWI. However, what Thomas had helped to start would later be referred to as the
Philadelphia School of Design, the products of which would have an enormous impact on
golf course architecture starting in the 1910s (Shackelford, 1996).

However, courses themselves were not the only products advancing the field of
golf course architecture in the 1900s. Writings on the subject of golf course architecture
were also prevalent and progressive. In 1900, American, Walter James Travis (Appendix
A.10), having just won his first of three U.S. Amateur titles, would complete the
Ekwanok Country Club in Manchester, Vermont, under the guidance of Scottish architect
John Duncan Dunn, son of Tom Dunn. Between 1900 and 1901, Travis would take an
extended trip to the British Isles to study the classic links courses. After returning home
to the United States, Travis would pen the ground breaking article Impressions on British
Golf. In 1902, he would publish a sequel, simply titled Hazards. Finally, in 1908, Travis
founded The American Golfer magazine. As owner and editor, Travis, unfiltered, wrote
extensively on architecture, rules, courses, etiquette, maintenance, and equipment. It has
been argued that his publication was the country’s most influential golf magazine,
especially in the pre-war era (Homsey, 2011).

Another early writer/designer at this time in the United States was Albert Warren
Tillinghast (Appendix A.20). In 1907, Tillinghast laid out his first course on the farm of
Charles Worthington in Shawnee-on-Delaware in Pennsylvania. One year later,
Tillinghast would begin a 32-year writing tradition, in which he would go on to publish
numerous articles in The American Golfer, Country Life and Golf Illustrated between
1908 and 1935. He was named Editor of Golf Illustrated in June of 1933. Between 1935
and 1937 he published frequent articles in The Professional Golfer of America. Finally,
after moving from New Jersey to California, Tillinghast published a monthly article and
served as Associate Editor with the Pacific Coast Golfer between 1938 and 1940. His self-reflection as a writer likely contributed greatly to his later design successes, and both his writing and courses would contribute greatly to the establishment of the Philadelphia School of Design (Tillinghast, 1995).

On the other side of the Atlantic, writer/designer Tom G. Simpson was also contributing greatly to the evolution of golf course architecture in Britain. While observing the alterations to his home club of Woking by John Low and Stuart Patton between 1904 and 1907, Simpson began to form his own ideas concerning golf course architecture. These ideas were first put to paper in 1908 and 1909 when he wrote several letters to Golf Illustrated describing the merits of good golf course architecture and feature design/placement. These early writings would serve as a precursor for his luminary 1929 publication The Architectural Side of Golf, co-written with H.N. Wethered. Again, these revelations would serve as the fodder for his later design career (MacKenzie, 2008) (MacKenzie, 2016).

Having been raised in Scotland and mentored in golf by both Willie Campbell, as a golf professional, and Andrew Forgan, in clubmaking, George Cumming (Appendix A.23) moved to Canada in 1900 to assume the position of head professional at the Toronto Golf Club. Cumming won the Canadian Open in 1905 and finished runner-up in 1906, 1907, 1909 and 1914. In 1909, Cumming received one of his first design commissions when he expanded the Mississauga Golf and Country Club from nine to eighteen holes. Cumming was likely given this opportunity because of his prominent position at the Toronto Golf Club, playing skill and Scottish heritage. Among Cumming’s young assistant professionals at the Toronto Golf Club in the early 1900s
were several brothers, later to be well known as the “Amazing Thompsons” (Barclay, 2000). Having apprenticed under Cumming, a young Stanley Thompson (Appendix A.30) obtained his first design commission in 1909, when he was hired as the first head professional at the Wa Wa Hotel at Norway Point, Lake of Bays. Here, at the age of 17, Thompson gave instruction and laid out, or helped to lay out, one or two golf courses. Though separate, these early projects would create a shared passion that would result in a design partnership and several successful projects starting in the early-1910s (Barclay, 2000).

A final theme emerged in America in the early-1900s which would become a much more important trend in the 1910s – the owner/designer. After selling his company in 1896 for a large sum, Pittsburgh native Henry Fownes (Appendix C.3) decided he wanted to design and build his own golf course. After organizing enough members to fund the project, Fownes purchase approximately 200 acres and began making plans for his new course. Starting in 1903, with 150 men and some two dozen mule teams, Fownes would spend the next year meticulously crafting the land into his desired vision. Though the design was penal in nature, the result proved that an owner with vision and money could craft their own product to compete with America’s best Scottish golf professionals of the time (Glenn, 2015).

4.2.10. 1910s

The 1910s in the United States were defined by an era of “expansion” (Figure 4.13). America was globally understood to be a land of opportunity, in which a man (or woman of means) could craft his own future. With the arrival of the Model T in 1913,
Figure 4.13 – Timeline of external influences on golf course architecture, 1910s

NOTE: This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

consumers in rural America were no longer locked into local pockets with limited
merchandise and high prices, in comparison to the larger cities. The popularity of rural
America soon exploded, and along with it came visions of domestic bliss. Magazines
such as *The American Golfer*, founded in 1908 by Walter J. Travis, sought to capitalize
on these social desires. As stated in the book *The American Golfer*, published by Charles
Price in 1987 as a retrospective on the influential magazine, “the American Golfer is
supposed to have been not so much a real person as an outrageous state of mind, like the
era he lived in.” Growing middle and upper class wealth resulted, as had occurred
previously in Britain, in greater interest in both leisure and recreational activities. This
fact, combined with an abundance of available land for development, meant that golf was
well-suited to capitalize.

Similar to the pioneering work by Henry Fownes at Oakmont starting in 1903,
wealthy American golfers soon realized that they too could be capable of designing and
building a golf course. Where most examples would eventually fall short, due to a lack
of knowledge in good design principles, two projects emerged from this era that would
redefine the practice of golf course design in America – Merion and Pine Valley.
However, before the completion of these courses came a landmark design which would
greatly enlighten all which followed. The National Golf Links of America, on Long
Island, was completed in 1911 by Charles Blair MacDonald. Not immodestly, he
anticipated that it would be viewed as his lasting monument, and would serve as the most
noteworthy course outside the British Isles. Using elements from the best golf holes in
Britain, MacDonald imported the first elements of strategy into American golf.
MacDonald is hailed as the father of American golf course architecture for this reason,
and is recognized as the first to use the term “golf architect” in 1901. Later partnering with engineer Seth Raynor in 1915, MacDonald would also complete layouts at Piping Rock (1913), Sleepy Hollow (1914), Greenbrier (1915), and Lido (1919). MacDonald never accepted a fee for his design services (Bahto, 2002).

In 1910, the Merion Cricket Club decided to relocate, as the new Haskell golf ball had made their existing layout too short. After the club had purchased a new parcel in the suburb of Ardmore, located just outside of Philadelphia, a committee was created to determine the design of the new course (later known as the East Course). Hugh Irvine Wilson (Appendix C.2), a rich socialite and graduate of Princeton, was appointed as the chairman of the committee, as he was the only member with the desire or means to spend seven months in the British Isles studying the most important golf courses. Wilson was also smart enough to seek out Charles Blair MacDonald at his ongoing project on Long Island, the National Golf Links of America, before embarking on his trip overseas. Upon his return, Wilson enlisted the help of construction supervisor William Flynn (Appendix A.29) and greenkeeper Joe Valentine to assist in the execution of his design. Laid out on only 125 acres, Merion East stands as one of the most efficient uses of space in the history of golf course architecture. The design was so well received that Wilson was asked to design and construct the West Course the following year (Shackelford, 1999).

In 1910, George Arthur Crump (Appendix C.1) sold the profitable Colonnades Hotel in Philadelphia, which he had previously inherited, in order to fund his dream of building a golf course. Pine Valley would be the result, and stands as the most collaborative effort in the history of golf course architecture. When Crump purchased 184 acres outside of New Jersey in 1913, he had the wisdom to consult others. Firstly,
Harry Colt was asked to advise on the intended routing. Colt’s design partner, C.H. Alison, would also play a minor role as a consultant. Secondly, Crump established an advisory council to assist with the design. Members included William Fownes of Oakmont, Simon Carr, and Alan Wilson (a soil and turfgrass expert). Finally, Crump beseeched many of the top architects of the day to visit his site and comment on the ongoing work. Visits were made by A.W. Tillinghast, Donald Ross, George C. Thomas Jr. (founding member), Perry Maxwell (Appendix A. 24) and Dr. Alister MacKenzie. Tillinghast is even credited with the creation of the famous “Hell’s Half Acre” hazard on the 7th hole. This melting pot for design ideas resulted in one of the most unique products the field of golf course architecture had ever produced. Furthermore, unlike a typical wealthy owner, Crump lived on site in a tent in order to supervise the day-to-day progression of his vision. His premature death in 1918 occurred with only 14 of the 18 holes completed. As such, friends like Hugh Wilson and William Flynn of Merion assisted in the completion of the work. While the final design is typical of the penal nature of the era, the details of the design took naturalness and scale to a level never before reached in the United States. Perhaps even more so than the undeniable quality of the design, stands the monumental impact Pine Valley had on the design community itself. Collaboration and the sharing of ideas became the norm, allowing for an early form of peer review, which would help push the boundaries of the developing discipline. It is no surprise that the 1920s and 1930s are commonly referred to as the “Golden Age of Golf Course Design” in American, due to the practices first instigated in this era (Shackelford, 1999).
In addition to completing layouts at St. George’s Hill and Camberley Heath in England, and his early consultation work at Pine Valley, Harry Colt would also make a more sweeping tour of North America starting in the early 1910s. In 1912, Colt completed a layout for the relocated Toronto Golf Club, a site which had been selected by head professional George Cumming. It is likely that Cumming took great interest in the practices of England’s foremost golf course architect. In 1914, Colt returned to Canada to layout the Hamilton Golf and Country Club. Again, Colt’s methods would have been intensely studied by head professional Nicol Thompson (Appendix A.30) and younger brother Stanley Thompson (Barclay, 2000).

This chronology gets more interesting when one considers that Stanley Thompson left studies at the Ontario Agricultural College (OAC), now the University of Guelph, to join his brother Nicol and George Cumming in their new golf course architecture company, Thompson, Cumming and Thompson, in 1913. It is probable that following the construction of the Toronto Golf Club, in which Cumming would have had played a large part, the firm was established in order to complete the construction of Hamilton Golf and Country Club. Stanley likely left school believing that the in-the-field education he would receive on a Colt project would be far superior to classroom studies in math, botany, chemistry, farm mechanics, horticulture, and zoology. This argument is supported by the fact that Cumming had started his design career before Colt’s arrival, with a renovation at Mississauga in 1909 and the creation of 9 holes at Oshawa Golf and Curling Club in 1911. Further, Cumming had capitalized on two sites not selected for the new Toronto Golf Club and had created courses at Summit and Scarboro for different clients. These courses were both successfully completed in 1912. As such, there would
be no reason that the new firm of Thompson, Cumming and Thompson did not complete any courses in 1913 or 1914, other than the likelihood that they were already engaged assisting with the completion of Hamilton Golf and Country Club for Harry Colt (Barclay, 2000).

An era known as “The Great Unrest,” shook Britain’s capitalist foundations between 1910 and 1914. A series of serious strikes were held as a result of the declining standard of living of Britain’s working class. Expansion in the United States was mirrored by an era known as “The Boom Years” in Canada. Greener pastures in the west prompted many to move across the Atlantic (Figure 4.13). The golf industry was not immune, resulting in the relocation of many golf professionals to Canada and the United States. In 1912, lawyer and golfer Arthur Vernon Macan (Appendix A.26) moved his young family to Victoria, British Columbia, Canada in search of a fresh start. Having won the Pacific Northwest Golf Association (PNGA) Men’s Amateur Championship at Butte Country Club the previous year, Macan was commissioned to complete the design at Colwood (now Royal Colwood) on Vancouver Island in 1914. Wisely, Macan did not approach this task lightly and consulted with Captain W. Chambers, a Scotsman and son to Tom Dunn, who was also a member of his home club of Victoria Golf Club. Captain W. Chambers, originally William Dunn, had married Nina Grace Chambers and adopted her surname in 1897. As such, Chambers had come from a long lineage of golf course designers and was more than qualified to assist. Colwood opened to great acclaim on November 8, 1914 starting the career of one of the most prolific designers of the Pacific Northwest (PNGA, 2016).
Similarly, Willie Park Jr. crossed the Atlantic for the first time in 1916. Between 1916 and 1923, Park spent much of his time in the United States and Canada. He was able to establish a base office in New York and a branch office in Toronto. Except for the occasional visit home, Park would spend the rest of his working life in North America. Park became so sought after that in the end, it was said, he literally worked himself to death. Park’s best courses resulted where he personally supervised the construction processes. Courses such as the Maidstone Club on Long Island, and Mount Bruno Country Club in Montreal, are examples of such. Park’s other notable projects from this period include Olympia Fields (North) in the United States. His Canadian projects include Calgary Golf and Country Club, Weston Golf and Country Club and Royal Ottawa (Cornish and Whitten, 1985).

Though activity had decreased in Britain, several developments did occur to further the field of golf course architecture in the 1910s. Firstly, in 1910, Tom Simpson joined Herbert Fowler’s established design practice in England. Secondly, in 1910, Bernard Darwin published *The Golf Course of the British Isles*. With colourful descriptions by Darwin, and vivid illustration by Harry Rountree, the book became an immense success. Thirdly, in 1913, Dr. Alister MacKenzie completed his design at Sitwell Park in England. The year prior, in 1912, MacKenzie would be introduced to Robert Hunter (Appendix B.3), an eventual design partner, through Harry Colt. Finally, in 1914, *Country Life* magazine held a competition to raise interest in the field of golf course architecture. The challenge was to design an ideal two-shot hole. Dr. Alister MacKenzie entered and won. The contest was judged by Bernard Darwin, Horace Hutchinson and Herbert Fowler. MacKenzie won a sum of £20 for his winning entry, but
more importantly gained international recognition for the accomplishment when his entry was published in 1915. In 1914, the onset of WWI brought the world of golf course architecture to a complete halt. Although the war would come to an end in 1918, the recovery of the British economy would take much longer than in North America (Burt, 2008).

4.2.11. 1920s

Following the conclusion of WWI, Britain’s economy would enter a period of postwar stagnation that would endure until 1929 and the start of the Great Depression (Figure 4.14). This trend was juxtaposed by the strong North American economies in the United States and Canada, which were benefiting from the Roaring 20s. Reasoning for this disparity was mainly due to the massive loss of life assumed by the British during the war. Comparatively, whereas the Canadian and American populations would see a loss of approximately 0.8% and 0.15% respectively, the United Kingdom encountered a loss of an estimated 1.6% to 2.0% of its people (War Office, 1922) (Love, 1931). These percentages account for approximately 735,000 to 890,000 deaths in the United Kingdom alone. As such, the loss of three-quarters of a million people devastated the British economy, which had already been struggling pre-war. These happenings would have significant impacts on the world of golf course architecture as well.

In Britain, the massive loss of life resulting from WWI meant that many established clubs simply did not have the pre-war numbers necessary to generate revenue. As such, many previously restricted clubs began to open their doors to a wider array of social classes. There simply wasn’t the need for more golf clubs. However, as people began to move on, a need did occur through a lack of public golfing facilities (non-
**Figure 4.14 – Timeline of external influences on golf course architecture, 1920s**

**NOTE:** This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

membership clubs). The duo of Hawtree and Taylor, having already designed the first public golf course in Britain prior to the war, were well suited to the task. In 1922, the firm of Hawtree & Taylor was officially formed. The pair would create layouts at Norwich Muni, Martson Green Muni, Pype Hayes Muni and White Webbs Muni during this period. In 1931, F.G. Hawtree personally funded, designed and constructed Addington Court, a 27-hole daily-fee course open to the general public. It served as the first privately owned public golf course in Britain. For the next fifty years Addington Court would serve as the headquarters for the Hawtree family firm (Cornish and Whitten, 1993).

In 1923, the firm of Fowler, Abercrombie, Simpson and Croome is formed in England. Though likely envisioned as a collaborative effort to produce work, the economy of Britain did not cooperate. Perhaps as a result, Tom Simpson would leave and form his own company, Simpson & Co., in 1928. A young Philip MacKenzie Ross, who had been hired by Simpson while still with Fowler, was made partner. Simpson would then seek work in Europe and would create Club de Campo de Malaga in Spain in 1928 and the New Golf Club in France in 1929. In 1929, Simpson would continue a long history in writing when he published *The Architectural Side of Golf* with Herbert N. Weathered (MacKenzie, 2008) (MacKenzie, 2016).

In 1919, following the war, Dr. Alister MacKenzie returned home to re-establish his medical practice. During this time he also started his first book, titled *Golf Architecture*, which would be published in 1920. Around the same time, partners Harry Colt and Hugh Alison were preparing to publish their own architectural manifesto, titled *Some Essays on Golf Course Architecture*. MacKenzie would assist with some thoughts,
and in 1920 a partnership was announced and the London firm of Colt, MacKenzie and Alison was born. However, the partnership was never clearly defined and personality conflicts between Colt and MacKenzie were soon evident. In 1922, and without the assistance of MacKenzie, Colt created a second course at Sunningdale, which would become known as the New Course. MacKenzie withdrew from the partnership in 1923.

In 1926, MacKenzie would travel to the United States for the first time visiting MacDonald’s National Golf Links of America on Long Island and touring California with friend Robert Hunter. Robert Hunter would publish the celebrated text *The Links* that same year. On this trip, MacKenzie would partner with Hunter to complete the Cypress Point Club and the Monterey Peninsula Country Club (Dunes Course). Before his departure back to England, MacKenzie inspected the proposed site for Pasatiempo Country Club in Santa Cruz, California (Beck, et. al, 1990).

In the fall of 1926, MacKenzie boarded a ship and departed for Australia. Between October of 1926 and February of 1927, he visited and made plans for numerous courses including Royal Adelaide, Royal Melbourne, Metropolitan, Royal Sydney, Victoria, Kingston Heath, Royal Queensland, New South Wales and Yarra Yarra. MacKenzie would appoint Alex Russell as his design partner for all of Australasia near the end of 1926. Russell would oversee the majority of the new construction projects. Nevertheless, it is the influence of MacKenzie which is still visually evident in Australia today (Beck, et. al, 1990).

In 1927, MacKenzie would travel back to the United States where he would again partner with Robert Hunter at the Meadow Club and the Valley Club of Montecito. Before returning to England at the end of 1927, MacKenzie would travel to Michigan to
meet with Perry Maxwell and visit the proposed site of Crystal Downs Country Club. MacKenzie created detailed green sketches before his departure, leaving Maxwell to complete the work. Although still engaged in banking until 1929, Perry Maxwell was another prolific designer who, during this decade, completed layouts at Twin Hills (1921), Donoch Hills (1923), Rolling Hills (1926), and Melrose (1927) (Beck, et. al, 1990) (Elliott, 2002).

The 1920s would become one of the most important and creative times in the history of North American golf course architecture. This decade would result in the emergence of more polished and thoughtful designs (Figure 4.15). As such, the era has been dubbed “The Golden Age” as a result of the many incredible layouts completed during the inter-war period. As proposed by Geoff Shackelford in his book The Golden Age of Golf Design, published in 1999, there were four major “schools of design” which shaped the field of golf course architecture in the 1920s and 1930s. They were the: 1) MacKenzie School; 2) National School; 3) Philadelphia School; and, 4) Ross School. Max Behr (Appendix B.5) is the only member of the proposed MacKenzie School whose actions have not been summarized previously for the 1920s (Shackelford, 1999).

Between 1922 and 1927, Max Behr was responsible for the design of approximately a dozen courses in California. His new build projects included Hacienda CC (1922), Montecito CC (1922), Lakeside Golf Club of Hollywood (1924), Oakmont CC (1924), and Rancho Santa Fe CC (1927). His design commissions also included re-modeling work at Victoria Club (1923), Brentwood CC (1925), and the Lake and Ocean courses at Olympic Club (1926). Though the Great Depression would put an end to Behr’s design career, he continued to write about course architecture, construction
Figure 4.15

Early Strategic or Arts & Crafts School (1900s-1910s)

compared to the Strategic School (1920s-1930s) (Shackelford, 2003).
practices and the rules of golf. In the August 1927 edition of *American Golfer*, Behr published an article titled *Art in Golf Architecture*. It remains his most enduring statement on the subject and perfectly sums up the purpose of golf course architecture (Yale, 2009) (Cornish and Whitten, 1993).

From the National School of design, architects Charles Blair MacDonald, Seth Raynor and Charles Banks (Appendix A.28) would all make major contributions to golf course architecture in the 1920s. Partners MacDonald and Raynor would create layouts at Mid Ocean Club (1924) and Yale University (1926). During the completion of the Yale course, teacher Charles Banks was hired by Raynor to assist with the work. On his own, Raynor completed layouts at Carmago (1921), Shoreacres (1921), Yeamans Hall (1925), Fox Chapel (1925) and Fishers Island (1926). In 1926, Seth Raynor died of pneumonia, leaving his assistant Charles Banks to complete his remaining projects. Between 1928 and 1931, Charles Banks completed several new layouts including Knoll GC (1929), Tamarack CC (1929), Westhampton CC (1929), Essex County CC (1930), Cavalier G&YC (1930), Forsgate CC (1931), and Caracas CC (1931). However, it would be his 1930 renovation of the Donald Ross course at Whippoorwill Country Club which has been deemed his best work. In 1931, at age 48, Charles Banks died suddenly of a heart attack. His last course was the Castle Harbour GC in Bermuda, located next door to the famous Mid Ocean Club, a course he had helped construct just after his start with Raynor and MacDonald (Cornish and Whitten, 1993) (Shackelford, 1999).

The Philadelphia School of design was the largest and most prolific of the decade. Architects A.W. Tillinghast, George C. Thomas Jr. (with William P. Bell), and William Flynn (with partner Howard Toomey) together form this group. During the 1920s,
Tillinghast would create layouts at San Francisco (1920 and 1924), Winged Foot’s East and West courses (1923), Baltusrol’s Upper and Lower courses (1922), Newport Country Club (1923), Scarboro (1924), and Baltimore’s East course (1926) (Shackelford, 1999).


Following WWI, William Flynn joined forces with Howard Toomey, a civil engineer, in the firm of Toomey & Flynn. The firm’s projects included Lancaster Country Club (1920), Cherry Hills Country Club (1923), Cascades Golf Club (1923), Rolling Green Country Club (1926), Huntington Valley Country Club (1927), Philadelphia Country Club (1927), and a nine-hole addition at The Country Club (1927). However, many believe Flynn’s best work was completed in 1931 when he re-worked and re-routed Shinnecock Hills on Long Island, New York (Morrison and Paul, 2011) (Cornish and Whitten, 1993).

Finally, and perhaps more importantly, was the work of Donald Ross. Throughout the 1920s and 1930s, Ross built or re-worked almost 400 golf courses. At his peak Ross had five offices, including a winter office in Pinehurst. During this time he employed many associates to oversee the construction and implementation of his detailed drawings. For his works in the Northeastern United States and Pinehurst area, Ross was
often more intimately involved. By 1925, three-thousand men were employed annually in the construction of Donald Ross’s golf courses (Shackelford, 1999).

Not recognized by the American “schools of design” were the prominent Canadian designers. Both Arthur Vernon Macan and Stanley Thompson also capitalized on the Roaring 20s. Though injured in one of Canada’s most famous battles during WWI, namely Vimy Ridge in France, Arthur Vernon Macan would become a pioneer for golf course design in the Pacific Northwest. Projects included Manito (1922), Marine Drive (1923), Inglewood (1923), Fircrest (1925), Columbia-Edgewater (1925), California Golf Club of San Francisco (1926), and Broadmoor (1927) (PNGA, 2016).

After completing the design and construction of Brantford Golf and Country Club in 1920, as part of the firm Thompson, Cumming and Thompson, Stanley Thompson started his own practice in 1921. Though Stanley was very busy from 1921 to 1924 with layouts at Highland (1921), Humber Valley (1921), Islington (1921), Muskoka Beach (1922), North Bay (1922), Old Ashburn (1922), Beach Grove (1922), Briars (1922), Cedarbrook (1922), Itanhanga (1922), Sleepy Hollow (1923), Squaw Creek (1924), and the Ladies Golf Club of Toronto (1924), it would be the next five years (1925-1929) which would bring him significant fame. Courses would include Jasper Park Lodge Golf Club (1925), Banff Springs Hotel Golf Club (1927) and St. Georges Golf and Country Club (1929). In 1923, Thompson would pen his views on golf course architecture in the publication *General Thoughts on Golf Course Design* (Barclay, 2000).

In early 1929, the International Society of Golf Architects was formed. The founding members included Dr. Alister MacKenzie, Harry Colt, John F. Abercromby, Herbert Fowler, John Morrison, Phillip Mackenzie Ross, Tom Simpson, Hugh Alison,
Guy Campbell, C.K. Hutchison, Horace Hutchinson, Bernard Darwin and J. Stewart Paton. The Society’s offices were located at Tom Simpson’s offices in England and he was made Honorary Secretary of the European Section. Unfortunately, this effort would not survive the turmoil of next decade. On September 4, 1929 stock prices fell drastically in the United States. On October 29, 1929 these economic events would become worldwide news, in an event later dubbed “Black Tuesday,” as a stock market crash destroyed the U.S. financial system. The effects of these events would be felt internationally by 1930 (Suddath, 2008).

4.2.12. 1930s

Beginning in 1929, the Great Depression was a worldwide economic downturn which lasted until about 1939 (Figure 4.16). It was the longest and most severe depression ever experienced by the industrialized Western world, sparking fundamental changes in economic structure, policy and theory. The Great Depression caused drastic declines in output, severe unemployment, and acute deflation in almost every country of the world. Its social and cultural effects were no less staggering. In golf, membership numbers fell by up to sixty-five percent as disposable income disappeared (Kenny, 2009). In the prairies of the United States and Canada, mass migration occurred when the Dust Bowl forced farmers and populations from rural areas to urban centres. To battle these issues, American President Franklin D. Roosevelt introduced his New Deal programs between 1933 and 1938. Designed to help America pull out of the Great Depression, an array of services, regulations, subsidies and work creation programs were introduced to combat rising unemployment and poverty (Berton, 2001). One of the most successful of these initiatives was the Works Progress Administration (WPA) of 1935.
<table>
<thead>
<tr>
<th>Year(s)</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1930</td>
<td>Diesel engine introduced</td>
</tr>
<tr>
<td>1932</td>
<td>Cool vulcanized thin-covered golf balls</td>
</tr>
<tr>
<td>1933</td>
<td>Steel shafts become the playing standard</td>
</tr>
<tr>
<td>1934</td>
<td>Clubface inserts on woods</td>
</tr>
<tr>
<td>1935</td>
<td>Small-cored golf ball</td>
</tr>
<tr>
<td>1936</td>
<td>World’s first live televised sporting event is the Olympics in Germany, only local</td>
</tr>
<tr>
<td>1937</td>
<td>Mechanical golf swing machine used to test clubs and balls</td>
</tr>
</tbody>
</table>

**Figure 4.16 – Timeline of external influences on golf course architecture, 1930s**

**NOTE:** This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

Though the WPA is mainly acknowledged for its legacy of bridges, roads and schools, there was also potential for recreational proposals. As such, golf courses would also benefit from the incentives, hundreds of them in fact. Though many of the golf courses created through this program were municipal, some funding was given to private ownership. As such, architects soon realized that their careers could be sustained through proper access of the available funding. Perhaps then it should not be a surprise that ex-banker turned golf course architect Perry Maxwell was one of the most prolific designers of the decade (Elliott, 2002).

In 1935, Perry Maxwell began construction on Prairie Dunes in Kansas. In 1937, he would complete the construction of the first 9 holes. Although the final 9 holes would be completed four years after his death in 1956, by his son Press Maxwell, Perry Maxwell’s work at Prairie Dunes has been cited as one of America’s most influential courses by today’s top golf course architects. Ben Crenshaw, of the firm Coore and Crenshaw, stated in 2006 that "Prairie Dunes is the kind of course we should study" (Elliot, 2006). Maxwell’s light handed design methods have been widely recognized and are now frequently copied. However, it is likely that the economic reality of the times had equally as much to do with Maxwell’s design approach as did his desire to create a natural aesthetic.

In 1936, Maxwell completed the 18-hole layout at Southern Pines Country Club in Tulsa, Oklahoma (Elliott, 2002). Following the death of Dr. Alister MacKenzie in 1934, Maxwell was invited to Augusta National Golf Club in 1937 to assist with some changes, most notably the original 1st and now the 10th hole. Finally, in 1938, Maxwell partnered with architect William Flynn to rework the Philadelphia Cricket Club. Earlier,
in 1931, Flynn had completed his most famous work when he rerouted and revised Shinnecock Hills on Long Island (Morrison and Paul, 2011).

Sadly, like much of the Western World, the 1930s was also a decade of loss for the field of golf course architecture. Beginning with the death of designer Charles Banks in 1931, the industry would also lose George C. Thomas Jr. in 1932, Devereux Emmet in 1934, J.F. Abercromby in 1935, and C.B. MacDonald in 1939. However, in 1934, the industry lost arguably its most creative designer, Alister MacKenzie. In 1930, MacKenzie would move from England to California where he would settle at the site of one of his last golf courses, Pasatiempo, completed the previous year in 1929. From this base, MacKenzie would complete layouts at Sharp Park (opened in 1931), and the Red and Blue courses at the Jockey Club (opened in 1935). In the 1930s, MacKenzie would also partner with Perry Maxwell. The pair completed courses at the University of Michigan (1930), Crystal Downs (1933), and Ohio State (1938). In 1931, MacKenzie started his most famous design, when he collaborated with famed golf professional Bobby Tyre Jones (Appendix A.31) on the design of Augusta National in Augusta, Georgia. Although MacKenzie would never see the completed course, due to his declining health, Augusta National would open in 1933 to international acclaim. Originally, the layout, based on the principles of the Old Course at St. Andrews, had only twenty-two bunkers and utilized major site contours to create interest and variety (Burt, 2008) (Beck et al., 1990).

In the British Isles, the effects of the Great Depression were also felt by many. The United States, in reaction to their own economic misfortunes, called in their loans from many other countries and instituted custom barriers to block the import of foreign
goods. By 1933, unemployment in Britain had risen to 2.5 million, or approximately twenty-five percent of the population (BBC, 2014). The worst hit sectors of the economy were the heavy industries such as coal, iron, steel and shipbuilding. Companies which had not modernised after the war were quickly outcompeted by those in other countries. However, in the south-east of England new light industries were emerging, such as chemicals, electrical goods and automobiles. Affluent families, and those with jobs, soon benefited from the Depression as prices fell. For those who were employed, many experienced a reduction in working hours, the first holidays with pay, and access to emerging technologies (such as the car, radio and television). Though golf benefited from these changes, the effects were also geographically specific (BBC, 2014).

In 1931, partners Hawtree and Taylor completed layouts at Harpenden Golf Club and Addington Court. Addington Court, a 27-hole public facility funded by Hawtree himself, was located in the booming south-east area of London. In 1932, both men would collaborated on the redesign of Royal Birkdale. In 1938, Frederic William Hawtree (Appendix A.38), son of Frederic George Hawtree, joined the firm. Sadly, within a year, the firm was voluntarily liquidated due to the onset of WWII. A new firm, Hawtree & Son, would be created following the war. However, in the early 1950s, the construction company was dissolved and the firm focused solely on design (Cornish and Whitten, 1993).

As projects were limited in Britain, several architects focused their efforts on Europe and Asia. Firstly, Tom Simpson partnered with female golfing star Molly Goulay to create Schloss Mittersill in Austria in 1936. From there, the pair would collaborate on the renovation of three courses in Ireland, namely the Old Course at Ballybunion (1936),
Carlow (1937), and County Louth (1938). Secondly, Charles Alison worked to create layouts at Fugi (1932), Tokyo (1932), Hirona (1932), and Kawana (1936). These projects would serve to pioneer golf course design in Asia. A fact still echoed by the fact that Japanese golf course architects still refer to large, sinuous bunkers as “Alisons” (Lawrence, 2011).

In Canada, the Great Depression was arguably the most damaging (Martin, 2013). By 1932, Canada has suffered a decline of 34.8 percent in per capita gross domestic product. No other developed nation was as deeply impacted. Canada was, and still is, a country dependent on trade. The drastic reduction in trade around the world, due to aggressive tariff acts, soon resulted in economic and social watershed. Historians have recognized that “Canadians muddled through the crisis with a makeshift combination of private and public charity” (Martin, 2013). In addition to select government programs, several private citizens in wealthier provinces recognized the plight and stepped forward with their own money. One such visionary was A.J.T. Taylor, a young and determined Vancouver entrepreneur, who would approach the wealthy Guinness family of Great Britain with a grand plan to purchase and develop 6,000 acres in the young municipality of West Vancouver. The British Pacific Properties Company was soon formed, however access to the site would be the next hurdle. After some political influence by Taylor, in 1933 the citizens of Vancouver voted in favour of a bridge connecting Stanley Park to the North Shore, linking Vancouver and the burgeoning subdivision. As part of the overall plan, 160 acres of wooded hillside was designated for the development of a world class golf course (Barclay, 2000).
In July 1932, Taylor conducted a business meeting in New York’s legendary Waldorf-Astoria Hotel with Stanley Thompson. Although he had not yet seen the site, Thompson agreed to take on the job of designing a golf course on Taylor’s rugged mountainside overlooking Vancouver. In February of 1932, Thompson visited the West Vancouver site for the first time and put his course design to paper. Stan Conway, the course’s superintendent, and his crew soon set to work on the monumental task of turning a mountain wilderness into Stanley’s vision – Capilano Golf and Country Club.

Earlier, in the spring of 1930, Stanley was asked to visit the future site of the Midvale Golf Club in Rochester to advise on the quality of the design proposed by a young, aspiring golf course architect, who had just finished studies at Cornell. The designer was Robert Trent Jones Sr. (Appendix A.33) and, in addition to approving the work at Midvale, Stanley would forge a partnership with the young architect. In September of 1930, the firm of Thompson and Jones Inc. was formally incorporated with offices in Toronto and New York. In the summer of 1931, Thompson & Jones completed minor modifications at Stafford Country Club near Rochester, a Walter J. Travis design from 1928. However, while a more substantive re-modeling was supposed to be done, the work consisted of little more than the construction of one new green. Similarly, the duo was hired by the Country Club of Ithaca to create a plan for a 27-holes layout. Again, this project ended in disaster when only $1,000, of an agreed $2,250, was paid for the completed plans and construction never commenced. In 1932, with little work in the United States, Stanley Thompson asked Jones to come to Canada to assist with his ongoing projects. Jones was asked to visit the Banff Springs Golf Course, on Stanley’s behalf, to complete an annual review of the course. All expenses were covered
by the Canadian Pacific Railway and Jones enjoyed some additional time to familiarize himself with Thompson’s Rocky Mountain masterpiece. On the same trip, Jones was sent to Capilano to survey the site and ensure the clearing work was proceeding as planned (Hansen, 2014). However, the development of the project would be a slow process and both men soon sought out additional work.

In 1935, Geoffrey S. Cornish (Appendix A.37) was hired by Thompson to complete soil studies at Capilano. Cornish would remain with Thompson as an associate for many years. The following year, Thompson would hire Robbie Robinson (Appendix A.34) as an associate. Together, the firm worked to complete Capilano in 1937 and Highlands Links in 1941. With his new associates holding down the fort in Canada, and his design partner Robert Trent Jones Sr. working to secure work in the United States, Thompson set off for South America in 1935 to expand the company’s opportunities. After securing some work in Brazil, Thompson sent notice to Jones requesting his presence. However, Jones did not cable Thompson a reply. Instead, he wrote a detailed letter admitting that his recent pursuits through Franklin D. Roosevelt’s New Deal program, were beginning to look promising. Stanley did not reply until his return home in May of 1935 in which his letter simply stated his “great disappointment” that Jones had not come down to help (Hansen, 2014).

In 1938, Jones published a promotional brochure titled *Golf Course Architecture* by Robert Trent Jones. In it, Jones makes no specific mention of Stanley Thompson, apart from the brochure’s last page where the office address is listed as “Thompson & Jones” (Figure 4.17). However, the address listed is Jones’ New York office. To make matters worse, numerous pictures of Banff Springs Golf Course are illustrated, as well as
many other projects completed solely by Stanley Thompson, as though they were completed by Jones himself (Figure 4.18). Finally, numerous quotes are provided in a “Comment” section, wherein a number of leading individuals impart great praise onto the work of Jones (Figure 4.19). However, as described in the book *A Difficult Par* by James R. Hansen, many of the quotes twist the truth, as many of the quotes describe Thompson and his work. Hansen also states that “this may be why Jones didn’t send copies of the brochure to Stanley, despite repeated requests” and why Jones wrote in his autobiographical retrospective, *Golf’s Magnificent Challenge*, that his partnership with Thompson “remained strong until 1938.” It is clear that this public insult may have been the final affront that undermined their relationship and partnership. The effects of the Great Depression caused many to fight for their own survival. It is likely that Jones’ brochure was simply an attempt to secure his own future (Hansen, 2014).

Though advancements in 1939 would allow for the first live telecast of sporting events, including golf, the onset of WWII would immediately end almost all progress in the field of golf course architecture in both Britain and Canada. However, the United States would not become involved until December of 1941 when the Japanese bombed Pearl Harbour. As such, some American architects continued their progress, although reduced in scale. During this time Robert Trent Jones used his rising fame to secure commissions at Scarsdale Golf Club in Hartsdale and Valley View Golf Club in Utica, both located near his office in New York (Hansen, 2014).
A GOLF course can be at once challenging to the champion and fair to the duffer. The differences between a poor and a good course are obvious, but the differences between a good and an outstanding course are subtle.

Before planning major or minor improvements, take advantage of the training and experience of a competent golf architect. The problems which face you today are his life’s work.

Robert Trent Jones

Write us arranging a preliminary consultation.

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With our staff of experts we are able to accept commissions for every phase of design, construction and maintenance:
Turf Technologists for plant disorders
Engineers for fairway watering and drainage systems
Agronomists for the soil problems

Figure 4.17
Contact page of Robert Trent Jones Sr.’s 1938 golf architecture brochure

(Robert Trent Jones Sr., 1938).
Figure 4.18

Photo of Banff Springs Golf Course in Robert Trent Jones Sr.’s 1938 golf architecture brochure (Robert Trent Jones Sr., 1938).
COMMENT

HORTON SMITH: “The Royal York is one of the best tests of high class golf in America.”

ABE MITCHELL, famous English golfer: “The Royal York is the best course I saw on my American tour.”

CRAIG WOOD: “The architect of Green Lakes did an amazing job on an exceptionally rugged piece of terrain. It took a fertile imagination and a real knowledge of the value of golf shots.”

GENE SARAZEN: “Of the courses I have played designed by Robert Trent Jones, I have yet to find one that is not outstanding. He is the modern Number 1 Architect.”

GOLFDOM MAGAZINE: “The new St. Charles municipal golf course will be the ideal of all nine-hole layouts.”

MRS. ALISTAIR MACKENZIE: “My late husband,” (the designer of Cypress Point, Augusta National and scores of other outstanding courses) “had the greatest admiration for your work, its strategy and beauty. He considered you among the world’s finest.”

CANADIAN GOLFER: “A round at Banff is the engraving of a lifetime impression on any golfer.”

ROBERT H. DAVIS, of the New York Sun: “I have knocked about the world from the Horn to Alaska, from Australia to Iceland, and for sheer beauty, delightful surroundings and everything that goes to make golf the greatest game on earth, this course here at Jasper Park has everything beaten that I have ever seen.”

JACK TUCKER, of the Rochester (N. Y.) Democrat and Chronicle: “Carved out of virgin forest in many places, Durand-Eastman is truly a picture no artist can paint. Holes like the fourth, fifth, sixth and sixteenth defy description. They are magnificent.”

OLIN DUTRA: “The Seigniory Club is an outstanding example of excellent golf architecture.”

The fourteenth hole at Jasper Park Lodge in the Canadian Rockies. This illustrates the effective use of natural features in a golf hole. From the tee, which can be seen in the background, the player gambling on his skill in hugging close to the lake reaches a green which has been molded to favor his second shot; the player driving safely out to the right takes more risk with his second shot because the slopes of the approach fall away to the lake.

—30—

Figure 4.19
Comment page in Robert Trent Jones Sr.’s 1938 golf architecture brochure

(Robert Trent Jones Sr., 1938).
4.2.13. 1940s

The Second World War was a defining event in world history. Germany and Japan were defeated and their cities were in ruins due to massive bombing campaigns by Allied forces. However, the United Kingdom was also devastated, having experienced its own bombings, such as the 1940 blitz by the Germans. Following the war, the British economy relied heavily on the United States for aid (Figure 4.20). To secure its own fortunes, the British Empire also phased out most of its remaining imperial holdings in the years following the war. Though France had not sustained the loss of life it had experienced during the First World War, its economy and people would need time to recover from the effects of Nazi occupation. While the Russian people had suffered immensely during their land warfare with Germany, which had occurred mostly on Russian territory, the Russians had formed a large and powerful army which now occupied most of Eastern Europe. The United States economy greatly benefited from the war, as the pre-war depression was brought to an immediate end with the proliferation of new industrial complexes throughout the country. Britain and France no longer held a status power comparable to either the United States or Russia (the Soviet Union). The resulting struggle for power brought about the long political and military tension known as the Cold War. New technologies and knowledge developed during the war were soon reapplied to improve life on home soil (Lowe, 2012).

During the war, the luxury of golf had largely taken a back seat to more pressing matters. However, for some it still represented an escape from the realities of the time. In November of 1940, while returning from a heavy raid on Berlin, Pat Ward-Thomas’ plane was hit by anti-aircraft fire causing the loss of one engine. While over Holland,
Figure 4.20 – Timeline of external influences on golf course architecture, 1940s

NOTE: This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

both engines were lost and the crew was forced to parachute to safety. Unfortunately, the men were captured by German soldiers and taken to the prison of war camp at Stalag III. Here, Ward-Thomas was one of the leaders in creating a crude, nine-hole golf course which the men played with balls they fashioned themselves from cushions and shoes. The men also wrote to the Red Cross and to the Royal and Ancient Golf Club of St. Andrews to request some equipment. The men received clubs and balls. Soon the activity was very popular and helped the POW’s keep their sanity during the long months that passed before the Russian advance from the east led to their eventual escape to safety. Pat Ward-Thomas won the inaugural tournament played on the nine-hole course, the Sagan Golf Club. Following the war, Pat Ward-Thomas would use his skills with a pen and love for golf to start a career in sports journalism, most notably golf (Ward-Thomas, 1990).

In a similar way, the war would also be the catalyst which would direct Pete Dye (Appendix A.39) toward the field of golf course architecture. In 1944, World War II interrupted Dye’s high school education and he enlisted in the 82nd Airborne Infantry of the United States Army. Although Dye entered the army’s Airborne School at Fort Benning in Georgia to become a paratrooper, World War II ended before he was sent overseas. As such, he was stationed at Fort Bragg in North Carolina where he served the rest of his time as greenkeeper of the base’s golf course. From here, Dye was able to play golf at neighbouring Pinehurst No. 2 and got to know Mr. Donald Ross, who had also built the Fort Bragg golf course (Florida Golf Magazine, 2009). While this meeting likely planted the seed for Dye’s later design career, it also demonstrates a rarity in this time of war – the mentoring of a future designer by an established industry great.
Founded in 1946, the American Society of Golf Course Architects held its first official meeting in Pinehurst, North Carolina in December of 1947. In attendance were Donald Ross (honorary president), Robert Bruce Harris (president), Stanley Thompson (vice-president), Robert Trent Jones Sr. (secretary-treasurer), William P. Bell, Robert White, W.B. Langford, William F. Gordon, William Diddle, and J.B. McGovern. Other charter members not in attendance were Perry Maxwell, Jack Daray, and Robert F. “Red” Lawrence. The meeting was likely held at Ross’ Pinehurst as his health had begun to slowly deteriorate, and he had become quite the recluse following the war (Klein, 2001). Donald Ross would pass away the following year in 1948. Similarly, Stanley Thompson lived his final years at Cutten Fields in Guelph, which he had bought in 1939 for only $22,500. In 1948, Thompson began selling some of the land for real estate development, as he had spent much of his earlier wealth (Barclay, 2000).

The only established American golf course architect left operating successfully following the war was Perry Maxwell. After the war, Perry Maxwell’s son, Press Maxwell, joined his father in the golf course design business. This father and son team completed several projects including the Dogwood Course at Lakewood GC (1947), Oakwood CC (1947), Grandview Muni (1947), and Bayou de Siard CC (1949).

In Britain, the resulting destruction of WWII had left the golfing world in shambles. Akin to trends in North America, many of the inter-war period architects were now retired or deceased. A fact which can be attributed the realization that many of their careers starting prior the onset of WWI. Enduring architects such as James Braid and the firm of Hawtree and Son, were able to capitalize on the abundant renovation work
Charles Alison decided that work in emerging markets would be more successful and in 1949 he traveled to South Africa (Lawrence, 2011).

With a booming economy, surging population, and renewed interest in golf in the United States came opportunities for up-and-coming architects to make their mark. Building on his association with Stanley Thompson, Robert Trent Jones Sr. was ideally poised to capitalize on these emerging trends. In 1945, Jones sent a letter to Dick Garlington of the Atlanta Athletic Club (AAC) after having heard of the club's intentions to build a second course. The East course at AAC had been the site on which a young Robert Tyre Jones Jr. had cut his teeth as a golfer. Hence, when plans were set in motion to create a second golf course for the club, famed professional golfer Robert “Bobby” Tyre Jones was asked to consult. Within the same letter, Robert Trent Jones Sr. sent some renderings of his post-war work, as well as a copy of his 1938 brochure, for consideration. Soon after, Trent Jones received a call to come to Atlanta and view the proposed site with Bobby Jones. The planning of the golf course began in May 1945. Construction started in February 1946. The first nine holes were opened for play in October 1947 and the second nine was ready for play in July of 1948. The Peachtree Golf Club, as it would come to be known, brought Robert Trent Jones his first significant national publicity. This included a featured story in Life magazine’s March 1951 issue.

In the 1951 article, entitled “Par-Buster’s Nightmare,” Trent Jones is pictured at his drafting table, underneath of which ran the caption: “Architect Jones, who regularly shoots in the 70s, has designed 75 courses, redesigned 80 others, and considers the Peachtree course his best effort to date” (Hansen, 2014). Equivalent to his portrayal in his 1938 brochure, Trent Jones greatly exaggerated his portfolio. Fatefully, the discipline
of golf course architecture was not in any state to debate his claims. Likewise, his middle name ‘Trent’ had been adopted in the 1930s to distinguish himself from Bobby Jones (Hansen, 2014). However, it is likely that this was just another attempt to confuse the public and use another’s fame to promote himself, a fact which Trent Jones later recognised sighting his propensity to never correct a false identification. This confusion was likely furthered in 1948 when Bobby Jones was diagnosed with the spinal condition syringomyelia, which eventually restricted him to a wheelchair, and prevented him from ever playing the completed Peachtree course (Lowe, 2014). This reality allowed Trent Jones to capitalise solely on the resulting accolades.

When Peachtree opened in 1948, the par-72 design was the longest in the United States at 7,219 yards. To promote himself further, Trent Jones pioneered a new style to suit the times – heroic design (Figure 4.21). This new style would merge the penal school of golf course architecture which had dominated in the early-1930s, with the strategic school which architects such as Stanley Thompson had helped to foster in the 1920s and 1930s. Often incorporating ponds, lakes, or streams, the heroic style confronted players with punishing hazards, with a “do or die” type mentality. The idea of a “tough par and easy bogey” became Trent Jones’ calling card (Hansen, 2014). This new style was likely influenced by Trent Jones’ time at Cornell and studies in design, which likely centred on the emerging idea of Modernism (Figure 4.20). The Modernist ideology that “form follows function” is relatable to the stylistic changes by Trent Jones. Observing that the golf ball was going further, and players were becoming better athletes, Trent Jones established a design style to protect his courses from the skill of the game’s
Figure 4.21
Strategic School (1920s-1930s) compared to the Heroic School (1940s-1950s)
(Shackelford, 2003).
best players (Hansen, 2014). Modernism also evoked a visual expression of structure and a simplicity or clarity of forms. This meant, for golf, that the previous subtleties of the landscape were in direct competition with the clarity of the design. The elimination of "unnecessary detail" was prescribed in Modernism and Trent Jones took this notion to the golf course.

However, Trent Jones was not the only designer in a position to capitalize on America’s post-war opportunities. In 1946, Dick Wilson (Appendix A.32), former protégée of William Flynn and Howard Toomey, started his own firm. Wilson worked closely with a number of talented design associates, who later went on to independent careers, including Joe Lee and Robert von Hagge. Wilson’s new firm was also connected with a Miami based earth-moving firm, the Troup Brothers. His early projects, such as West Palm Beach Country Club which opened in 1947, established Wilson as one of the most sought after architects in America, next to only Trent Jones. He was also commissioned later that year to restore Seminole Golf Club, a Donald Ross course situated on Florida’s eastern coastline (Sherman, 2009).

4.2.14. 1950s

After completing projects at the University of Oklahoma (1950), Riverside GC (1950), the North Course at Lake Hafner GC (1951), and Kentucky Dam Village GC (1952), Perry Maxwell passed away in 1952. His death, coupled with the passing of both Stanley Thompson and Charles Alison that same year, marked the end of a significant era in golf course architecture in North America. Maxwell’s son, Press Maxwell, would be left to complete his remaining projects, including the unfinished Prairie Dunes in Kansas, completed in 1957.
In Britain, high worldwide economic growth during the 1940s and early-1950s allowed for an improved economic climate starting in the mid-1950s (Figure 4.22). In an era referred to as the “Golden Age,” opportunities in the field of golf course architecture began to reappear. Similar to previous events in the United States, new firms began to emerge to capitalize on the available prospects. In 1954, the firm of Pennink, Cotton and Lawrie was formed in England. A successful amateur golfer, Frank Pennink (Appendix A.36), soon became the most active designer in the firm. He would complete projects in Britain, continental Europe, Africa and even the Far East (Fine Golf, 2008).

Following the death of his father in 1955, F.W. Hawtree continued his family’s legacy and completed numerous courses. In 1969, he was joined by A.H.F. Jiggens. Slowly, the firm would create a portfolio which would include courses in Britain, Ireland, France, Italy, Spain, Belgium, Holland, Germany, Switzerland, Iran, South Africa, El Salvador, Morocco, and the United States (Cornish and Whitten, 1993). In addition to his golf course design work, F.W. Hawtree was a very enthusiastic supporter of the British Golf Greenkeepers’ Association, which his father founded in 1912. F.W. Hawtree served as Vice Present of the organization for many years. Further, he edited The Greenkeeper and regularly contributed editorials between 1960 and 1974. During the 1960s and 1970s he served on the English Golf Union Council and the Golf Development Council. For many years F.W. Hawtree devoted time as member of the board for the Sports Turf Research Institute at Bingley and was also a member of the Turfgrass Advisory Committee. Finally, F.W. Hawtree was influential in founding the British Institute of Golf Course Architects in 1970, and later served as President (Cornish and Whitten, 1993).
Figure 4.22 – Timeline of external influences on golf course architecture, 1950s

NOTE: This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

In America, economic prosperities were still high due to post-war economic expansion. As a result of the recent success of Peachtree Golf Club, Trent Jones was commissioned to makeover Oakland Hills Country Club in preparation for the 1951 U.S. Open. Trent Jones was selected as it was the intention of the USGA to “toughen up” the course for its ever improving players (Hansen, 2014). However, it would be a previous and unrelated event which would change the face of golf course architecture forever, and the futures of one Robert Trent Jones Sr.

Following a car crash that almost ended his professional golfing career in 1949, Ben Hogan returned to golf at the 1950 U.S. Open and won the event. The following year he would win the Masters. Following Hogan’s wins, writer Herbert Warren Wind (Appendix B.7) penned an article in the August 4th issue of The New Yorker, in which he profiled Robert Trent Jones and his renovation work at Oakland Hills Country Club, the selected venue for the 1951 U.S. Open. This article would be hugely important for Robert Trent Jones and his future career in golf course design. When Hogan won the U.S. Open in 1951 it would be his words that would change the focus of modern golf. Hogan is famously quoted as saying, “I'm glad I brought this course – this monster – to its knees” (Hansen, 2014). Hogan, undeniably the best golfer in the world at the time, was politely stating how tough the course had played. This proclamation, combined with the aforementioned Wind article, turned Trent Jones into a celebrity architect (Hansen, 2014).

Throughout the 1950s, Dick Wilson still remained Trent Jones’ major competition. It is likely that his knowledge of inter-war period design principles, attained through his time at Merion and with his mentor William Flynn, gave clubs an alternative
to Trent Jones’ disposition to extensively renovate courses. Clubs such as Colonial (1956) and the West and East courses at Winged Foot (1958 and 1959 respectively) enlisted Wilson to re-model their existing layouts. In 1959, when the Royal Montreal Golf Club moved from Dixie to Ile Bizard, Wilson was hired to create two courses. The Blue and Red courses were the result (Sherman, 2009). Finally, in 1959, Wilson took his skills to Australia with a commission to renovate the East Course and West Course at Royal Melbourne (Sherman, 2009). Wilson’s growing reputation of sensitivity and respect for the works of the Golden Age golf course architects, likely resulted in these commissions in a country only before touched by the legendary hand of Dr. Alister MacKenzie.

With only Trent Jones and Wilson fighting for the most prestigious commissions, there was abundant room for other aspiring golf course architects to stake their claim in the 1950s. In 1952, Canadian born golf course architect Geoffrey S. Cornish started his own firm in Amherst, Massachusetts, following the death of his mentor Stanley Thompson that same year (ASGCA, 2012). Similarly, after winning the Indiana State Amateur Championship in 1958, Pete Dye decided to leave a very successful career in insurance to pursue a future in golf course architecture (Florida Golf Magazine, 2009). His first golf course, started in 1959, was El Dorado in Indianapolis (Cornish and Whitten, 1993).

4.2.15. 1960s

The mid-1960s represented the peak of economic expansion following the Second World War (Figure 4.23). This prosperous time resulted in an international golf boom. Between the early 1960s and the early 1970s, the golf industry in Japan expanded from
**Figure 4.23 – Timeline of external influences on golf course architecture, 1960s**

**NOTE:** This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

approximately 200 to over 1,000 courses. In America, these figures were more astounding as more than 3,800 golf courses were created (Beditz and Kass, 2010).

In the 1960s, Dick Wilson continued his legacy of historically sympathetic golf course architecture at courses like Metropolitan (1961), Aronimink (1961), and Rivera (1962). In 1964, Wilson completed a renovation of the East Course at Merion, the place where his career in golf had begun. Though Wilson was a talented designer, it should be noted that he was not a self-promoter. Further, his love of alcohol would limit his ability to achieve even greater success (Sherman, 2009). Sadly, in the summer of 1965 at age 61, Wilson suffered a fall and died three weeks later of a pulmonary embolism. The discipline of golf course architecture was left in the hands of only one dominant practitioner, Robert Trent Jones Sr. (Sherman, 2009).

The golf boom of the 1960s prompted Trent Jones Sr. to expand his growing business. In 1960, his son Robert Trent Jones Jr. (Appendix A.41) joined the firm. His first experiences in golf course design and construction were at his father’s side during the construction of Spyglass Hill, which opened for play in 1966. Spyglass Hill stands today as the Jones’ finest and highest ranked project. This may be attributed to the fact that the budget was so low, and the site was so dynamic, that Trent Jones was forced to work with the site’s existing attributes. In 1965, Robert Trent Jones Sr.’s second son, Rees Jones (Appendix A.43), would also join the firm. Eventually, Robert Trent Jones Jr. was given control of the firm’s Western and Pacific Basin practice, through management of the California office. Rees Jones would focus on the firm’s work on the East Coast (Cornish and Whitten, 1993). Robert Trent Jones was the most popular architect of the 1960s, pumping out ten to fifteen golf course project per year. Due to the
rate of production, Trent Jones was forced to develop an effective and repeatable style. As such, Jones began to refer to certain courses as “signature designs.” In essence, this was a media spin on saying due his large workload he would not be there much, however his staff (sons and others) would incorporate the typical Trent Jones style. The result was a proliferation of course which all looked and felt the same regardless of the setting (Shackelford, 2003).

In 1962, Pete Dye created his first 18-hole golf course. The course was named Heather Hills, but is now known as Maple Creek Golf and Country Club. That same year, Dye started on the Radrick Farms Golf Course for the University of Michigan, however the course did not open until 1965. At this time, Pete Dye was heavily influenced by the work of Robert Trent Jones Sr., as he was by far the most famous architect in the world. However, during his time at the University of Michigan, Pete was exposed to the older Michigan course, which had been designed by Dr. Alister MacKenzie in 1931. Dye would later copy two of the MacKenzie greens on his next project.

In 1963, Dye spent six months in Scotland and made a thorough study of the classic links courses. Though the inspiration for this trip can be largely attributed to the impression of MacKenzie’s course at Michigan, the influence of Scotland on Pete Dye may stem back all the way to his encounters with Donald Ross at Pinehurst. Nevertheless, in Scotland, Dye’s eyes were opened to the traditional use of pot bunkers, bulkheads constructed of wood, the use of ground contour to alter depth perception, and the use of small greens. All these features would heavily influence his subsequent designs and foster his own unique style (Florida Golf Magazine, 2009).
Following, and likely due to these experiences in the Home of Golf, Pete produced his first notable work at Crooked Stick Golf Club in Carmel, Indiana. Construction began on the course in 1964. In 1967, Pete designed The Golf Club near Columbus, Ohio, where he solicited design advice from a young Jack Nicklaus (Appendix A.42). Pete and Jack would then collaborate on the Harbour Town Golf Links, which opened to critical acclaim in 1969. The success of Harbour Town would push Pete Dye into the spotlight, starting in the early 1970s (Florida Golf Magazine, 2009).

With the death of Dick Wilson came even more room for up-and-coming designers within the discipline, both in the United States and the British Isles. In 1963, Tom Fazio (Appendix A. 45) would get his first taste of golf course architecture when he joined his uncle George Fazio in his growing golf course construction business. In Ireland, former professional golfer Eddie Hackett secured his first design commission when he was hired to complete an eighteen-hole layout at Letterkenny Golf Club in County Donegal. In England, Donald Steel (Appendix A.40), a golf writer for the Sunday Telegraph, joins the established practice of Cotton (C.K.), Pennink, Lawrie and Partners, Ltd. as a consultant trainee in 1965 (Donald Steel, 2011). Finally, the overwhelming popularity of the game prompted Herbert Warren Wind to launch the famous television series Shell’s Wonderful World of Golf in the early 1960s, for which he created all the scripts for the first two years of the show (Yale, 2009).

4.2.16. 1970s

At the start of the 1970s, members of the Organization of Arab Petroleum Exporting Countries (OAPEC), who were fighting in the ongoing Arab-Israeli War,
imposed an embargo against the United States in retaliation for the American decision to aid the Israeli military (Gordon, 2016). The resulting 1973 Oil Embargo strained the U.S. economy which had become dependent on foreign oil (Gordon, 2016). That spring, President Nixon announced a new domestic strategy to increase the supply of oil, reducing vulnerability to oil imports. However, this vulnerability would become evident in the fall of 1973 when the price of oil per barrel multiplied (Gordon, 2016). As the oil embargo coincided with the devaluation of the American dollar, a global recession was feared. Though the oil embargo was lifted in March 1974, oil prices remained high and the effects of the energy crisis lingered throughout the decade (Figure 4.24) (Gordon, 2016).

In Britain, these economic misfortunes were accentuated by growing domestic issues. Throughout the mid-1970s, especially 1974 and 1975, the British economy was troubled by high rates of inflation (Woodward, 2004). To tackle this, the government capped public sector pay increases and publicly encouraged a clear capped level to private wages. This caused unrest among trade unions. In protest, coal miners conducted a form of “industrial action” when they purposely reduced their output in protest of government policy. To combat the shortage of both oil and coal power, the British government rebutted by instigating The Three-Day Week (Woodward, 2004). Rather than risk a total shutdown, working time was reduced to prolong the life of available fuel stocks. After years of strikes and government action, tensions peaked during the winter of 1978-79, which would become known as the Winter of Discontent. The strikes were largely over by February 1979, as the general election lead to a new government in the form of Margaret Thatcher's Conservative Party (Woodward, 2004).
Figure 4.24 – Timeline of external influences on golf course architecture, 1970s

**NOTE:** This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

The impact of these events on the discipline of golf course architecture was immense. In the United States, golf course development slowed dramatically from averaging 380 new golf courses per year in the 1960s, to 150 per year in the latter part of the 1970s, to about 100 per year by the mid-1980s. At this point, many in the golf business felt that golf might be a mature industry with little headroom for growth (Hueber and Worzala, 2010). In reaction to these tough times, some architects became proponents of a new school of design, one which (in theory) would reduce construction costs and increase the speed of play, all in an effort to improve returns. Also influenced by the prevailing Modernist style in allied fields, this new style would be even more devoid of natural character. These basic layouts would represent the modernist model of functional design. This style would become known as the Freeway School (Figure 4.25). One of the major reasons for the prevalence of this design style was the lasting impact of the Great Depression on the designers who had to live through such harsh times. Simplicity became a lifestyle for many who had to endure that era.

While the deteriorating economy would drastically reduce the production of new golf courses, this fact did not stop several aspiring designers to take a chance and form their own design firms during the 1970s. In 1972, Robert Trent Jones Jr. left his father’s design practice and formed Robert Trent Jones II Group, also based in California (Robert Trent Jones Jr., 2008). Similarly, in 1974, Robert Trent Jones Jr.’s brother Rees Jones followed suit and formed his own design practice, Rees Jones Inc., headquartered in his hometown of Montclair, New Jersey (Rees Jones, 2016).

Several other designers would also follow suit in 1974. Firstly, Martin Hawtree (Appendix A.47) joined his father’s firm in England. By 1980, Martin had completed
Figure 4.25

Heroic School (1940s-1960s) compared to the Freeway School (1960s-1980s)

(Shackelford, 2003).
more than 60 new projects, including: Royal Waterloo (Belgium), Simon's (Denmark), Bearwood Lakes (England), China Fleet (England), Les Baux (France), Caen (France), Carquefou (France), Mazury (Poland), Country Club Johannesburg (South Africa), and Golden Greens (India), all with his father F.W. Hawtree (Hawtree, 2016). Secondly, Jack Nicklaus founded his own golf course architecture firm, utilizing Bob Cupp and Jay Morrish as full–time designers (Nicklaus, 2014). Nicklaus would complete his first solo design in 1976 with the opening of Glen Abbey in Ontario, Canada. Finally, Tom Fazio became a partner in the firm Fazio Golf Course Designers, with his uncle George Fazio and brother Jim Fazio. In 1976, Fazio completed his first course with the National Golf Club of Canada. By the start of the 1980s the Fazio team would become one of the most successful firms in the United States (Cornish and Whitten, 1993). It should also be noted that Canada, although affected by the 1973 Oil Embargo, experienced a modern-day gold rush when Alberta experienced an oil-boom in the early 1970s. This event led to the “creation of more multi-millionaires than any time before in Canadian history” (CBC, 2001). Though the prosperity would be short-lived, the domestic production of oil would offset the negative effects of the embargo. Only the impending global recession would have an impact on the Canadian economy (CBC, 2001). As such, Canada provided a much needed opportunity for budding designers to showcase their skills during the 1970s.

courses. The book included rendered aerial plans of the world’s best courses, provided insights to the construction, and revealed interesting historical facts their evolution (Ward-Thomas, 1990).

4.2.17. 1980s

In building architecture, Postmodernism started as the International Style and did not become a movement until the late-1970s (Figure 4.26). Postmodernism was said to be the return of wit, ornament and reference (Jencks, 1991). The Postmodernist Style occurred due a divergence of taste from the previous Modernist era. While modernism was rooted in the minimal and represented an absence of ornament, postmodernism emerged as a rejection of strict rules set by the early modernists and sought meaning and expression in the use of timeless building techniques, forms, and stylistic references. These references included columns and other elements of premodern designs, sometimes adapting classical Greek and Roman examples (Jencks, 1991).

In golf course architecture, Pete Dye’s use of the classic links principles created a similar design era. Dye’s work has since been recognized as a “juiced-up version of the classic, traditional designs mixed with his own artistic flair” (Shackelford, 2003). In his book *Grounds for Golf*, writer/designer Geoff Shackelford (Appendix B.11) states that, “many have never come to like [Dye’s] work because it seemed too “quirky,” too busy-looking or just too difficult.” This new school of design, which would come to define much of the late-1970s, 1980s, and early-1990s, would first burst into the spotlight at the 1982 Players Championship (Shackelford, 2003).
Figure 4.26 – Timeline of external influences on golf course architecture, 1980s

NOTE: This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences — Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions — the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

Pete Dye completed the Tournament Players Club (TPC) at Sawgrass in 1980. Constructed specifically to host The Players Championship, it employed a distinctive “stadium” concept where fans would sit atop “stands” of grass (mounds). The 1982 Players Championship was the debut of the Stadium Course. However, a controversial layout, conceived by PGA Tour Commissioner Deane Beman and designer Pete Dye, would produce many negative comments from the players. In fact, eventual winner Jerry Pate ended the television broadcast of the tournament when he pushed Beman and Dye into the pond to the left of the 18th green. This made-for-TV moment, transformed the Players Championship from just another golf tournament into something more. Golf became entertainment, and suddenly the sport saw its future (Sickle, 2004). Although the discipline of golf course architecture in America would only construct 841 golf courses in the 1980s, golf as a sport grew more than any other time in its history as more than 7.5 million people picked up the game (Beditz and Kass, 2010). Pete Dye would use this fame to become one of the most successful golf course architects of the 1980s and 1990s.

In 1980, Dye was commissioned to construct a new course for the Austin Country Club in Texas. It was here that Dye would employ Canadian Rod Whitman (Appendix A.49) as his construction foreman, a match forged by former Dye associate Bill Coore (Appendix A.46). The course was completed in 1984. In 1982, Dye’s use of classic principles attracted the talents of a young designer by the name of Tom Doak (Appendix A.52). In 1986, Dye completed the Firethorn Golf Club. The following year, in 1987, Dye would return to Crooked Stick to renovate the greens. Finally, in 1989, Dye would complete Oaktree National in Oklahoma (Cornish and Whitten, 1993).
Dye’s early successes were a direct result of the fact that his work embodied the classic ideas of Scottish golf, though pushed to new extremes. Also, Dye was a proponent of the design-build method, which had not been utilized since the inter-war period, and frequently shaped features himself using various forms of construction equipment. His extensive time on-site throughout all stages of the design and construction process lead to an increased level of detail and enabled the use of existing natural elements. As such, many others in the discipline sought to copy Dye’s imported design elements to better their own careers. Dye’s success lead to a wave of golf course architects, and professional golfers turned designers, presenting themselves as semi-Dye imitators. However, without an understanding of the origins of the principles themselves, all that was being copied were the design elements. The use of water, mounding and railroad ties became prevalent (Shackelford, 2003). Further, as many professional players continued to voice their dislike of Dye’s more quirky design elements, namely those features which most embodied the true spirit of Scottish golf, designers also emerged to provide more “playable” and “fair” design alternatives. This meant that the strategic dilemmas and quirky hazards posed by Dye were soon minimized or eliminated completely in the work of others. All in the pursuit of “fairness,” features soon became seen as “framing” elements instead of strategic or even penal tools. As such, the mid- to late-1980s and early-1990s were consumed by the Framing School (Figure 4.27) of design (Shackelford, 2003).

The most famous designer of this emerging school would be Tom Fazio. Though his work at Inverness (1979) and Oak Hill (1980) gave him his first national recognition, most of it was unfavourable (Cornish and Whitten, 1993). However, after altering his
Figure 4.27
Freeway School (1960s-1980s) compared to the Framing or Superficial School (1980s-2000s) (Shackelford, 2003).
style to suit more prevalent social tastes, in 1980 Tom Fazio completed the Wild Dunes course in South Carolina. The course’s success quickly changed his prospects (Tom Fazio, 2016). Fazio then completed the Mountain Course (1981) and the Desert Course (1984) at the Vintage Club in California, before completing Wade Hampton Golf Club in 1987. The Wade Hampton project was named “Best New Private Course” in 1987 by *Golf Digest*. The following year, Fazio’s Black Diamond Ranch in Florida was given the same honour. Finally, this fame secured Fazio the commission to construct the most expensive golf course ever conceived. When Shadow Creek Golf Club in Las Vegas opened for play in 1989, it received rave reviews, including being named “Best New Private Course” by *Golf Digest*. However, what this style had also accomplished through its elimination of strategy was a need for something else to retain the interest of the golfer. As such, golf course architecture became dependent on more and more “superficial” or ornamental features, such as artificial waterfalls and even fake mountains, to create interest. However, as exemplified by the $45,000,000 price tag attached to the design of Shadow Creek in Las Vegas, golf course architects had created a trend that could not be sustained. Unfortunately, this trend would be exported throughout the world, through Globalization, as American designers became the most sought after due to the popularity of the PGA Tour and television (IMF Staff, 2008). The explosion of “Signature Architecture” and the golf course residential development would result. As golf course designers remained in their offices to pump out designs, the market opened for the golf course contractor.

However, separate from this prevailing trend would emerge a more subtle style of golf course architecture at the end of the 1980s. Originating with those who had worked
onsite with Pete Dye, arose projects once again based on the classic design principles of the Scottish links. Firstly, in 1984, Rod Whitman, who was still working on and off with Pete Dye, opened his first solo design at Wolf Creek in Alberta, Canada. Four years later, in 1988, Whitman would partner with Bill Coore, another Dye protégée, in the completion of the Chateaux Course at Golf du Medoc in France. Secondly, following his first win at The Masters in 1984, PGA Tour golfer Ben Crenshaw (Appendix A.48) would partner with Dye protégée Bill Coore in 1986 to form the firm Coore & Crenshaw. However, as the golf design market in the US was slow, it took until the late-1980s for the duo to secure their first project. In 1988, Coore and Crenshaw began working on the Plantation Course at the Kapalua Resort on the Hawaiian island of Maui. Soon after, the pair were commissioned to complete a course at the Barton Creek Resort in Austin. Lastly, Dye protégée Tom Doak founded his own firm in 1987. In 1988, Doak published the seminal *Confidential Guide to Golf Courses*. In 1989, Doak completed his first course when High Pointe opened in Michigan. Though the work of these men would be first recognized as a different “low-profile” trend in the publication *The Architects of Golf*, released in 1993 by Geoffrey Cornish and Ron Whitten (Appendix B.8), its emergence as a distinctive style (or school of design) would not occur until the mid-1990s (Cornish and Whitten, 1993).

Another individual recognized by Cornish and Whitten in *The Architects of Golf* as a potential member of this “low-profile” trend was Michael J. Hurdzan (Appendix, A.44). After partnering with his mentor Jack Kiddwell in the firm Kiddwell & Hurdzan Inc. in 1976, and starting his own firm in 1987 following the retirement of his mentor due to health reasons, Hurdzan hired a young Dana Fry (a former shaper with Tom Fazio) to
assist him with a new project he had secured in Canada. The Devil’s Pulpit was the result, and it opened for play in 1990 (Cornish and Whitten, 1993).

In Britain, the firm of Hawtree & Son was still the longest operating and most respected practice. In addition to the firm’s extensive work throughout the British Isles, Europe and Asia, in 1984 F.W. Hawtree released the influential book *The Golf Course: Planning, Design, Construction and Maintenance*. This publication signified a shift in power within the firm as Fred W. Hawtree reduced his work schedule to concentrate on writing, leaving the reigns of the company in Martin Hawtree’s hands. Upon his father’s retirement, Martin expanded the Hawtree firm. He completed a series of courses in conjunction with former European PGA Tour player Simon Gidman and also trained several new associates, including Stephen McFarlane (Hawtree, 2016). In 1989, a young and passionate American interned with the firm. His name was Gil Hanse (Appendix A.53). Martin Hawtree would serve on the Committee of the British Association of Golf Course Architects (BAGCA) from 1980-1996 (Hawtree, 2016).

In 1983, golf designer and writer Donald Steel started writing for *Country Life* magazine, in addition to his role as partner in the firm of Cotton (C.K.), Pennink, Lawrie and Partners, Ltd. In 1987, Donald Steel started his own firm Donald Steel & Co. Ltd., hiring young architects Tom Mackenzie and Martin Ebert as associates. Since that time, Steel has worked in more than 25 countries and stands as the only architect to have advised every Club or course on which the Open championship has ever been played. These courses include: Prestwick; Musselburgh; St Andrews; Muirfield; Sandwich; Hoylake; Deal; Troon; Lytham & St Annes; Prince's; Carnoustie; Portrush; Birkdale; and, Turnberry (Donald Steel, 2011).
4.2.18. 1990s

Minimalist building architecture emerged in the late-1980s to become a movement starting in the early-1990s (Figure 4.28). In concept, the aim of minimalist architecture was to strip everything down to its essential components. The movement, though not without ornamentation, required all elements of the design to be reduced to a stage where no one thing could be removed to improve the whole (Bertoni, 2002).

In golf course architecture, the 1990s resulted in a similar trend. In opposition to the visually stimulating, yet strategically lacking, designs of the previous decade, a new design school emerged which focused on the key elements (strategy and naturalness) of the game’s origins – The Minimalist School (Figure 4.29). The visual trappings which had cluttered the highly manicured courses of the 1980s were removed as design returned to more natural and rugged features meant to reflect the inherent characteristics of the site onto which the golf course was being placed. Social trends supporting Environmentalism, which had been growing since the early 1970s, would also inspire this style, though its understated results would take time to be acknowledged over the more spectacular visual impacts created by Fazio and his disciples. Finally, as a result of the influx of 7.5 million golfers to the sport in the 1980s, and only 841 golf courses being constructed, the general economic prosperity of the 1990s resulted in a construction boom, as some 2,641 courses were created (Beditz and Kass, 2010). As such, the two divergent styles, one embellished and one subtle, were both permitted to flourish.
**Figure 4.28 – Timeline of external influences on golf course architecture, 1990s**

**NOTE:** This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

Figure 4.29

Framing or Superficial School (1980s-2000s) compared to the Minimalist or Low-Profile School (1990s-present) (Shackelford, 2003).
Unlike Robert Trent Jones Sr. and his boys, or even Pete Dye, Tom Fazio never attended college. In a unique article, written by John Garrity and published in *Sports Illustrated* in April of 2002, Fazio is suggested to have developed his own unique style, one that “he sees in the irises of a client's eyes” (Garrity, 2002). It is suggested that he has a “photographic memory” and a “business sense like no other”. Further, it is his “dynamic personality” that has secured him many high profile clients, such as the 2002 renovation of Augusta National. Dubbed “Tiger Proofing,” Fazio’s efforts at Augusta were intended to “make sure the Masters remained a great test of golf.” What occurred was that additional trees were planted, tees were moved back, rough was grown higher, and fairways were narrowed. Golf had become the only sport willing to change its playing fields. Fazio, like he had done many times before in the late-1980s and 1990s, simply gave his clients what they thought they wanted – a tougher test of golf and/or a visually stunning product - with no thought given to golf’s future. In fact, in the article itself the writer notes that, “to hear him talk, you'd have thought Fazio demolished golf courses for a living.” Further, Fazio himself is quoted as saying, “I'm blamed for golf costing so much… when I started with my uncle [George Fazio] back in the '60s, it cost $10,000 to build a hole… I have friends now who say, 'Give me one of those courses at $10,000 a hole (laughing)... I would love to be able to do that, but how? When are we going to see a $2,500 Chevy again? In our society, we don't go backward” (Garrity, 2002).

Fazio’s highly critiqued work at Oak Hill, a classic Donald Ross course, at the end of the 1980s, also started a new craze in the golfing world starting in the early-1990s. Restoration became a buzz word as clubs began to realize that their history was
important. However, whereas some clubs found architects to enhance their existing history and design, others simply hired those most willing to enhance the visual appeal or create the toughest test possible. This trend, in turn, started a “keeping up with the Joneses” mentality between clubs. Perhaps fitting, seeing as this movement first started with the (Trent) Jones family of golf.

Mike Strantz (Appendix A.50) would be the most notable of Fazio’s protégées to advance the trend of bold design in the 1990s. Completed in 1994, Strantz’s first solo project would be the Caledonia Golf and Fish Club in South Carolina. The success of Caledonia led to a commission for Stonehouse in Virginia, which in turn led to the design of Royal New Kent in Virginia. When both courses were ranked “Best New Golf Course” by *Golf Digest* in consecutive years, 1996 and 1997 respectively, Mike Strantz became the first designer to repeat as winner of the “Best New” category. Strantz followed up these projects with True Blue Golf Club in 1998 and Tobacco Road in 1999. Many consider Tobacco Road to be Mike’s most enduring and influential design. Golf critics immediately echoed these feelings, as Strantz was named “Architect of the Year” by *Golf World*, which a year later also cited him as the “most in-demand course designer in the U.S.” In 2000, the praise reached a climax when *Golf Week* followed suit and named Mike among its "Top 10 Greatest Golf Architects of All Time" (Strantz, 2001) (Hiseman, 2013). However, where Strantz differed from Fazio was his deep respect for the past work of Dr. Alister MacKenzie. Strantz harked back to classic design principles, with courses full of quirky, seemingly random features. However, as with Fazio, his products were bold. Strantz believed that people wanted excitement, and while he delivered the classic principles, he cranked them to eleven. Strantz’s presentation of
classic strategic choices was more blatant, his changing of the angles of play was much more pronounced, and his bunkers were that much closer to the best line of play. What Strantz was providing was a grander version a classic approach. Golfers, especially the media, either loved or hated him for it.

Evolving in parallel with this more over-the-top approach, was the Minimalist School (or low-profile style) of golf course design. Just like its initial presentation, the Minimalist School at the outset demanded less of the spotlight. This style was pioneered by the work of two key firms – Renaissance Golf (Tom Doak) and Coore & Crenshaw (Bill Coore and Ben Crenshaw). As summarized by Tom Doak, “the minimalist's objective is to route as many holes as possible whose main features already exist in the landscape, and accent their strategies without overkilling the number of hazards. Sometimes, though, the best solution for the course as a whole may require major earthmoving on a handful of holes to connect the others. That's minimalism, too. And the key to success in those instances is to move enough earth to make the artificial work appear natural, not to move as little as possible… If you want to judge whether a particular designer is really comfortable in the minimalist style, ask him what he does when a hole has no natural feature to build upon. The real minimalist will respond that he's never faced that situation -- he'll always find something, whether it's the length of the hole, or a small hump, existing vegetation, or simply the direction of the prevailing wind -- and expand upon that to create an interesting golf hole” (Doak, 2016).

In 1990, Tom Doak was joined by another graduate landscape architect from Cornell, Gil Hanse. Together, the pair worked to complete several designs until Hanse’s eventual departure in 1993 to start his own firm. These courses included the Heathland
Course at The Legends (1990); Black Forest at Wilderness Valley (1991); Charlotte Golf Links (1993); and, the Old Course at Stonewall Golf Club (1993). Doak would then go on to create courses at Beechtree Golf Club (1997); Riverfront Golf Club (1999); Lost Dunes Golf Club (1999); and, Apache Stronghold Golf Club (1999). However, perhaps most importantly, in 1992 Tom Doak also published one of the most important texts in the evolution of golf course architecture when he released *The Anatomy of a Golf Course*. This text provided the first detailed look at strategic design and classic principles in golf course architecture since WWII.

In 1993, Gil Hanse left Doak’s mentorship to start his own design practice, Hanse Golf Course Design Inc. In 1995, Gil joined forces with architect Jim Wagner. Together, the duo have produced a stellar resume, including new course layouts at Inniscrone Golf Club in Avondale, Chester County; Applebrook Golf Club in Malvern, Pennsylvania; and, French Creek Golf Club in Elverson, Pennsylvania. Hanse was also the first minimalist to venture to Scotland when he completed Craighead Links in 1998.

After forming in 1986, the duo of Bill Coore and Ben Crenshaw had a tough time finding their first project. Although their first two years were fraught with disappointments, in 1988 Coore and Crenshaw began working on the Plantation Course at the Kapalua Resort on the Hawaiian island of Maui. Soon after, the pair were commissioned to complete an 18-hole layout at the Barton Creek Resort in Austin. Both courses opened as planned in 1991 and gave the world a glimpse of what the duo was capable of. The courses were wide enough to accommodate resort guests, but were sufficiently challenging and strategically designed to challenge top players (Dear, 2011).
In 1990, the pair received a call from former building architect turned developer Dick Youngscap (Appendix C.4), about an opportunity in Nebraska. Youngscap invited the pair to Mullen, in the Sand Hills region of the state of Nebraska, to look at his 11,000 acre site. Although Youngscap had just recently completed a course called Firethorn in Lincoln, Nebraska with Pete Dye, he hired the pair of Coore & Crenshaw with the belief that they would be the least invasive designers. As such, what Bill and Ben were presented with is considered by many experts to be some of the best land for golf in North America. The pair did not disappoint and used their “minimalist” methods to construct 18-holes for less than $1.1 million dollars, seventy-five percent of which went to the irrigation system. Not only was the golf course economical but it was also excellent, debunking the ideology of Tom Fazio that “in our society, we don’t go backward.” When Ben Crenshaw won his second Masters tournament in 1995, the same year that Sand Hills would be completed, the Minimalist movement finally got the attention it deserved. The application of once discarded design practices soon achieved international acclaim. The effort shocked the world as to what could be done with the correct vision and site (Dear, 2011).

Paying attention to this message was entrepreneur, Mike Keiser (Appendix C.5). Having developed a fortune with recycled paper greeting cards in the 1970s and 1980s, Mike Keiser turned his ambitions to golf course development in the 1990s. In 1995, Keiser opened the Dunes Club in New Buffalo, Michigan. Using architects Dick and Tim Nugent of Chicago, and a healthy dose of his own architectural ideas, Keiser produced possibly the top 9-hole course in the country. The course was constructed on 68-acres of densely wooded sand dunes adjacent to Lake Michigan. However, it would
be his next investment that would start his transformation from an average capitalist into a golf industry mogul and icon (Dear, 2011).

In 1999, Bandon Dunes opened for play. The layout was conceived by Scottish born architect David McLay Kidd (Appendix A.54) and was routed over the rugged, sandy coast of Bandon, Oregon. Keiser had purchased more than enough land for one course with a vision to create a multi-course, destination resort. Keiser hired Kidd, a young and untested designer, because of their shared views on links golf and natural-based design. Kidd, at the time, was uninfluenced by the manicured American version of the game, as his golfing ideals had been derived with his father, the legendary head greenkeeper at Gleneagles, in Scotland. Keiser understood the quality of his coastal site and wanted an architect that would put the effort into highlighting what was already there. With the recent success of Sand Hills in Nebraska, Keiser could have hired Bill Coore and Ben Crenshaw to do the work, but feared it would be seen as their second course. As such, he opted to select a new comer for the commission. The risk worked, and Keiser’s course soon gained worldwide acclaim. The benefits of minimalist design were again showcased to the world and the resort destination boom of the 2000s had begun (Dear, 2011).

Paralleling the explosion of golf course construction in the 1990s, came the abundant production of literature. In Britain, F.W. Hawtree would produce four excellent works, titled: Colt & Co.: Course Architects (1991); Triple Baugé, Promenades in Medieval Golf (1996); Aspects of Golf Course Architecture I, 1889-1924, an Anthology (1998); and, Aspects of Golf Course Architecture II, 1924-1971 (1999) (EIGCA, 2000). In the United States, Geoffrey S. Cornish would work with Ron Whitten to co-author and
update their 1981 publication *The Golf Course*, released in 1993 as *The Architects of Golf*. Similarly, in 1998, Cornish would partner with golf course architect Robert Muir Graves to create the text titled *Golf Course Design*. Finally, in 1995, a young and passionate writer, Geoff Shackelford, burst into the world of golf course literature when he released *The Riviera Country Club: A Definitive History*. Shackelford then focused on the architect of the same course when he published *The Captain: George C. Thomas Jr. and His Golf Architecture*. Likely drawn to golf architecture during his research of George C. Thomas Jr., Shackelford compiled and edited *Masters of the Links: Essays on the Art of Golf and Course Design*, which he released that same year. This edited volume presented the best classic and modern interpretations of golf architecture from its top practitioners (Shackelford, 2016). In 1999, Shackelford published one of his greatest works. *The Golden Age of Golf Design* proved to be landmark book, summarizing the greatest era in golf course design, its influential designers, and their projects. These works, combined with the Dotcom boom of the mid-1990s, meant that the literature pertaining the roots and history of golf course architecture was again available to the public, this time even more so than during the pre- and inter-war eras. The link between golf course architecture and its literature would again strengthen in the 2000s.

**4.2.19. 2000s**

Following Geoff Shackelford’s biographic summary of the life and work of George C. Thomas Jr. in 1996, the early-2000s saw the release of many similar texts detailing the lives and works of other Golden Age architects. The first notable example, published in 2000 by J.A. Barclay, was *The Toronto Terror: The Life and Works of Stanley Thompson*. In 2001, Bradley S. Klein (Appendix B.9) released *Discovering
Donald Ross: The Architect and his Golf Courses. Finally, in 2002, George Bahto released his detailed assessment of golf course architect Charles Blair MacDonald when he published the Evangelist of Golf.

In 2002, writer and publisher Paul Daley (Appendix B.10) of Australia released the first of his now six book series, titled *Golf Architecture: A Worldwide Perspective, Volume 1*. Likely inspired by Colt and Alison’s *Some Essay’s on Golf Course Architecture* (1920), and Geoff Shackelford’s *Masters of the Links* (1997), Daley invited contributions from many renowned golf course architects and edited their essays into a single literary volume. This pioneering work likely inspired the creation of the British magazine *Golf Course Architecture* in 2005. Finally, Geoff Shackelford released two pivotal texts – *Grounds for Golf* (2003) and *The Future of Golf* (2005). The proliferation of these texts, and most notably their theme, indicates a mirroring of the ideals of the discipline of golf course architecture and gives an indication in to how the industry was becoming more self-reflective in the early 2000s.

A further justification of the connection between design literature and practice occurred in 2000 when golf course architect Gil Hanse partnered with writer Geoff Shackelford to create Rustic Canyon in Moorpark, California. Again, in 2009, the pair would join forces to produce the Horse Course at the Prairie Club. Separately, Gil Hanse would continue his work with partner Jim Wagner at new course designs like Castle Stuart Golf Links in Inverness, Scotland and the Boston Golf Club in Hingham, Massachusetts. Further, the pair worked to renovate (or restore) the Tokyo Golf Club in Japan, TPC Boston in Massachusetts, The Country Club in Massachusetts, and Sleepy Hollow Country Club in New York (Logan, 2012) (ASGCA, 2016).
However, what really took minimalist design to the forefront of the profession was the work of Tom Doak at the start of the 2000s. In 2001, Doak completed Pacific Dunes in Oregon. In 2004, he completed Cape Kidnappers Golf Course in New Zealand and Barnbougle Dunes Golf Links in Tasmania. All three of these courses would be ranked within the Top 100 Golf Courses in the World by *Golf Digest*. These three courses quickly dotted the covers of all the major golfing publications and Mike Keiser, principal investor at both Pacific Dunes and Barnbougle Dunes, proved that his resort golf model was a successful one (Doak, 2016).

The resort model seemed so alluring that others, including Donald Trump, decided to pursue similar options. In 2007, Martin Hawtree completed Trump International Golf Links in Aberdeen, Scotland. Hawtree was likely hired due to his family’s great legacy and the fact that he had been chose the year prior to serve as the consulting golf course architect for the R&A (Hawtree, 2016). Once opened, Trump International was soon ranked in the Top 100 Golf Courses in the World by *Golf Digest*. Trump had his first success. However, where Keiser had only selected the best sites and brought in the best architects for multi-course resorts, Trump was happy to buy financially stricken courses and pump money into their non-golfing facilities, such as the clubhouse, locker rooms and bar. Every course he opened was instantly marketed as the greatest course in the world. His developments, like many of those in the 1980s, 1990s and 2000s, centre on real estate first and golf second (Revesz, 2016). This real-estate driven model would be drastically impacted starting in 2008.

Between 2008 and 2013, in an era now called the Great Recession, a global economic downturn began after the 2007-2008 global credit crunch (Figure 4.30). A
<table>
<thead>
<tr>
<th>ERAS</th>
<th>EVENTS</th>
</tr>
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<tbody>
<tr>
<td>(2000-present) Evidence-Based Design</td>
<td>2003</td>
</tr>
<tr>
<td>(1970-present) Environmentalism; (2000-present) Evidence-Based Design</td>
<td>2004</td>
</tr>
<tr>
<td>(1960-2005) Deconstructivism</td>
<td>2006</td>
</tr>
<tr>
<td>(1995-present) Corporate Modernism or Neomodernism</td>
<td>2007</td>
</tr>
<tr>
<td>(2000-present) Evidence-Based Design</td>
<td>USGA limits clubhead size and club length</td>
</tr>
</tbody>
</table>

**Figure 4.30 – Timeline of external influences on golf course architecture, 2000s**

**NOTE:** This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

long period of slow growth and rising unemployment resulted. Housing bubbles, bad loans, and banking losses combined to produce lasting impacts. In 2008, all major economies experienced a very sharp drop in Gross Domestic Product (GDP). The banking crisis severely curtailed normal bank lending. The result was a fall in investment and consumer spending. The global nature of the crisis meant that there was also a drop in world trade (Pettinger, 2013).

As a result of these instabilities, the golf course industry in North America experienced some drastic effects. During the Great Recession golf economy revenue was driven primarily by weaknesses in golf real estate (-68.3%) and golf course capital investment (-42.1%), including new course construction (SRI International, 2012). New golf residential construction was severely impacted by the housing market crash and the economic recession of 2008-09. New course construction slowed considerably during this period, and golf facility operators made significantly lower average capital investments in response to the weakened economic landscape. In addition, spending on golfer supplies (-8.3%) declined due to weakened overall retail spending (SRI International, 2012).

However, whereas the developer driven model was failing, the minimalist movement, due to its inherent economic benefits, continued to persevere. After successes with Blackhawk Golf Club (2003) in Alberta and Sagebrush Golf and Sporting Club (2008) in British Columbia, golf course architect Rod Whitman began construction on Cabot Links in Inverness, Nova Scotia in 2008. Though the initial construction season was cut short in October of 2008, due to initial economic forecasts, the project was re-started the following spring. The schedule of the project was slowed down allowing for
two benefits. Firstly, Rod Whitman, who in addition to being the golf course architect was also the head feature shaper on his project, was allowed to craft the site slowly ensuring the best results were achieved. Secondly, the opening of the course could occur when the economy showed signs of recovery. As such, Cabot Links received international acclaim in 2012 when it first opened for play (Whitman, 2016). Developer Mike Keiser would again provide the backing, once again illustrating the prudence of his destination business model.

Similarly, after completing layouts at Friars Head (2002) on Long Island, Old Sandwich (2004) in Massachusetts, and Bandon Trails (2005) in Oregon, the firm of Coore & Crenshaw would start projects in North Carolina and Tasmania at the end of the 2010s. The Dormie Club in Pinehurst, North Carolina was opened in 2011. The project demonstrated, again, that a good site and minimalist vision could build a top quality golf course, even during a recession. Next, and also completed in 2011, the pair finalised the Lost Farm course at Barnbougle Dunes in Tasmania. With backing provided by Mike Keiser, the pair of Coore & Crenshaw crafted a second course for the resort. Both resort courses would be ranked in the Top 100 Golf Courses in the World by Golf Digest, and would add to the growing market of high-end resort golf destinations utilizing the minimalist school to improve on the previous residential business model (Dear, 2011).

The 2000s also represented a transition away from the purely Superficial School of golf course design. Foundations for this change started with a proliferation of golfing literature and were enhanced by the effects of the realities of the economic downturn at the end of the decade. After completing Tot Hill Farm in 2000 and Bulls Head Bay in 2001, golf course architect Mike Strantz softened his former Fazio inspired flair and
focused on strategic elements in the completion of the Shore Course at the Monterey Peninsula Country Club. Though his background as an artist was still visually evident, Strantz focused on the integration of native vegetation and the masking of man-made features. Unfortunately, in 2005 following the completion of the Shore Course renovation, Mike Strantz passed away due to cancer. Though his legacy was cut short, his influence on the evolution of golf course architecture was significant (Hiseman, 2013).

4.2.20. 2010s

As the effects of the Great Recession (Figure 4.31) would continue throughout the world until 2013, the resort-model or destination-model (two or more top tier courses at a single location) would continue to direct the design industry. Firstly, in 2010, Tom Doak and Jim Urbina, another Pete Dye disciple, would collaborate to build a fourth golf course at Mike Keiser’s Bandon Dunes Golf Resort in Oregon. This project would be unique as the inspiration for the golf holes came from Golden Age golf course architect Charles Blair MacDonald. Doak and Urbina even enlisted the help of writers/historians George Bahto and Bradley S. Klein (Doak, 2016). Secondly, on property which they owned and operated for 60 years as a phosphate mine, the Mosaic Company decided to build two golf courses in the early-2010s. The company hired the minimalist firms of Coore & Crenshaw and Renaissance Golf (Tom Doak) to complete the work. The courses would open in 2012 to international acclaim (Dear, 2011).
Figure 4.31 – Timeline of external influences on golf course architecture, 2010s

NOTE: This timeline has been summarized into both “Eras” and “Events”. Eras occurred over many years and events occurred on or after a specific date/year. Eras have been based on 3 distinct influences – Economy (ECO), Landscape Architecture (LA), and Architecture (ARCH). Further, eras have been defined by 3 geographic regions – the British Isles (BI), the United States (US) and Canada (CAN). Date ranges shown, combined with codes used for both influence and region (e.g. Economy-British Isles = ECO-BI), explain when and what occurred to define an era. Events comprise the same 3 influences (ECO, LA, and ARCH), but also includes Media (MED), Social (SOC), Construction / Maintenance (CM) and Golf Equipment Advancements (GEA).

Completed in 2010, Gil Hanse once again sought the assistance of Geoff Shackelford, golf historian and a noted George C. Thomas Jr. expert, to assist in the restoration of Los Angeles Country Club, a famous Thomas (and Herbert Fowler) design. In 2012, Gil Hanse was selected as the golf course architect to craft the golf course for the 2016 Summer Olympic Games in Brazil. Hanse’s concept, which was formed in collaboration with Canadian golf course architect Ian Andrew, was sold to the International Golf Federation on the premise it would resemble the Sandbelt layouts of Australia’s south-east coast. This concept stemmed not only from the quality of golf course architecture in Australia, as influenced by the work of Dr. Alister MacKenzie during the inter-war period, but the reality that the Sandbelt region of Australia and Rio de Janeiro in Brazil both fall with the same Koppen-Geiger Climate Classification (Figure 4.32).

This idea was further fostered in the construction phases as Hanse offered to move his family to Rio de Janeiro, near the site, so he could be present for every phase of the course’s development. Further, Hanse formed a team of passionate shapers who had spent time in the Sandbelt and had developed a feel for how they could shape Sandbelt type features. The result, completed for test events in 2016, was recently audited for environmental impacts. The inspection was carried out in December of 2015 following a civil lawsuit filed by state prosecutors who questioned the environmental impacts of the project. The suit involved prosecutors, legal advisors and environmental specialists. However, as reported on the Rio 2016 website in February, whereas 80% of the total site area had been degraded due to sand extraction activities prior to golf course construction, the golf course project had increased vegetation by 167%, leading to a “positive cycle for
Figure 4.32
World Map of Koppen-Geiger Climate Classification
(Rubel and Kottek, 2010).
fauna development” (Rio 2016, 2016). Further, the report indicated that 263 species are now found in the area, compared to only 118 species before construction had commenced (Rio 2016, 2016).

Finally, started in 2012, a project was completed at Pinehurst Resort in preparation for the 2014 U.S. Open, which would raise many questions in the industry. In 2014, the US Open was held at Pinehurst No. 2, celebrated as the greatest Donald Ross course, and showcased the recent restoration work of Bill Coore and Ben Crenshaw to the world. Gone were the deep rough areas, replaced with native sand hazards and native plant species. Viewers were shocked to see brown, dry fairways instead of the lush green fairways typical of the PGA Tour. However, what Coore and Crenshaw had done was simply return the course to how it was meant to look and be played. The design duo used the original irrigation system, a single line system running down the centre of the playing corridors, to locate the intended angles of play. Through this undertaking they would discover that the original system was still operational and that they could maintain the course in the same fashion imagined by Donald Ross. This design process would further allow them to remove all non-original rough areas and reinstate the natural sandy areas with native wiregrass species. The result was a reduction in 36.2 acres of maintained area over the almost 150 acre course, while at the same time widening some fairways by as much as 50 percent. Further, the style of course allowed for a reduction in water usage from 55 million gallons a year to just 15 million gallons a year (Farren, 2012). However, when asked about their intentions, Coore and Crenshaw noted that they “were not environmental crusaders” but that they simply wanted to restore the classic course to its intended design. What people could not understand was how reverting a course back to
its intended design style had also created so many other benefits. Or, as Tom Fazio had formerly stated, “our society does not move backward.” However, the overarching issue was that the golf industry was not aware of its own past and how Pinehurst had been allowed to deviate from its original vision to suit evolving social tastes. While society may not move backward, it is important to look backward (Farren, 2012).

4.3. Scholarship of Integration - Eras in Golf Course Architecture

The literature of golf course architecture has often sought to sort its practitioners, and their courses, into various eras or schools of design. Geoffrey Cornish, Ron Whitten, Michael Hurdzan and Geoff Shackelford have all attempted to do so through their writings. While the Golden Age, as an era, is the most research and widely accepted of these design eras, the definition of other eras often differ between texts or, in some instances, go without classification. The reason for this inconsistency has been, until now, a lack of knowledge pertaining to the evolution of golf course architecture.

For example, within the book Golf Course Design: An annotated bibliography with highlights of its history and resources, co-authors Geoffrey S. Cornish and Michael J. Hurdzan state that the era between 1929 and 1953 is known as the “Dismal Years.” However, in Geoff Shackelford’s Golden Age of Golf Course Design, he states that the “Golden Age” occurred between 1911 and 1937. Obviously, these classifications are contradictory. A second example occurs between Mike Hurdzan’s Golf Course Architecture: Design, Construction and Restoration and Shackelford’s Grounds for Golf. Hurdzan states that architect Charles Blair MacDonald is a “penal style designer,” while Shackelford claims him to be a member of the “strategic school.” Finally, a term bestowed onto the era of geometric, Victorian inspired designs in the British Isles
between 1885 and 1900, was the “Dark Ages of Golf Architecture.” This characterization was first given by golf course architect Tom Simpson in his 1927 publication *The Architectural Side of Golf*. Since, this terminology has been repeated frequently and is referenced in several modern day books including *The Golf Course* by Cornish and Whitten, *Golf Course Architecture* by Michael Hurdzan, and in edited volumes like Richard Mandell’s piece titled *The Evolving Art of Strategy* in Paul Daley’s *Golf Architecture: A Worldwide Perspective, Volume Two*. However, what this characterization actually does is label the first actions of golf course architects away from the links, on which the game naturally evolved, as a “Dark Age.” When, in fact, these were the first attempts to spread the game away from the coasts of Scotland. As such, it is still a progression of the discipline and, by definition, cannot be a “Dark Age.”

Based on the preceding decade-by-decade exploration of the evolution of golf course architecture, and the suggested Schools of Design, the following eras have been distilled to more accurately reflect the evolution of the discipline.

<table>
<thead>
<tr>
<th>ERAS</th>
<th>TIMEFRAME</th>
<th>SCHOOLS OF DESIGN</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Natural Age</td>
<td>Pre-1830s</td>
<td>Natural School</td>
</tr>
<tr>
<td>The Bronze Age</td>
<td>1830 - 1890</td>
<td>Victorian or Penal School</td>
</tr>
<tr>
<td>The Silver Age</td>
<td>1890 - 1910</td>
<td>Early Strategic or Arts &amp; Crafts School</td>
</tr>
<tr>
<td>The Golden Age</td>
<td>1910 - 1939</td>
<td>Strategic School</td>
</tr>
<tr>
<td>War Age*</td>
<td>1939 - 1945</td>
<td>*loss of knowledge within the discipline</td>
</tr>
<tr>
<td>The Renaissance**</td>
<td>1970 - 1980</td>
<td>**the early work of Pete Dye</td>
</tr>
<tr>
<td>The Superficial Age</td>
<td>1980 - 1990</td>
<td>Freeway School</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Framing or Superficial School</td>
</tr>
<tr>
<td>The Neo-Golden Age</td>
<td>1990 - 1995</td>
<td>Minimalist or Low-Profile School</td>
</tr>
<tr>
<td>The Platinum Age</td>
<td>1995 - present</td>
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</tr>
</tbody>
</table>

**Figure 4.33**

Eras of Golf Course Architecture
The preceding categorization sought to summarize not only individual eras of design excellence or mediocrity, but also to establish relationships between the eras, and for the totality of discipline of golf course architecture itself. Ten eras were summarized, with eight schools of design falling within them. Firstly, The Natural Age of Golf Course Architecture included the Natural School of Design. This period represented the development of golf on the earliest links of Scotland. Golf courses were not constructed, they were simply found. Overtime, after repeated play, these sites revealed their finest and most intriguing layouts.

Secondly, The Bronze Age of Golf Course Architecture included the Victorian or Penal School of Design. This era represented the first time golf course architecture left the ideal sites of the Scottish coasts to venture inland toward the larger urban centres. Sites were less suited for the game, yet designers, professional golfers of the age, were tasked with creating features reminiscent of those found on the Scottish links courses. Without any golf construction knowledge, or an established understanding of golf course design principles, these early designers relied heavily on the prevailing design style of the era, the Victorian Style, to influence their courses.

Thirdly, The Silver Age of Golf Course Architecture, which occurred between 1890 and 1900, included the Early Strategic or Arts & Crafts School of Design. Influenced heavily by Horace G. Hutchinson and the emerging Arts & Crafts Movement in the arts, architecture and landscape architecture, this era represents that which was formerly called the Heathland Era. However, whereas the Heathland Era title does not relate that this was in fact the second major step in the evolution of the discipline, the
Silver Age of Golf Course Architecture relates this fact more clearly. The associated schools of design emphasize influence, while the eras the overall design progression.

Fourthly, The Golden Age of Golf Course Architecture included the Strategic School of Design. This era and school are the most commonly accepted in the industry. However, as the Golden Age builds on the previous Bronze and Silver Ages, this new classification illustrates that these eras are in fact related and a progression of knowledge did occur.

Fifthly, The War Age represented the onset of WWII and a massive loss of knowledge within the discipline. This break in knowledge has been summarized in Figure 4.33. As illustrated through the life and career spans of the disciplines leading designers, the onset of WWII represented a clear break in the evolution of the discipline. Further, the occurrence of The Great Depression before the war had resulted in far less work and little mentorship. As such, only Robert Trent Jones Sr. and Dick Wilson remained as the dominant designers in the United States by the 1950s. However, as illustrated in the decade-by-decade summary of the evolution of golf course architecture, Robert Trent Jones Sr. used his self-promotion talents and former relationship with Stanley Thompson, most notably his brochure in which he stole credit for Thompson’s projects, to establish himself as the prevailing designer of the next era.

Sixthly, The Dark Age of Golf Course Architecture included the Heroic School of Golf Course Design. Conversely, some have argued that this era represents the origins of “Modern Golf Course Design” and the establishment of the American Society of Golf Course Architects. Therefore, they would counter that this era is not a Dark Age. However, one has to look no further than the Top 100 golf course rankings, the
production of literature on the subject of golf course architecture during this era, and the previously summarized decade-by-decade evolution of the discipline, to understand that this era truly represented a major stop to the previous advancement and application of knowledge. As such, it only makes sense to characterize this era as a “Dark Age.”

Seventhly, The Renaissance represented the early work of Pete Dye. While this era does not include a specific school of design, as Pete Dye would later change his style to compete with the more bold and constructed courses of Tom Fazio, Robert Trent Jones Jr. and Rees Jones, it does represent a change in thinking. After visiting Scotland for a six month period, Dye returned to the United States with an understanding of the origins of golf. He then used this understanding, and his design-build approach, to mentor and influence those who worked with him at that time. It would be these protégées who would spurn the later Neo-Golden Age of Golf Course Architecture.

Eighthly, however, before golf would recapture its lost knowledge, the discipline, encouraged by economic growth, transitioned into the Superficial Age of Golf Course Architecture. This era included two schools of design, namely the Freeway School and the Framing or Superficial School. Designers sought to capitalize on the golf boom through the creation of as many projects as possible. The result, was the signature designer and the golf course contractor model.

Ninthly, the maturation of Pete Dye’s disciples allowed for the start of a new era in the 1990s. The Neo-Golden Age of Golf Course Architecture was made possible by the emergence of the Minimalist or Low-Profile School of Design. Courses were designed to work with the sites presented, instead of recreating a certain style. Further, classic courses were studied for their architectural merits and this understanding was
reflected in the design efforts of this period. Finally, writings on the subject of golf course design once again emerged, linking both knowledge and practice.

Lastly, the Minimalist or Low-Profile School began to replace the previously dominant Superficial School, most recently assisted by the onset of the Great Recession. This era was dubbed the Platinum Age as it was seen as a continuation of the inter-war progression of the discipline of golf course architecture. This relationship between the Golden Age and Platinum Age was explored using the questionnaire method, and has been summarized in the next section of this study. However, it was originally the massive success of Sand Hills in 1995 which influenced the last decade of the discipline. Though destination golf has prolonged the style through the recession, practitioners are now focusing the benefits of the minimalist style toward other issues such as growing the game (affordable, public, urban golf) and environmental/economic sustainability.
### Summary of Leading Golf Course Architect’s Life Span and Career Span

<table>
<thead>
<tr>
<th>Name</th>
<th>Life Span</th>
<th>Design Career</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allan Robertson</td>
<td>1815-1859</td>
<td>1842-1859</td>
</tr>
<tr>
<td>Old Tom Morris</td>
<td>1821-1908</td>
<td>1842-1903</td>
</tr>
<tr>
<td>Tom Duer</td>
<td>1849-1902</td>
<td>1870-1902</td>
</tr>
<tr>
<td>Charles Blair MacDonald</td>
<td>1856-1939</td>
<td>1883-1936</td>
</tr>
<tr>
<td>Herbert Fowler</td>
<td>1856-1941</td>
<td>1901-1941</td>
</tr>
<tr>
<td>Devereux Emmet</td>
<td>1861-1934</td>
<td>1897-1934</td>
</tr>
<tr>
<td>John P Abercombsy</td>
<td>1861-1935</td>
<td>1909-1935</td>
</tr>
<tr>
<td>Archie Simpson</td>
<td>1866-1955</td>
<td>1887-1933</td>
</tr>
<tr>
<td>Willie Campbell</td>
<td>1862-1900</td>
<td>1889-1900</td>
</tr>
<tr>
<td>Walter J Travis</td>
<td>1892-1927</td>
<td>1899-1927</td>
</tr>
<tr>
<td>Willie Park Jr</td>
<td>1864-1925</td>
<td>1886-1925</td>
</tr>
<tr>
<td>Tom Bentsdell</td>
<td>1866-1936</td>
<td>1895-1936</td>
</tr>
<tr>
<td>Harry S Colt</td>
<td>1896-1951</td>
<td>1901-1939</td>
</tr>
<tr>
<td>Harry Vardon</td>
<td>1870-1937</td>
<td>1905-1937</td>
</tr>
<tr>
<td>James Reid</td>
<td>1870-1959</td>
<td>1901-1950</td>
</tr>
<tr>
<td>Alister MacKenzie</td>
<td>1870-1934</td>
<td>1907-1934</td>
</tr>
<tr>
<td>John H Taylor</td>
<td>1871-1963</td>
<td>1889-1939</td>
</tr>
<tr>
<td>Donald Ross</td>
<td>1872-1948</td>
<td>1889-1948</td>
</tr>
<tr>
<td>George C Thomas Jr.</td>
<td>1873-1932</td>
<td>1904-1927</td>
</tr>
<tr>
<td>Albert W. Tillinghast</td>
<td>1874-1942</td>
<td>1907-1942</td>
</tr>
<tr>
<td>Seth Raynor</td>
<td>1874-1926</td>
<td>1907-1926</td>
</tr>
<tr>
<td>Tom Simpson</td>
<td>1877-1964</td>
<td>1919-1939</td>
</tr>
<tr>
<td>George Cumming</td>
<td>1876-1950</td>
<td>1909-1920</td>
</tr>
<tr>
<td>Percy Maxwell</td>
<td>1879-1952</td>
<td>1913-1952</td>
</tr>
<tr>
<td>Charles Alston</td>
<td>1882-1952</td>
<td>1907-1932</td>
</tr>
<tr>
<td>Fred George Hawtree</td>
<td>1883-1955</td>
<td>1911-1935</td>
</tr>
<tr>
<td>Charles Banks</td>
<td>1883-1931</td>
<td>1929-1931</td>
</tr>
<tr>
<td>William Flyer</td>
<td>1889-1945</td>
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<tr>
<td>Stanley Thompson</td>
<td>1894-1952</td>
<td>1913-1952</td>
</tr>
<tr>
<td>Robert Tyre Jones Jr.</td>
<td>1902-1971</td>
<td>1931-1948</td>
</tr>
<tr>
<td>Dick Wilson</td>
<td>1904-1965</td>
<td>1925-1955</td>
</tr>
<tr>
<td>Robert Trent Jones Sr.</td>
<td>1905-2000</td>
<td>1925-2000</td>
</tr>
<tr>
<td>Clinton &quot;Rob&quot; E. Robinson</td>
<td>1907-1989</td>
<td>1936-1989</td>
</tr>
<tr>
<td>Frank Pennink</td>
<td>1913-1983</td>
<td>1948-1983</td>
</tr>
<tr>
<td>Geoffrey Cornish</td>
<td>1914-2012</td>
<td>1955-2012</td>
</tr>
<tr>
<td>Pete Dye</td>
<td>1928-present</td>
<td>1961-present</td>
</tr>
<tr>
<td>Donald Steel</td>
<td>1937-present</td>
<td>1969-present</td>
</tr>
<tr>
<td>Robert Trent Jones Jr.</td>
<td>1937-present</td>
<td>1969-present</td>
</tr>
<tr>
<td>Jack Nicklaus</td>
<td>1940-present</td>
<td>1969-present</td>
</tr>
<tr>
<td>Ross Jones</td>
<td>1944-present</td>
<td>1969-present</td>
</tr>
<tr>
<td>Michael Huntzan</td>
<td>1943-present</td>
<td>1957-present</td>
</tr>
<tr>
<td>Tom Fazio</td>
<td>1945-present</td>
<td>1963-present</td>
</tr>
<tr>
<td>Bill Coore</td>
<td>1945-present</td>
<td>1969-present</td>
</tr>
<tr>
<td>Martin Hawtree</td>
<td>1947-present</td>
<td>1972-present</td>
</tr>
<tr>
<td>Ben Crenshaw</td>
<td>1952-present</td>
<td>1986-present</td>
</tr>
<tr>
<td>Rod Whitman</td>
<td>1953-present</td>
<td>1980-present</td>
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<tr>
<td>Mike Grantz</td>
<td>1955-2005</td>
<td>1979-2005</td>
</tr>
<tr>
<td>Kyle Phillips</td>
<td>1956-present</td>
<td>1981-present</td>
</tr>
<tr>
<td>Tom Doak</td>
<td>1961-present</td>
<td>1987-present</td>
</tr>
<tr>
<td>Ole Hanoee</td>
<td>1963-present</td>
<td>1989-present</td>
</tr>
<tr>
<td>David McLay Kidd</td>
<td>1967-present</td>
<td>1988-present</td>
</tr>
</tbody>
</table>
4.4. Questionnaires

As outlined in the methods section of this study, a questionnaire was used to bridge the gap between deceased “Contemporary” golf course architects and practicing “Luminary” golf course architects. The questionnaire method created a similar platform for selected Contemporary architects to provide direct written comments. This method was specifically chosen as it allowed participants to contemplate the questions, and strategically craft their answers, as selected Luminary architects had done previously through their publications. As revealed in the previous decade-by-decade evolution of the discipline of golf course architecture, selected Luminary architects are actually from the Golden Age of Golf Course Architecture and Contemporary Architects are actually from the Platinum Age of Golf Course Architecture. The following comparison enabled relationships to be found between the two high points within the discipline’s evolution. For consistency, practitioners are still referred to as Luminary and Contemporary golf course architects. In the following subsections, aggregate feedback from Contemporary questionnaires are contrasted against aggregate findings from Luminary publications to determine relationships within the material.

From the 35 Luminary designers researched, 6 provided sufficient detail in their writings to allow for comparison. Further, of the 35 Contemporary golf course architects asked to participate in the questionnaire method, 22 responses were successfully received. Returned questionnaires from each participant were first stripped of any personal identification, and a coding system was used to distinguish between questionnaires. From these sources, themes have been created for three primary focuses: 1) design influence; 2) personal journey; and, 3) design process.
4.4.1. Design Influence

As shown in Figure 4.35, nineteen themes were found to summarize the design influences of selected Luminary and Contemporary golf course architects. Firstly, the influence of landmark publications (as previously summarized in Figure 2.1) had a major impact on both Luminary and Contemporary designers. Of the selected Luminary designers, 83% were affected by the writings of other Luminary golf course architects, now seen as landmark publications. From the selected Contemporary designers, 95% of the participants stated that landmark publications had an influence on their design careers. As such, the relationship between design literature and practice is again supported.

Secondly, indirect mentorship, where designers were influenced by the work of another Luminary or Contemporary golf course architect, was also significant. For the selected Luminary designers, the work of Old Tom Morris at the Old Course at St. Andrews was paramount to their views on design. Further, the work of Willie Park Jr. in the heathlands south-west of London proved that ideas could indeed be transferred to inland sites. As such, 100% of the selected Luminary designers were influenced by the work of other Luminary designers. From the selected Contemporary designers, 50% of participants stated that they were influenced by the work of a Luminary designer and 36% stated that they were influenced by the work of another Contemporary designer. Therefore, direct and indirect mentorship influenced the careers of more Luminary designer than Contemporary designers.

Thirdly, direct mentorship was hugely influential to both Luminary and Contemporary architects. The influence of family and friends affected 33% of Luminary
designers and 36% of Contemporary designers. The mentorship of another Luminary designer influenced 50% of the selected Luminary designers. Of the Contemporary designers, 23% of the participants stated that they were mentored by a Luminary designer and 68% by another Contemporary designer.

Fourthly, whereas playing golf locally, being a club member, and competing in golf from a young age, were all moderate influences for Luminary designers, affecting 50%, 33% and 50% of designers respectively, these influences were less significant for Luminary designers. This trend continues when one compares both employment at a golf course and exposure to construction at a young age for both Luminary and Contemporary designers.

Fifthly, direct mentorship from a golfing professional influenced 17% of Luminary designers and 27% of Contemporary designers. This can be attributed to the fact that 33% of Luminaries and 27% of Contemporaries worked at a golf course growing up. Mentorship from a golf course developer only influenced a single participant (5%) of the Contemporary designers.

Sixthly, whereas Luminary golf course architects were exposed to various golf courses and cultures through competition or war, Contemporary designers have utilized newer forms of media, including television, magazines, social media, and website forums, to access broader influences for their personal understanding of what constitutes good design. These trends suggest that direct and indirect mentorship, combined with the influence of landmark publications and more recent media alternatives, have had the largest impact on design influence.
### Themes for Design Influence

<table>
<thead>
<tr>
<th>Theme #</th>
<th>LUMINARY</th>
<th>CONTEMPORARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3</td>
<td>X X X</td>
<td>X X X</td>
</tr>
<tr>
<td>4</td>
<td>X</td>
<td>X X X</td>
</tr>
<tr>
<td>5</td>
<td>X X X</td>
<td>X X X X</td>
</tr>
<tr>
<td>6</td>
<td>X</td>
<td>X X X X</td>
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<tr>
<td>7</td>
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<td>9</td>
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</tr>
<tr>
<td>14</td>
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</tr>
<tr>
<td>19</td>
<td>X</td>
<td>X X X X X X</td>
</tr>
</tbody>
</table>

#### Aggregate summary of themes for design influence.

1. mentored by family/friends
2. mentored by another luminary
3. mentored by another contemporary
4. mentored by a golf professional
5. influenced by the work of a luminary
6. influenced by the work of a contemporary
7. influenced by landmark publications
8. influenced by a golf developer
9. grew up playing golf locally
10. member at a golf club
11. competed in golf (amateur/school)
12. professional golfer
13. worked at a golf course (caddie/grounds)
14. exposed to golf course construction at an early age
15. war
16. television
17. golf magazines
18. social media
19. website forum Golf Club Atlas

**Figure 4.35**

Aggregate summary of themes for design influence.
4.4.2. Personal Journey

As shown in Figure 4.36, nine themes were found to summarize the personal journey of selected Luminary and Contemporary golf course architects. Firstly, making a study of the world’s top golf courses was another common trend. From the selected golf course architects, 67% of Luminary designers travelled both nationally and internationally to study top golf courses. Further, 100% of selected Luminary designers either grew up near or travelled to view the classic links courses of Scotland. This trend was consistent with selected Contemporary designers, as 86% of those who participated in the questionnaire stated that they have travelled internationally to visit and study top golf courses. Further, even more (91%) stated that they have travelled nationally to visit and study top golf courses. Finally, of participating Contemporary designers, 91% stated that they either grew up near a classic links course or have travelled to study them.

Secondly, education resulted in four themes: 1) no schooling; 2) some college/university but did not graduate; 3) completed undergraduate degree; and, 4) completed graduate degree. What is interesting is that only 17% of the selected Luminary designers had no formal education, as these men lived during a time when completing high school was typically a rare feat. This argument is supported by the fact that 50% of selected Luminary designers had completed a trade apprenticeship within their lifetime. Further, 50% had at least an undergraduate degree and 17% completed graduate level studies. This indicates that these men were highly educated for this period in time.

From the selected Contemporary designers, even fewer (5%) had either no formal education or had completed some studies but did not graduate. Further, of participating
Contemporary designers 64% stated that they had completed an undergraduate degree and 27% stated that they had continued to complete graduate level studies. While trends indicate a continued tendency toward additional education, what is interesting is that critical thinking, as required in post-secondary schooling, seems to have been linked to success in the discipline of golf course architecture from the start. Further, of those Luminary designers who graduated with an undergraduate or graduate level degree, 33% went on to achieve professional designations in other fields before transitioning into golf course architecture. This fact illustrates that the early successes of these Luminary designers could also be linked to the practices they would have adopted in other professional fields of the time.

These themes indicated that higher levels of education, and therefore the critical thinking required to complete such work, was fundamental to future success in golf course architecture. Further, the application of professional type practices, gained in other early professional fields, likely aided the earliest practitioners of golf course architecture in their endeavours. Finally, as there is no required schooling for the discipline of golf course architecture, the majority of noteworthy Luminary and Contemporary designers made significant efforts to travel and study the world’s best golf courses, especially the classic links courses of Scotland where the game originated. The study of top golf courses seems to be the most significant trend in the discipline.
Themes for Personal Journey

1 - no schooling  
2 - some college/university but did not graduate  
3 - completed undergraduate degree  
4 - completed graduate degree  
5 - achieved professional designation in other field  
6 - trade apprenticeship  
7 - travelled internationally to study top golf courses  
8 - travelled nationally to study top golf courses  
9 - travelled to study/grew up on classic links courses

Figure 4.36
Aggregate summary of themes for personal journey.
4.4.3. **Design Process**

As shown in Figure 4.37, twenty-four themes were found to summarize the design processes of selected Luminary and Contemporary golf course architects. Whereas Luminary design processes seemed to centre on themes related to the “ideal golf course” itself, Contemporary design processes seemed to focus more on the design steps toward achieving that ultimate goal.

Firstly, the most fascinating results stemmed from common themes shared by both Luminary and Contemporary designers. Four themes were shared between these two differing eras. Firstly, 50% of Luminary designers and 14% of Contemporary designers thought that it was important to consider the soil type and drainage qualities of the site. Further, the Contemporary responses noted the importance of drainage as an overall design principle. Secondly, 100% of selected Luminary designers and 36% of participating Contemporary designers wrote that nature should be used an inspiration. Thirdly, 83% of Luminary designers and 32% of Contemporary designers stated that variety in all elements of the final design (length, size and shape) were fundamentally key. Fourthly, 50% of Luminary designers and 36% of Contemporary designers stated that strategic design was one of the primary pursuits. However, perhaps more important than the percentage of Contemporary designers who matched principles with Luminary designers, was the fact that the majority of these Contemporary designers were also proponents of the design-build method. Hence, there seems to be a correlation between the design-build method and some of the Luminary design principles. As the design-build method is most commonly utilized by those practitioners who profess to be members of the Minimalist School of Design, it is likely that the Minimalist School of...
Design is the major link between the Platinum Age of Golf Course Architecture and the previous highpoint referred to as the Golden Age of Golf Course Architecture.

Next, of the selected Luminary designers, 100% wrote that greens and fairways should be undulating, this theme was not present in the written comments of Contemporary designers. Secondly, 33% of selected Luminary designers wrote that the length of a golf hole should be flexible. Again, this theme was not voiced in the received responses from selected Contemporary designers. Thirdly, 50% of Luminary designers wrote that: 1) a golf course should have two loops of nine holes, each of which should return to the club house; 2) there should be little walking between holes and golf should not be an exercise in hill climbing; and, 3) hazards should be visible as it allows for choices to be made. None of these themes were echoed by the selected Contemporary designers.

Procedurally based themes described by Contemporary designers, and not described by Luminary designers, included the following. Firstly, of Contemporary designers, 10% stated there was no set design process, 59% believed that the design process involved established steps, and 36% believed that the site itself defined the design process. However, these themes were not mutually exclusive.

Many Contemporary designers cited other influences pertinent to their design processes. Of the participants, 59% suggested that pre-design site visit analysis, site inventory, site history, and existing environmental constraints were critical. Further, 50% stated that client and/or golf course superintendent opinions weighed heavily into the design process. In the same way, 23% stated that budget and intended users were also important factors to consider in the design process.
The actual design product was viewed differently between Contemporary designers. Whereas 35% of participants believed in producing design alternatives for their clients, only 9% believed that creating a singular design solution was the best practice. Similarly, whereas 23% of Contemporary designers believed that the final plan should be detailed, showing proposed grading and features, 32% viewed the final plan to be conceptual in nature.

Related to the detail of the final plan, many Contemporary designers differed in their belief in the supervision of, or activity in, the construction phases of the design. Whereas 9% believed that all of the construction phases should be supervised, 18% believed that supervision could occur occasionally. Alternatively, 23% believed that the construction of the design should be completed in-house, through the design-build process. There was also a strong correlation between plan detail and level of construction management. Where Contemporary designers intended to design and build their product, the detail of the plan was intentionally less to allow them to have more freedom in the field. However, were designers sought to minimize their time in the field, final plans were created in greater detail to direct golf course contractors.
Themes for Design Process

1 - consider the soil type and drainage
2 - use nature as inspiration
3 - greens and fairways should be undulating
4 - variety is key
5 - hole length should be flexible
6 - two loops of nine holes starting at clubhouse
7 - little walking between holes and no hill climbing
8 - strategic design
9 - hazards should be visible to allow for choices
10 - there is no set design process
11 - pre-design site analysis and inventory
12 - established design process (steps)
13 - the site dictates the design process
14 - site history and constraints are important
15 - create design alternatives
16 - create singular design solution
17 - supervise all of the construction
18 - supervise some of the construction
19 - complete the construction in-house (design-build)
20 - client and/or superintendent opinions influence design
21 - budget and intended user are key factors
22 - design review/adjustments continue even after grassing
23 - final plan is detailed with exact grading and features
24 - final plan is conceptual to allow for field alterations

Figure 4.37
Aggregate summary of themes for design process.
4.5. Summary

The major goal of this study was to identify evolutionary patterns within the field of golf course design, in an effort to inform future decision making within the discipline of golf course architecture. Timelines of external influences were created and compared to detailed profiles for influential golf course architects, writers and owners. The scholarship of integration method was used to create a decade-by-decade breakdown revealing the evolution of the discipline. From this breakdown, 10 eras and 8 schools of design were created and rationalized. Two factors, operating both independently and concurrently, would ultimately produce these era and design school changes within the discipline, they were: 1) external influences; and, 2) a progression or dilution in design knowledge, mentorship and practice.

This understanding lead to the identification of two high points in the evolution of the discipline, namely the Golden Age of Golf Course Architecture and the Platinum Age of Golf Course Architecture. The Golden Age of Golf Course Architecture was influenced mainly by the Strategic School of Design and the Platinum Age of Golf Course Architecture was influenced mainly by the Minimalist School of Design. The questionnaire method was used to create a platform to contrast these two eras of design. Golden Age practitioners were referred to as Luminary designers and Platinum Age practitioners were referred to as Contemporary designers. From both the questionnaire and scholarship of integration methods, themes were created for three primary focuses: 1) design influence; 2) personal journey; and, 3) design process.

Findings demonstrated that direct and indirect mentorship, combined with the influence of landmark publications (and more recent media alternatives), have had the
largest impact on design influence. Higher levels of education, and therefore the critical thinking required to complete such work, has been fundamental to success in golf course architecture. The application of professional type practices, gained in other early professional fields, likely aided the earliest practitioners of golf course architecture in their endeavours. As there has never been any required schooling within the discipline of golf course architecture, the majority of noteworthy Luminary and Contemporary designers made significant efforts to travel and study the world’s best golf courses, especially the classic links of Scotland where the game originated.

Finally, whereas Luminary design processes seemed to centre on themes related to the “ideal golf course” itself, Contemporary design processes seemed to focus more on the design steps toward achieving that ultimate goal. However, the most fascinating results stemmed from the few common themes shared by both Luminary and Contemporary designers, in relation to their design processes. There seemed to be a correlation between the design-build method and some of the Luminary design principles. Themes such as using nature as inspiration, infinite variety, and abundant strategy were professed by both design-build practitioners and Luminary designers. As the design-build method has been most commonly utilized by those practitioners who profess to be members of the Minimalist School of Design, it is likely that the Minimalist School of Design is the major link between the Platinum Age of Golf Course Architecture and the previous highpoint referred to as the Golden Age of Golf Course Architecture.
5. Discussion

“...true taste, in every art, consists more in adapting tried experiments to peculiar circumstances, than in that inordinate thirst after novelty, the characteristic of uncultivated minds, which, from the facility of inventing wild theories, without experience, are apt to suppose, that taste is displayed by novelty, genius by innovation, and that every change must necessarily tend to improvement.”

– Humprey Repton, as addressed to the King of England in the dedication of his 1774 publication Landscape Gardening (Repton, 1774).

5.1. Summary of Research

The primary goal of this study was to identify evolutionary patterns within the field of golf course design. The evolution of, and the accompanying body of knowledge for, golf course architecture has not been a linear progression. From its beginnings, the evolution of the discipline has been directed by external influences and the personalities of its own practitioners. Typically viewed as more of an art form than a science, golf course architecture has evolved to suit prevailing social tastes, artistic trends, media effects, economic climates, and technical advancements. Recently, the golf industry has been engaged in a finger-pointing exhibition as to who is to blame for the current state of the game. However, the discipline of golf course architecture has failed to recognize its burden of responsibility.
Writers and practitioners alike have pointed to the Golden Age of Golf Course Architecture as the pinnacle of design practice. Numerous books have focused on the practitioners of this period and the era as a whole. Some have even noted that issues currently facing the game of golf are not new ones, and that these same problems were voiced as far back as the early 1900s. However, whereas many classic courses have stood the test of time, and are revered today, many modern courses have failed to live up to these pre-WWII standards. It is the evolution of the discipline of golf course architecture, as revealed through this study, which explains this disconnect.

The exploration of the evolution of golf course architecture, as completed through this study, has revealed 10 Eras of Golf Course Architecture and 8 Schools of Design. Whereas the first four and last four eras represented a progression in design practice, The War Age and The Dark Age represented the dissolution of the earliest progression within the discipline. The destitution of The Great Depression, followed by the onset of WWII, allowed for a semi-established practitioner to emerge from the War Age as America’s leading designer, namely Robert Trent Jones Sr. Further, America’s post-war economic strength, coupled with Britain’s post-war austerity, allowed western ideals to supersede traditional Scottish values in the game. Trent Jones helped to establish the American Society of Golf Course Architects (ASGCA) and the Heroic School of Design. Further, as the first secretary-treasurer of the ASGCA, Trent Jones personally crafted the charters and code of ethics on which the society is still structured (Klein, 2001).

Conversely, Tom Doak, one of the pioneering proponents of the Minimalist School of Design, is currently not a member of the ASGCA. Firstly, his portfolio includes at least four courses ranked within the Top 100 golf courses in the world.
Secondly, he is without doubt one of the most proficient and influential writers of the Contemporary age. Thirdly, he is educated with a Bachelors of Landscape Architecture from Cornell. Fourthly, he has made one of the most extensive studies of the world’s top golf courses, having even lived in Scotland on several occasions. Finally, his internship program is one of the most extensive mentorship programs in the history of golf course architecture. Through it, he has inspired many of the next cohort of golf course architects, including his first protégée – Gil Hanse. Regardless of these professional accomplishments, Tom Doak has not been able, or willing, to attain membership with the ASGCA. The primary reason for his lack of inclusion stemmed from the nomination process and the fact that Doak’s first book, titled *The Confidential Guide to Golf Courses*, was a no-holds-barred peer review of golf course architecture. Many within the ASGCA took offense to Doak’s negative feedback on their work.

Results from the questionnaire method have revealed that contemporary practitioners utilized two major approaches to design practice in golf course architecture. The first was based on the field of landscape architecture and gained traction following WWII. Through this method, golf course architects produced detailed plans which directed contractors in the construction of the design. This process allowed the designer to visit the site occasionally for inspections. However, for the golf course architect to make a decent living several golf course projects had to be completed simultaneously.

On the other hand, a second approach has emerged more recently in the field which incorporates the practices of both design and build. This method allowed the designer to employ a group of skilled “shapers” (i.e. construction experts with a background in golf course design) to assist with the completion of the work. Often, golf course architects
from this style were once shapers themselves and continued to actively participate in the construction of their own projects. This method allowed the designer to sustain a career while creating only one or two golf courses a year. The major differences seemed to be the quality and economy of the product, as more time onsite by those most knowledgeable led to better results (Golf Course Architecture, 2013).

The questionnaire method also suggested a correlation between the design-build method and some of the Luminary design principles. Themes such as using nature as inspiration, infinite variety, and abundant strategy were professed by both groups. Further, the design-build method has been most commonly utilized by those practitioners who profess to be members of the Minimalist School of Design. Therefore, it is likely that the Minimalist School of Design is the most profound link between the two high points of design practice, namely the Golden Age of Golf Course Architecture and the Platinum Age of Golf Course Architecture.

5.2. Results of Study Objectives

This study sought to characterize and rationalize how and why the field of golf course architecture has developed over time. It was believed that this evolution could have major implications on future decision making within the discipline of golf course architecture. In the fulfilment of the goal of this study, several underlying objectives were also achieved. These five objectives were completed and can be summarized as follows:
1) **Document the current issues facing the game of golf.**

The game of golf has deviated from its original Scottish roots. Modern golf courses have typically resulted from an extensive process of earth-moving. Contemporary golf course architects have imposed their style onto any site, regardless of the inherent attributes of the existing landscape. Considerable maintenance effort and cost are used to maintain patterns which conflict with natural processes. Typical problems have included excessive water use, excessive fertilizer use, excessive pesticide use, and habitat loss during construction. These problems lead to increased costs, which eventually result in higher green fees. As such, golf has seen fewer people entering the sport.

Further, golf writers have argued that golf has been kidnapped by equipment manufacturers and knowingly deregulated by its governing bodies, all in an effort to monetize the game. The slumping golf industry has responded to unregulated technology by lengthening and narrowing courses. The costs associated with these ‘quick fixes’ have resulted in increased green fees, ballooning maintenance costs and lengthy playing times. The result, again, has been a decline in the popularity of the game.

2) **Contextualize the current issues facing the discipline of golf course architecture**

A lack of literature defining the evolution of the discipline, from origins to present day, provides little insight to how and why golf course architecture operated best. Although literature in the field of golf course architecture has existed since 1888, this work has been frequently limited to individual architects, their design principles, and their portfolios of work. Though several works have attempted to outline the significant
eras and key figures in the evolution of golf course architecture, these texts are either severely out of date or do not cover more than a decade or two of the discipline’s evolution.

3) **Define and rationalize the evolution of golf course architecture**

Timelines of external influences were created and compared to detailed profiles for influential golf course architects, writers and owners. The scholarship of integration method was used to create a decade-by-decade breakdown revealing the evolution of the discipline. From this breakdown, 10 eras and 8 schools of design were created and rationalized. The 10 eras of golf course architecture were defined as: 1) The Natural Age; 2) The Bronze Age; 3) The Silver Age; 4) The Golden Age; 5) The War Age; 6) The Dark Age; 7) The Renaissance; 8) The Superficial Age; 9) The Neo-Golden Age; and, 10) The Platinum Age. The 8 school of design were classified as: 1) the Natural School; 2) the Victorian or Penal School; 3) the Early Strategic or Arts & Crafts School; 4) the Strategic School; 5) the Heroic School; 6) the Freeway School; 7) the Framing or Superficial School; and, 8) the Minimalist or Low-Profile School. Two factors, operating both independently and concurrently, would ultimately produce these era and design schools changes within the discipline: 1) external influences; and 2) a progression or dilution in design knowledge, mentorship and practice.

4) **Compare and contrast the high points of design practice**

The high points of design practice in golf course architecture have been classified as The Golden Age of Golf Course Architecture and The Platinum Age of Golf Course Architecture. The Golden Age of Golf Course Architecture is the most commonly
accepted era in the industry. The Platinum Age was seen as a continuation of the inter-war progression of the discipline of golf course architecture. This relationship between the Golden Age and Platinum Age was explored using the questionnaire method.

Results from the questionnaire method have indicated that The Golden Age of Golf Course Architecture was influenced mainly by the Strategic School of Design and the Platinum Age of Golf Course Architecture was influenced most significantly by the Minimalist School of Design. The questionnaire method was used to create a platform to contrast these two eras of design. Golden Age practitioners were referred to as Luminary designers and Platinum Age practitioners were referred to as Contemporary designers. From both the questionnaire and scholarship of integration methods, themes were created for three primary focuses: 1) design influence; 2) personal journey; and, 3) design process.

Findings demonstrated that direct and indirect mentorship, combined with the influence of landmark publications (and more recent media alternatives), have had the largest impact on design influence. Higher levels of education, and therefore the critical thinking required to complete such work, has been fundamental to success in golf course architecture. The application of professional type practices, gained in other early professional fields, likely aided the earliest practitioners of golf course architecture in their endeavours. As there has never been any required schooling within the discipline of golf course architecture, the majority of noteworthy Luminary and Contemporary designers made significant efforts to travel and study the world’s best golf courses, especially the classic links of Scotland where the game originated.
Finally, whereas Luminary design processes seemed to centre on themes related to the “ideal golf course” itself, Contemporary design processes seemed to focus more on the design steps toward achieving that ultimate goal (the ideal course). However, the most fascinating results stemmed from the few common themes shared by both Luminary and Contemporary designers, in relation to their design processes. There seemed to be a correlation between the design-build method and some of the Luminary design principles. Themes such as using nature as inspiration, infinite variety, and abundant strategy were professed by both design-build practitioners and Luminary designers. As the design-build method has been most commonly utilized by those practitioners who profess to be members of the Minimalist School of Design, it is likely that the Minimalist School of Design is the major link between the Platinum Age of Golf Course Architecture and the previous highpoint referred to as the Golden Age of Golf Course Architecture.

5) Rationalize the low points of design practice

The low points of design practice in the evolution of golf course architecture have been dubbed The War Age of Golf Course Architecture and The Dark Age of Golf Course Architecture. The War Age represented the onset of WWII and a massive loss of knowledge within the discipline. Further, the occurrence of The Great Depression before the war had resulted in far less work and little mentorship. As such, only Robert Trent Jones Sr. and Dick Wilson remained as the dominant designers in the United States by the 1950s. However, as illustrated in the decade-by-decade summary of the evolution of golf course architecture, Robert Trent Jones Sr. used his self-promotion talents and former relationship with Stanley Thompson, most notably his brochure in which he stole
credit for Thompson’s projects, to establish himself as the prevailing designer of the next era.

The Dark Age of Golf Course Architecture included the Heroic School of Golf Course Design. Conversely, some have argued that this era represents the origins of “Modern Golf Course Design” and the establishment of the American Society of Golf Course Architects. Therefore, they would counter that this era is not a Dark Age. However, one has to look no further than the Top 100 golf course rankings, the production of literature on the subject of golf course architecture during this era, and the previously summarized decade-by-decade evolution of the discipline, to understand that this era truly represented a major stop to the previous advancement and application of knowledge. As such, it only makes sense to characterize this era as a “Dark Age.”

6) Define professional practice and contrast professional practice in golf course architecture with allied professional fields

In 1955, Caplow summarized 5 steps forming a progression from a craft to a profession, they are: 1) establishment of a professional association; 2) undergo a name change; 3) adopt a code of ethics; 4) licensure; and, 5) development of accreditation for educational facilities (Caplow, 1955). The ASLA was the first to complete this process and served as the model for all future associations. However, the steps were followed in a different order. Frederick Law Olmsted and Calvert Vaux were two of the first to use the title “landscape architect” in 1863. This was followed by the formation of the ASLA and adoption of a code of ethics in 1899. Then, in 1900, university education was first instituted at Harvard University. Soon, accreditation procedures followed and the
enactment of licensure laws were passed in a majority of states (IFLA, 2016) (Taylor, 2010).

The discipline of golf course architecture is currently represented by four major and separate associations - The American Society of Golf Course Architects (ASGCA), the Society of Australian Golf Course Architects (SAGCA), the European Institute of Golf Course Architects (EIGCA), and the Japanese Society of Golf Course Architects (JSGCA). These organizations operate independently. Further, while these associations have achieved phases 1 and 2 of Caplow’s 5 steps, there is little evidence that steps 3, 4 and 5 are (or will be) completed as prescribed by Caplow. The various codes of ethics differ between each association and often include wording negating the importance or strictness of the code. Further, there are no established repercussions for violating the code of conduct. As such, it is more accurate to call them “general rules” than a “code of ethics.” According to Caplow’s 5 steps, the field of golf course architecture is operating as a craft, yet calling itself a profession.

5.3. Limitations of the Study

As with all historical research, there is undoubtedly some level bias and inaccuracy. Further, as history is often written by the victors, or in the case of golf course architecture its leading practitioners, there is undeniably a level of bias attached to the results. The Scholarship of Integration method was selected as it enabled previously unrelated historical evidence, from an array of fields, to be contrasted to reveal specific relationships. Contrasting various sources helped to remove or reveal historical skepticism. Further, numerous publications, from various authors, were contrasted to remove any bias or emphasis.
The scope of this study could also be viewed as a limitation. The ability of one researcher to analyze the evolution of an entire profession is a massive undertaking. However, this study was well organized and findings were structured into timelines, profiles and summative tables for comparison. Further, decade-by-decade analysis was used to focus exploration within a specific era first, before relating those findings to other periods. Analysis at both micro (decade) and macro (entire history of the discipline) scales allowed for more compelling results.

The questionnaire method also prohibited the ability of the researcher to probe for additional information in cases where short answers occurred, or where questions were misunderstood. However, the questionnaire method was selected as it was thought to create the most consistent comparison between the responses given by Contemporary designers and those previously written by Luminary designers in their publications. Further, Dillman’s Total Design Method (TDM) was used to maximize response rates. As a result, twenty-two (63%) of the selected Contemporary designers participated in the study.

The selection method of both Contemporary and Luminary architects could also be viewed as a limitation. Golf course rankings were used to select designers. Practitioners with two or more projects ranked within the Top 100 golf courses of the British Isles, the United States and/or Canada were selected for the study. However, as suggested by this study, golf course rankings are often highly subjective and have historically focused on a course’s overall toughness and standard of maintenance. As most printed magazines do not offer an area-by-area analysis, it was necessary to utilize the “only independent website dedicated to the best golf courses of the World” – Top 100
Golf Courses. This website allowed for the most consistent analysis as all geographic areas were reviewed under the same criteria. Further, as the panelists are directly associated with the website, and not comprised of volunteers like other magazine rankings, the course rankings do not fluctuate as dramatically when new rankings emerge. Hence, the overall ranking of a course was deemed to be more consistent.

5.4. Applications of Research

The primary application of this study should be the fulfilment of Caplow’s 5 steps. With the knowledge of its evolution, and established connections between Golden Age and Platinum Age practitioners, the discipline of golf course architecture must now complete the progression from a craft to a profession. Firstly, a professional code of ethics should be created to direct professional conduct. The focus of the discipline can no longer be solely directed by the wishes of owners or magazines. Practitioners have a responsibility to uphold the values of good design. Practice should embrace themes such as using nature as inspiration, infinite variety, and abundant strategy moving forward. Further, there should be repercussions for professional misconduct (i.e. disciplinary board).

Secondly, licensure should focus on the traits and skills revealed in this study for all top practitioners. Higher levels of education and critical thinking should be required. Opportunities for direct mentorship should be provided and a minimum period prescribed. A minimum knowledge of the discipline’s landmark publications should be tested. Lastly, prospective members should be required to visit and study the top golf courses of the world. Continuing education should be mandated.
Thirdly, the development of accreditation for educational facilities should be based on the same requirements as licensure. The study of golf course architecture does not require as specific degree program, as the field does not require that many golf course architects. As such, the study of landscape architecture is the logical choice within which a specific course, or courses, could be outlined, as landscape architecture is the parent discipline of golf course design. However, whereas education in landscape architecture is focused on specific accreditation requirements from its own overseeing societies, golf course architecture must find a way to employ and offset these existing areas of study.

A secondary application of this study should focus on the prevalence of “magazine architecture.” As previously stated, a course’s overall toughness and level of maintenance has historically trumped more integral themes such as using nature as inspiration, infinite variety, and abundant strategy. The discipline of golf course architecture many be the only association which allows the products of its practitioners to be ranked and valued externally. The founding of an international body to direct a vision for the discipline, could be supported through the establishment of golf architecture’s own awards and ranking system. Further, peer review and project case studies could aid in advancing knowledge.

5.5. Future Research

Most importantly, this study must not be an end. The most essential function of a professional practice is the assemblance and maintenance of a specialized body of knowledge. Therefore, this study is just the next step in a perpetual process of research and analysis. Fulfilling Caplow’s 5 steps will establish the vital link between scholarly and professional activities.
Although golf course architecture started as a strictly utilitarian pursuit, one aimed at spreading the game to allow for increased equipment sales, the discipline has evolved into one where general knowledge will no longer suffice. As the discipline of golf course architecture advanced, entire sub-disciplines developed around it. These specialists offer skilled support in areas once tackled by the golf course architect independently, albeit in a less sophisticated manner. Various specialized firms now provide construction services, feasibility studies, environmental assessments, and even find financing sources. Future research should focus on integrating practice with scientific/specialist input. It is imperative to stress that the ultimate success or failure of the product lies with the designer and the structure of the discipline itself.
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Appendix A. – Profiles of Influential Golf Course Architects

A.1 - Allan Robertson

Born: 1815 in St. Andrews, Scotland
Died: 1859 in St. Andrews, Scotland

Portfolio Highlights:

- made the first architectural modifications to the Old Course at St. Andrews
- designed a 10 hole layout in Barry, Angus, Scotland (now Carnoustie)

Allan Robertson was born into a golfing family. His father and grandfather were both senior caddies at St. Andrews. His grandfather owned and operated a golf ball manufacturing company, which would become the family business. The business, and Allan’s childhood home, overlooked the 18th hole of the Old Course. Eventually, Allan would take over and the company would become the foremost manufacturer of feathery golf balls in the world, most likely aided by Allan’s reputation as an exceptional golfer (Adamsen, 1985).

As a young golfer, Allan competed on the early links courses of Scotland. Matches were commonly played between the top players of St. Andrews and Musselburgh, among others (Adamsen, 1985). Allan would utilize his upbringing and playing experiences at St Andrews, and the other early links courses of Scotland, to provide inspiration for his later design decisions (Cornish and Whitten, 1981).
Sometime between 1836 and 1839, Allan accepted a young man named Tom Morris, later to be known as Old Tom Morris, as his apprentice in art of golf ball making (Malcolm and Crabtree, 2008). In 1842, Allan and Old Tom Morris made the trip to Carnoustie to layout 10 holes for golf (Adamsen, 1985).

In 1848, Allan was made superintendent of the Old Course at St Andrews. He would make many alterations to the course over his tenure. These changes included the creation the first double greens, the widening of fairways through the removal of scrub and gorse bushes, and the construction of the 17th green, now famously known throughout the golfing world as the “Road Hole”. It is believed that by widening the playing corridors Allan effectively started the strategic school of golf course design, as more angles and options were introduced for play (Adamsen, 1985).

Allan was referred to throughout Scotland as the “Champion Golfer”, a term given to him as the best player. He seldom lost a match and was known to allow his opponents to think they had a chance to win before clinching the match on the last few holes. In matches together, Allan Robertson and Old Tom Morris were undefeated. Allan was the first golfer to record a score below 80 on the Old Course, recording a score of 79 using the new gutta-percha ball (Adamsen, 1985).

At the time of his death in 1859, the golfers at Prestwick Golf Club initiated a competition to determine who would succeed Robertson as the “Champion Golfer”. The first Open Championship was held at Prestwick in 1860 (Adamsen, 1985).
A.2 – ‘Old’ Tom (Thomas Mitchell) Morris Sr.

Born: 1821 in St. Andrews, Scotland
Died: 1908 in St. Andrews, Scotland

**Portfolio Highlights:**

- finalized 12 hole layout at Prestwick; added 9 holes at Royal Dornoch; renovated the Old Course at St Andrews; and, created layouts at St Andrews New, Muirfield, Westward Ho! and Royal County Down
- pioneered turf maintenance practices, including the top dressing of greens

Old Tom Morris was born in St. Andrews, Scotland. As the son of a hand-loom weaver, Tom was intended to follow in the family occupation. However, by the mid-1930’s it was evident that there was no future in weaving. Evidence from around 1836/37 suggests that a change of career was being sought for him (Malcolm and Crabtree, 2008).

Sometime between 1836 and 1839, Tom started as an apprentice with Allan Robertson. Morris served approximately four years as apprentice and a further five years as journeyman under Robertson. Tom’s experiences involved feathery ball making, greenkeeping and golfing as Robertson’s partner in numerous matches. As a team, they became known as "The Invincibles" and are said to have never lost a match on even
terms. In 1951, Tom was fired on the spot after being caught by Robertson playing the new gutta-percha, or gutty, golf ball in a match (Malcolm and Crabtree, 2008).

In 1851, Old Tom took the position as head greenkeeper and golf professional at Prestwick, which had just been formed. At Prestwick, Morris laid out, oversaw the construction of, and maintained the golf course. He subsequently ran his own golf equipment business selling gutties and clubs, gave instruction to players, and managed events. Morris was hugely influential in founding the first Open Championship in 1860, and struck the very first shot. Morris won the British Open in 1861, 1862, 1864 and 1867 (Malcolm and Crabtree, 2008).

Having established himself as a top golf professional and the first-ever golf course architect, Morris received requests from many towns and clubs for his design services. Old Tom would create the basis for many of today’s well-known courses including St. Andrews Old, St. Andrews New, Royal Dornoch, Muirfield, Machrihanish and Royal County Down. However, golf course design was still novel and Old Tom viewed it more as a hobby, this is exemplified by his one pound design fee (Shackelford, 1999). Nevertheless, as a native of the links, with a honed eye for every shot in golf, Old Tom developed a talent for utilizing natural terrain and finding a site’s best features (Malcolm and Crabtree, 2008).

In 1865, at the request of the R&A, Tom returned to St. Andrews to serve as head greenkeeper and professional. At this time the course was in very poor condition. Morris corrected this by using greenkeeping techniques, such as topdressing, which he had pioneered at Prestwick. Further, architectural improvements were made through the widening of fairways, enlarging the greens (including building two new greens on holes 1
and 18, and "managing" the hazards. Tom would remain at his post until his retirement in 1903. The R&A would offer Tom the position of “Consulting Green Keeper” and would continue to pay him a salary for the remainder of his days (Malcolm and Crabtree, 2008).

Old Tom’s legacy is not simply exemplified by the courses he crafted or his success as a golfer, but maybe more so by his effect on the growth of the game and future golf course architects. The social and sporting status of having played St. Andrews and met the “great ol’ man” was well established by the turn of the 20th century. Old Tom became the figure head of golf throughout the British Isles and many made the pilgrimage to the Old Course to visit with him and hear his stories about the game. Architects who apprenticed under, or were inspired by their time with, Old Tom Morris include Bob Simpson, Archie Simpson, Charles Blair MacDonald, Donald Ross, Albert Warren Tillinghast and Dr. Alister MacKenzie. These architects would go on to revolutionize golf course architecture, both in the United Kingdom and North America (Malcolm and Crabtree, 2008) (Shackelford, 1999).
A.3 - Thomas Dunn and the Dunn family

Born: 1849 in Musselburgh, Scotland
Died: 1902 in Blagdon, North Somerset, England

Portfolio Highlights:
- first inland designer of golf courses
- specialized in functional and economic design
- was a proponent of the penal and Victorian schools of architecture
- built 137 courses in the UK and Europe
- notable layouts: Broadstone and Woking

Tom Dunn was born in Musselburgh, Scotland into a golfing family. His father, Willie Dunn Senior, was also born in Musselburgh and, along with his twin brother Jamie, were prominent golfers and played in many challenge matches between 1840 and 1860. The most notable of these matches were against Allan Robertson and Old Tom Morris. Willie Dunn Sr. had three top-10 finishes in the Open Championship. In Musselburgh, Willie apprenticed under the Gourlay family, who were famous for making feathery golf balls (especially David Gourlay). In 1851, Willie moved to England with his family to assume the position of custodian of the links at Blackheath (Seaton, 2016).

Tom Dunn’s early life was spent at Blackheath in London. In 1864, his father moved the family back to Scotland after taking a position at Leith. Tom remained at Leith with his father until 1869 when he moved to North Berwick to start a club-making operation. One year later, he was appointed golf professional of the London Scottish
Club at Wimbledon, a position he would oversee for eleven years. Tom would extend the course to eighteen holes on Wimbledon Common. In 1882, he returned to North Berwick to assume the role of head greenkeeper and club maker (Seaton, 2016).

Tom was diagnosed with blood poisoning and advised to recuperate in the South of France. However, Dunn left for France without informing the Greens Committee and his employment was terminated by letter in 1889 (Seaton, 2016). Later that same year, he returned to London for a position at the Tooting Bec Golf Club. It was during his tenure at Tooting Bec that the game’s popularity exploded and demand for inland courses was becoming prevalent. Tom drew from his experiences to layout courses that were both functional in their design and economical in their construction, in order to help grow the game (Seaton, 2016) (MacWood, 2008).

However, Tom Dunn was the target of much criticism after his death. Later architects, such as Colt, Campbell and Mackenzie, singled Tom Dunn out as the symbol for Victorian golf architecture and all the evils it represented. Dunn was a firm believer in a cross-bunker requiring a carry from the tee, another for the approach and a third for a three-shot hole, a concept that would fall from favour around the turn of the century. However, as Horace Hutchinson wrote in reference to Tom Dunn, “A man is not to be criticized because he is not in advance of his time.” Courses such as Broadstone and Woking surely illustrate his talents as a designer. While it is recognized that others were involved in polishing many of his best courses into what they are today, he did conceive their structure and should be credited for the routing (MacWood, 2008).

Finally, the Dunn family golf lineage did not stop with Tom Dunn. His brother, Willie Dunn Jr., would work with Tom on several projects and would serve as the head
professional at both Westward Ho! in England and Biarritz in France before moving to America. Tom’s sons James Duncan Dunn, Seymour G. Dunn and William G. Dunn (later William Chambers) all worked as golf professionals and club makers. James and Seymour would follow their uncle Willie Dunn Jr. to the United States (Seaton, 2016).

After travelling to New York, James secured a job with his uncle as the assistant pro at Ardsley C.C. He would later replace his uncle as golf professional, before moving on to designing his own courses. In 1900, John Dunn and Walter Travis laid out the course at Ekwanok Country Club in Manchester, Vermont, one of the first courses in America to be compared favourably with the famous links courses of the United Kingdom. Soon after, John was employed by the Florida East Coast Railroad Company to develop their hotel associated golf courses. This relationship provided James the opportunity to design many of the first courses along the new rail lines of the eastern seaboard. Later, James spent many years in charge of Wanamaker's golf store in Philadelphia, where he had 24 instructors under him. His final years were spent in California, where he instructed, manufactured clubs, and served as head professional at the Los Angeles Country Club (Seaton, 2016).

Seymour G. Dunn served as the golf professional at Royal County Down in Northern Ireland before moving to the United States to join his uncle. In 1907, Seymour was appointed pro at the Wykagyl Golf Club in New York. He also designed many courses throughout the United States and Europe, including the golf club at Lake Placid Resort and the first course in Belgium, Royal Ostend Golf Club. Seymour established a mail order business distributing golf equipment all over the United States and was later associated with A.G. Spalding & Brothers in New York. However, he was most
celebrated for his golf instruction, developing principles later copied by Ben Hogan (Seaton, 2016).

At the age of 17, William G. Dunn was appointed manager of the Richmond Golf Course designed by his father Tom Dunn. In 1893, William laid out the original course at Northampton Golf Club. The next year, he was made the first pro at the Prince's Club in Mitcham. In 1897, William married Nina Grace Chambers and adopted the surname Chambers. In 1911, William immigrated with his family to Vancouver Island in Canada. Two years later, William, under the name Capt. W. Chambers, and Arthur Vernon Macan designed the Royal Colwood Golf Course on Vancouver Island (Seaton, 2016).
A.4 - Charles Blair MacDonald

Born: 1856 in Niagara Falls, Ontario, Canada
Died: 1939 in Southampton, Long Island, NY

**Portfolio Highlights:**
- never accepted a fee for his design services
- won the first U.S. Amateur in 1895
- coined the title ‘Golf Architect’ in 1901
- father of American golf course architecture
- protégées included Seth Raynor, Charles Banks and Ralph Barton

Charles Blair MacDonald grew up in Chicago, but was born in Niagara Falls, Ontario, Canada. MacDonald came from a family of means and at age 16 was sent to St. Andrews University in Scotland. It was there that he was introduced to Old Tom Morris by his grandfather, a member of the R&A. Old Tom outfitted young Charles with the necessary equipment and mentored the boy on swing mechanics and course management. MacDonald soon became proficient enough that he played matches on the Old Course at St. Andrews against several of the leading golfers of the day. His principle playing partner on the links was Young Tom Morris, often regarded as the greatest golfer to ever live. In 1872, the year MacDonald arrived in St. Andrews, Young Tom Morris would win his fourth straight Open Championship, a feat still not replicated (Bahto, 2002).

MacDonald returned to Chicago in 1874 and secured a position with the Board of Trade. With a personal fortune gathered in part through family ownership of some 500,000 acres of prime real estate in upstate New York, and his own not insignificant
business success, MacDonald became a fixture amongst Chicago's social elite (Bahto, 2002). However, MacDonald constantly moaned about the poor standard of golf in the United States, a period he referred to as the “Dark Ages” in his 1928 publication *Scotland’s Gift* (Noyes, 2006).

It wasn't until the World's Columbia Exposition of 1893 that MacDonald had a chance to foster some real interest in golf. Chicago was eager show the world it was a world class city and it was deemed essential that golf be made available to the visiting dignitaries from Great Britain. Hence, MacDonald was presented with his first opportunity to layout a course. In the spring of 1892, a short seven-hole layout was created on the on land owned by United States Senator Charles Farwell at Lake Forest. MacDonald took little pride in his product, but increasing interest inspired him to foster some support and create a newer larger layout on rented farmland in the western suburb of Belmont (now Downers Grove). By the summer of 1892, MacDonald had completed the nine-hole course that would become Chicago Golf Club. In 1893, he would expand the layout to eighteen-holes, the first full size layout in the United States (Bahto, 2002).

In 1894, the Newport Country Club and St. Andrew's Golf Club both held "National Championship" tournaments in the United States. MacDonald placed second in both events. However, the results of both tournaments were declared unofficial. This angered MacDonald and he publically denounced the manner in which each competition was held. As a result, later that same year delegates from the five major golf clubs – Chicago Golf Club (MacDonald), St. Andrew's Golf Club, The Country Club, Newport Country Club, and Shinnecock Hills Golf Club – met in New York City to resolve the problem. The product was the formation of the United States Golf Association (USGA),
which would henceforth administer the country’s official championship. MacDonald was elected as the first Vice President of the organization. In 1895, the first United States Amateur was held at the Newport Country Club where MacDonald won the event defeating Charles Sands 12 & 11 in the final (Bahto, 2002) (Noyes, 2006).

Still not pleased with the results, MacDonald was determined to build a course which reflected the quality of the great Scottish links. The result would be the newly relocated Chicago Golf Club. However, he didn't just simply design the course. Instead, MacDonald financed the development, purchased the necessary 200 acres of farmland, built himself a grand home adjacent to the course, recruited the membership, and oversaw every aspect of the design and construction. The course opened for play in 1895 (MacDonald, 1928) (Noyes, 2006).

In 1900, MacDonald left Chicago to live in New York, becoming a partner in the Wall Street brokerage firm of C.D. Barney. Shortly thereafter, MacDonald decided he was too old to compete as a top amateur and focused his passion on creating the perfect golf course. His vision was based around his idea of “transatlantic translation,” whereby he would take the ideals of the greatest holes in Scotland and work them into the shaping of a golf course in the United States. From 1902 to 1904, MacDonald took extended trips to Europe to study the great golf courses. MacDonald utilized detailed field study and surveying, combined with interviews with 30 prominent golf figures in Great Britain, to define the features that made the best golf holes of Scotland what they were. He would return in 1906 with detailed ideas for his ideal course (MacDonald, 1928) (Noyes, 2006).

With his education complete, MacDonald set forth to build the National Golf Links of America on a sandy stretch of land on the western coast of Long Island. He
completed this venture in the same way he did Chicago Golf Club. First, he sourced and bought the land, recruited the first investors, and oversaw every aspect of the design and construction. The course opened in 1911 to international acclaim (Noyes, 2006).

Through the completion of the National Golf Links, MacDonald began collaborating with his eventual partner Seth Raynor. The pair would collaborate on a number of courses over the years, including The Creek Club, Piping Rock, Yale, Lido, the Old White Course at The Greenbrier, and the Mid Ocean Club in Bermuda. MacDonald never accepted a fee for his design services and is considered by many to be the father of golf course architecture in America (Bahto, 2002) (Noyes, 2006).
A.5 - William Herbert Fowler

Born: 1856 in Edmonton, England
Died: 1941 in London, England

Portfolio Highlights:
- spent two years crafting his first design – Walton Heath
- used a horse to survey new properties
- pioneer in making courses look natural
- famous for lengthening the 18th hole at Pebble Beach Golf Links into an iconic par-5

Herbert Fowler was born into a wealthy family from Tottenham in London. At a young age his father, the barrister William Fowler, moved the family to the posh rural hamlet of Harlow in Essex. Herbert was educated at Rottingdean and then at Grove House School in Tottenham. His size and stature made him an imposing figure, one who excelled at most sports, especially cricket. Fowler began his cricket career in 1877 at the Essex County Cricket Club. A move to Somerset in the late 1870s saw a switch to the Somerset Country Club in 1879. Fowler was known as a big-hitter of the ball, his 157-yard strike at Lord's in 1882 was reckoned to be one of the longest hits in first-class cricket at the time. While in Somerset, Herbert worked as a banker with the firm Fox & Company and in 1878, at age 22, Herbert was made partner. The next year the firm was renamed Fox, Fowler & Company (Lawrence, 2012).
During a business trip to Devon in 1879, Fowler first experienced golf at Westward Ho!. He soon became a member of the club, but played infrequently during the 1880s as cricket occupied most of his free time. In 1890, he married Ethel Mary Brand, daughter of James Brand, chairman of the National Telephone Company. The couple then moved back to Taunton, where Fowler served as the town’s Mayor for a year during the 1890s. Now married, and no longer playing competitive cricket, Fowler returned to playing golf at Westward Ho!. He quickly became a scratch golfer. In 1891, Fowler made his first visit to St. Andrews and reached the final sixteen at the British Amateur Championship. Fowler later became a member at both the Royal and Ancient Golf Club of St Andrews and the Honourable Company of Edinburgh Golfers (Lawrence, 2012).

The 1890s saw Fowler’s fortunes turn for the worse. By 1897, his finances were in desperate straits and he was advised by his brother-in-law, Sir Cosmo Bonsor, to declare bankruptcy. In 1899, Bonsor came to Fowlers rescue with the idea of building a golf course on the heathland of Walton-on-the-Hill in Surrey. The land was surveyed by Fowler in 1901 and was officially purchased by a group of investors in 1902. The development of the golf course, which would become known as Walton Heath, was a slow, deliberate process. Fowler was well funded by Bonsor and the club’s other backers, and was able to take his time. Fowler spent two years planning and creating his new course at Walton Heath. He spent numerous visits on horseback finding the best natural green sites and then tracing lines back to uncover natural holes. He repeated this process over and over until he had found his course (Lawrence, 2012) (Pilley, 2003).
Walton Heath opened to critical acclaim in 1904. Fowler was made Director of the club, a position he would hold until his passing. Fowler was soon busy with other work, including the re-model of Royal North Devon in 1908. In 1910, Fowler joined forces with Tom Simpson in the firm of Fowler and Simpson. Simpson completed most of the firms work on the Continent, while Fowler concentrated on the British courses.

The firm later expanded to include both J.F. Abercromby and Arthur Croome, who acted primarily as design consultants. Fowler would also make several extended trips to the United States. Examples of his work in the United States include the South Course at Los Angeles Country Club (1911) and Eastward Ho! (1922). Fowler’s most prolific works in the British Isles include the East Course at Saunton, Royal Lytham & St Annes, 27-holes at Cruden Bay (with Tom Simpson), and the New Course at Walton Heath (Lawrence, 2012) (Pilley, 2003).
A.6 - Devereux Emmet

Born: 1861 in Pelham, New York, USA
Died: 1934 in Garden City, New York, USA

Portfolio Highlights:

- one of the first golf course architects in North America
- Emmet’s legacy is largely like his work at Congressional, obscured by those who followed
- designed more than 130 courses
- helped with the surveying of British golf courses for, and aided in the construction of, the National Golf Links of America with friend Charles Blair MacDonald

Devereux Emmet was the son of a wealthy judge and the descendent of Thomas Addison Emmet, a founder of Tammany Hall. Emmet was one of eight children. His four brothers became successful businessmen and his three sisters were accomplished artists. Emmet attended Columbia University and graduated with a law degree in 1883. While his others siblings took to the working world with vigour, Devereux was less inclined to a structured life and was known as a socialite and a sportsman. He was an accomplished golfer and in 1904 made it to the quarter finals of the British Amateur (Cornish and Whitten, 1993).

In 1889, Emmet married Ella B. Smith the daughter of Judge J. Lawrence Smith. The couple would have two sons together, Richard Emmet and Devereux Emmet Jr. Ella was also the niece of Alexander Stewart, who was a successful Irish entrepreneur who had made a fortune through the development of one of the most extensive and
lucrative dry goods businesses in the world. This connection would play a key role in Emmet’s future as a golf course architect (Shackelford, 1999).

Before 1870, Emmet made a small income training and selling hunting dogs. He bought the dogs in the spring in the southern United States, raised them and hunted with them throughout the summer, and finally sold them in the British Isles in the fall. While overseas, Emmet would spend time hunting and golfing. It was on one of these later trips that he would spend time sketching and measuring the features of the famous British golf holes for his friend C.B. MacDonald (Shackelford, 1999). A friendship that enabled Emmet to assist in the design and construction of the most famous course of the time – The National Golf Links of America (Cornish and Whitten, 1993).

In 1869, Alexander Stewart set out to create a place that would secure his legacy. With no children to carry on his name, he decided to craft something to reflect his ideals, wisdom and wealth. The result was Garden City. With the purchase of 10,000 acres on the Hempstead Plains of Long Island, Stewart began creating his legacy. Garden City was one of America's earliest planned villages and was developed with wide avenues, hundreds of trees and shrubs, sixty well-built homes on spacious lots, and a grand hotel on a 30-acre park. This was all made accessible 1893 with the completion of Stewart’s own railroad line, the Central Railroad of Long Island (Smith, 1987).

Being a planned design, Garden City also required a golf course. In 1897, based on his skill and enthusiasm for the game, Emmet was selected to design and build the course. The original nine-holes was called Island Golf Links and was designed after an extended trip to Scotland. In 1899, Emmet extended his layout to eighteen holes. The expanded course was incorporated as the Garden City Golf Club. Originally, he accepted
no fees for his work. Although, this was likely because the work was for his family. This included other early works at Sherewogue and Cherry Hills. However, with the success of the Island Golf Links he soon became a full-time golf course architect (Smith, 1987) (Cornish and Whitten, 1993).

In 1929, Emmet formed a design partnership with, his then design associate, Alfred H. Tull. A year later, his son, Devereux Emmet Jr. joined the firm of Emmet, Emmet and Tull. However, there is little evidence that Emmet Jr. participated in any design or construction work with the firm (Cornish and Whitten, 1993).

Devereux Emmet completed some 130 courses throughout his career. Many of these designs were on private estates. Examples include Congressional in Washington D.C., and Marion Hollins’ Women’s National Golf Club, a course built exclusively for women. Unfortunately, Emmet’s legacy has frequently been obscured by the designers who followed him (Shackelford, 1999).

Emmet’s work reflected his experiences in the British Isles. His courses incorporated great variety, including varied hole length and bunker size, shape, and positioning. He was not shy of blind shots, par 6 holes, and other “quirky” features that fell out of favour as time went on. His routings often utilized triangulation with three-hole loops, allowing the golfer to experience the elements from all directions. Emmet understood angles and believed in width to allow for playability and choice. He often got the most out of the land he worked with (Shackelford, 1999).
A.7 - John Frederick Abercromby

Born: 1861 in Felixstowe, Suffolk, England
Died: 1935 in Addington, Surrey, England

Portfolio Highlights:
- some consider him the finest architect of the pre-WWI era
- pioneer of the Heathland Era
- free-hand artist, who never measured distances
- supervised the construction of all his courses

Of Scottish decent, John Frederick Abercromby’s grandfather, named James Abercromby I, was born in Edinburgh and relocated to South Africa in September of 1817 aboard the Clyde. James Abercromby I was a medical doctor and surgeon, who had four children, including James Abercromby II. James Abercromby II was also a medical doctor. He had 7 children with Johanna Sebella Abercromby (Denys) before passing away in May of 1871. His son, John Frederick Abercromby, was only 10 years old. Widowed, his mother moved the seven children back to the British Isles. The family settled north-west of London in the small coastal town of Felixstowe (Geni, 2016).

John took up golf at a young age, eventually becoming a scratch golfer and competed successfully in amateur matches around London. Aber, as he was known to friends, worked as a stockbroker’s clerk and was later a member of London’s Stock Exchange. In the early 1900s, he was hired as a private secretary to a financier at Bridley Manor in Surrey. His new boss, who lived just southwest of London, was impressed with
the three new courses in the area that had been created on heathland sites, namely Sunningdale, Walton Heath and Woking. He was instructed to create a course (Cornish and Whitten, 1993).

Somewhat foolishly, Aber decided to build the course himself on a heavily wooded hill. The construction was a massive undertaking, employing 500 labourers to clear some 1,500 trees and 700 barrow loads of stones. While he consulted both Willie Park Jr. and Jack White during the initial stages, the final product, Worplesdon GC which was completed in 1908, was almost entirely his own design (Cornish and Whitten, 1993).

With his first design successfully completed, Aber decided to pursue a full-time career in golf course design. He was soon commissioned to create a new layout for Coombe Hill GC, were again he consulted Willie Park Jr. His final project, before the onset of WWI, was at Addington GC. Aber would later settle in Addington, working as the club secretary. He would remain with the club for the rest of his life and served as Chairman with the club from 1919 to 1935. He was seen as the club’s “benevolent dictator”, and continuously made changes to its features. Aber even designed and constructed a second course at Addington in 1933. Unfortunately, the new course was used for military purposes during WWII and was then subsequently requisitioned for social housing after Aber’s death (Cornish and Whitten, 1993).

In 1920, Aber joined Herbert Fowler, Tom Simpson and Arthur Croome in the design firm of Fowler, Abercromby, Simpson and Croome. Almost all of Aber’s work done with the firm was completed in collaboration with Fowler, and was done in the heathlands area of London. Projects included West Kent GC (1916), Cowdray Park GC
(1921), Knole Park GC (1924), and Manor House Hotel GC (1930) (Cornish and Whitten, 1993).

Aber was a totally free-hand artist, who worked based on feel and not measured distances or drawings. He believed that design work was completed on-site, and he was always present to supervise the construction of his projects. Aber is now recognized as one of the finest designers of the pre-WWI era. He was an artist who created some of the most natural looking bunkers of the period (Cornish and Whitten, 1993).
A.8 - Robert “Bob” Simpson

Born: 1862 in Elie, Fife, Scotland

Died: unknown, likely in Carnoustie

Portfolio Highlights:
- completed construction at Carnoustie with Old Tom Morris
- one of the premier club makers of all time

A.8 - Archibald “Archie” Simpson

Born: 1866 in Elie, Fife, Scotland

Died: 1955 in Detroit, United States

Portfolio Highlights:
- famous for the Carnoustie swing
- early pioneer of golf in the United States

As the two youngest boys of six siblings, Bob Simpson and Archie Simpson looked up to their older brothers. Alex, Davie (David), Charlie (Charles) and Jack (John) were also keen on the sport of golf, and growing up in Elie allowed all the brothers to develop this obsession. Elie at the time was a cradle for gifted golfers. Jack Simpson won the Open in 1884 at Prestwick and later became the keeper of the greens at Elie. Bob Simpson tied for fourth in the 1885 Open at St. Andrews and sixth in the 1893 Open at Prestwick. Archie Simpson placed second in both the 1885 and 1890 Open Championships. Two other famed golfers from Elie at that time were Douglas Rolland and his nephew, James Braid. These two men were actually cousins of the Simpson brothers. Douglas Rolland finished second in the Open Championship in both the 1884
and 1894 Open Championships. James Braid, meanwhile, was the most successful winning the Open Championship five time in 1901, 1905, 1906, 1908 and 1910 (Simpsons of Carnoustie, 2016).

At the age of 17, Bob Simpson secured an apprenticeship with George Forrester, one of the greatest club makers of the time, whose workshop was close to his home and just across the road from the Elie Links. Bob would stay with George for most of that year until an opportunity in St. Andrews presented itself. It was in St. Andrews that he became apprentice to Robert Forgan and where his club making talents grew quite noticeably. Forgan was a master club maker and one of only a few to rival George at the time. Through his time in St. Andrews Bob not only garnered the reputation as an excellent club maker, but also the consummate professional. It was here that Bob also forged a friendship with Old Tom Morris (Simpsons of Carnoustie, 2016).

In 1883, Bob was hired as head professional by the Dalhousie Club of Carnoustie. He was employed by the Dalhousie Club as ball maker, club maker, teacher and golf course superintendent. During his forty years in Carnoustie, Bob’s golf business flourished and at various times his brothers Charles, Jack and Archie worked with him where they also learnt the skills of club making. At one time he employed around almost thirty club makers and golf instructors in his shop. Further, it is thought that he mentored a good portion of 200 or so golf professionals who emigrated from Carnoustie to the fast growing golf industry of North America (Simpsons of Carnoustie, 2016).

However, perhaps the greatest contribution Bob Simpson made to golf was through his brief exploits in golf course design. In 1886, Bob worked to significantly improve the Balgownie Links (later Royal Aberdeen) with Old Tom Morris. In 1888,
Bob helped Old Tom Morris in his redesign of Carnoustie. These projects exposed both Bob and Archie, then working with his brother at the Dalhousie Club, to the design processes of Old Tom. Bob is also credited with designs at Crieff, Oban, Linlithgow, Alyth, Blair Atholl and Edzell (Simpsons of Carnoustie, 2016).

Archie would become the most famous golf architect of the Simpson brothers. In 1887, Archie’s solo design career started at Nairn. However, this work would later be renovated by Old Tom Morris and then James Braid. In 1894, Archie became the greenkeeper at Balgownie, a course he helped renovate with his older brother Bob. He would remain in this position for 17 years. In 1898, Archie got another opportunity when he assisted Old Tom Morris with the design and construction of the links at Cruden Bay. In 1909, Archie would layout the Murcar Golf Club in Aberdeen, Scotland (Goodale, 2007).

In 1911, Archie moved to the United States to become the head greenkeeper at the new Country Club of Detroit. He arrived at the same time Harry Colt was scheduled to meet with the powers that be at the club. It is unknown whether Archie was involved in the design and eventual 1913 construction of the course. In 1921, Archie moved back to Carnoustie and re-joined his brother Bob Simpson in the club making business. The following year, Archie moved back to the United States to manage the construction of the golf course at Vincennes C.C. for William Langford. He then moved to Tam O’Shanter in Detroit to manage construction for C.H. Alison, another possible indication of his association with Harry Colt. His final known project was again with William Langford at Clovernook in Cincinnati. His later influence on golf course design in America is largely undocumented (Goodale, 2007).
A.9 - Willie Campbell

Born: 1862 in Musselburgh, Scotland

Died: 1900 in Manchester, Massachusetts, USA

**Portfolio Highlights:**

- finished top 10 in the Open Championship 8 times, and 6th in the first US Open in 1895
- designs were very basic, done in a matter of days or hours
- designs were intended to be functional
- among the earliest to design golf courses in North America

Under the guidance of Bob Ferguson, a champion golfer who won The Open Championship three successive years between 1880 and 1882, Willie Campbell became one of four boy wonders to emerge from Musselburgh at that time. Together with David Brown, Willie Park Jr. and Willie Dunn Jr., Willie Campbell furthered Musselburgh’s reputation as a source for elite golfers. Campbell’s specialty was match play and he frequently challenged the world’s top players to contests. Willie finished second in the Open Championship at Prestwick in 1886, after imploding with the lead in a bunker on the 16th hole (MacWood, 2008) (Cornish and Whitten, 1993).

Campbell served as the head professional at Prestwick between 1887 and 1888. He then moved to Ranfurly Castle in 1889 where he designed a nine-hole course. He would remain as head professional until 1891. That same year, Willie laid out the links at
Machirie on the Isle of Islay and designed Cowal, Rothesay and Kilmacolm in western Scotland. Willie then moved to North Berwick in 1892 where he worked as head professional until 1894. In 1893, while working at North Berwick, he also laid out the first nine-holes at Seascale (MacWood, 2008).

In 1894, Campbell suffered from a rheumatic disorder and immigrated to America, settling in Boston. This was a critical move as the popularity of golf was ready to burst and Willie was well positioned to capitalize on this fact. There were four major projects completed that year including the expansion of Brookline, the completion of the first nine-holes at Essex Country Club, the design of Quincy (Wollaston) and, perhaps most importantly, the design and construction of Myopia Hunt. Willie Campbell was responsible for all four projects (MacWood, 2008).

Over the next six years, before his premature death due to cancer in 1900, Willie became a prolific architect throughout the region. Projects included Oakley, Wannamoissett, Winchester, Worcester, New Bedford, Beaver Meadow and Franklin Park. Although not as prolific as some of his contemporaries, Willie was undoubtedly one of the most important early golf architects, especially in America (MacWood, 2008).
A.10 - Walter James Travis

Born: 1862 in Maldon, Australia
Died: 1927 in Denver, Colorado, USA

**Portfolio Highlights:**

- known in golf circles as the “grand old man” because of his late start to the game at age 35
- through consultations with the original designers, several noted courses reflect his influence, including Pine Valley, National Golf Links of America, and Pinehurst No. 2.
- founder and editor of *American Golfer* magazine; and, authored many articles, including two landmark articles - *Impressions on British Golf* (1901) and "Hazards" (1902)

Walter Travis was the fourth of eleven children born to Charles and Susan Travis. He was small in stature, but was a successful student displaying a talent for writing. As a young man, Travis was active in sports including hunting, tennis, and cricket. In 1886, at the age of 24, Travis was offered the position of manager at a new American office with his employer McLean Brothers and Rigg, a hardware and construction supply company. Travis took the opening in New York and would never again return to his homeland (Homsey, 2011).
Travis quickly charmed his way into the New York City social and recreational scene. In addition to hunting and fishing excursions with friends, Travis devoted considerable time to competitive bicycling. In 1896, Travis was on a business trip in England when he received news that his friends at the Niantic Social Club in Flushing, NY, were forming a golf club. He later professed to a “mild contempt” for the game, but wishing to keep up appearances returned to the United States with some newly purchased golf clubs (Homsey, 2011).

Travis hit his first golf shot in October of 1896 on the Oakland Golf Club, just three months before his 35th birthday. Only a month later, Travis earned his first trophy by winning the Oakland Golf Club handicap competition. Travis became a devoted student of the golf swing and became enthralled in the books of the day on the subject, including *The Badminton Book on Golf* by Horace G. Hutchinson and *Golf* by Willie Park Junior. Within a year, Travis won the Oakland Golf Club championship with a score of 82. Travis was soon the country's top amateur golfer, winning the U.S. Amateur in 1900, 1901, and 1903. In 1904, he became the first player from America to win the British Amateur. Travis dominated the amateur golf scene until his retirement from competitive golf in 1916 at the age of 54 (Homsey, 2011).

In 1899, Travis got his first opportunity to design a golf course. Under the guidance of Scottish architect John Duncan Dunn, Travis assisted with the one year construction of the Ekwanok Country Club in Manchester, Vermont. As this was Travis' first design effort, Dunn likely took the leading role in developing the overall concept for the golf course. However, when Dunn returned to New York in early 1900, Travis remained to oversee construction, which he complete by mid-summer. Travis and Dunn
would collaborate on several other golf course projects over the following years (Homsey, 2011).

In addition to his experiences with Dunn, the development of Travis’s golf course design philosophies were greatly influenced by his own observations of the great golf courses of the British Isles, witnessed during an extended trip between 1900 and 1901. In 1901, Travis would describe these influences in the groundbreaking article *Impressions on British Golf*. In it, he would describe the undulating terrain, the lack of trees, the numerous and strategically sited bunkers, and greens defined by the natural contours of the land. He defined golf in England and Scotland as “golf in its best and highest form”. Travis’ sequel to his earlier publication was titled “Hazards” and was released in 1902. Again, Travis outlined his opinions on design which included his distaste for cross-bunkering, a then typical design feature of American golf. He suggested that bunkers be placed strategically in order to “make each hole present a new problem” (Homsey, 2011).

Walter Travis was also one of the founding members of Devereux Emmet’s course at Garden City Golf Club, where he served as the Green Committee Chairman for 10 years. Given his status as the country’s most successful amateur golfer, he was given free rein with the course and used it as a laboratory to test his design theories. Travis filled in Emmet’s cross-bunkers, installed numerous strategic bunkers (including deeper greenside traps), and created undulating greens with bold contours. He also lengthened the course to account for the improved playing equipment of the day. Travis’ changes to the course received great praise at the 1908 U.S. Amateur, and firmly established his reputation as a notable designer. Although much of his work was in the re-design of courses, Travis did complete several original layouts, including Garden City Country
Club (1916) on Long Island, and both Cherry Hill Golf Club (1917) and Lookout Point in Canada (Cornish and Whitten, 1993) (Homsey, 2011).

However, even more so than his courses, Travis’s greatest contribution to the evolution of golf course architecture was his writings. As the founder and editor of the magazine *The American Golfer*, Travis wrote extensively on all subject related to golf, including golfing rules, playing techniques, hole handicap systems, golf etiquette, golf course design in America versus in the British Isles, golf course architecture, competition formats, golf rules, turfgrass management issues, and golf equipment standardization.

From 1908 to 1920, while Travis owned and operated the publication, it could have been argued that *The American Golfer* was the country’s most influential golf magazine. Though immersed in his career as a golf course designer, Travis would continue to write and publish occasionally throughout the early 1920s. His last article, titled *The Future of Golf*, was published in the March 1924 issue of *Golf Illustrated* (Homsey, 2011).

Born: 1864 in Musselburgh, Scotland

Died: 1925 in Edinburgh, Scotland

**Portfolio Highlights:**

- Initial courses were simply “laid out” through staking
- projects at Sunningdale and Huntercombe changed golf architecture forever, as Park utilized inherent site features and manipulated the ground (more so than anywhere else before) to achieve his desired results

Willie Park Jr. stemmed from an esteemed golfing family. His father, Willie Park Sr., was an excellent golfer and a four time winner of the Open Championship. His uncle Mungo Park Sr. was also an admirable golfer and claimed the Open Championship once in 1874 at Musselburgh. As a result, young Willie Park Jr. was exposed to the best links course early in his life by watching matches between his father and the great golfers of the day, including Allan Robertson and Old Tom Morris. Willie Park Jr. caddied and played golf professionally, in both stakes matches and tournaments, starting in his mid-teens. Park Jr. played in his first Open Championship in 1880 at the age of 16. He would win the Open Championship twice in 1887 and 1889, and finished second in 1888 (Stephen, 2005).
Willie Park Sr. ran a successful golf equipment business, producing clubs and balls. Willie Park Jr. would apprentice with his father as a young boy before leaving Musselburgh at the age of 16. Between 1880 and 1894, Willie Park Jr. served as assistant greenkeeper and professional under his uncle Mungo at the Tyneside Club in Ryton, England. In 1892, he took over as greenkeeper when Mungo left for Alnmouth, just north of Newcastle in England. Willie Park Jr. would later return to Musselburgh to join his father in the club and ball making firm of W. Park and Son, later taking over the firm (Stephen, 2005).

Willie Park Jr. would use the family name and his personal playing success to transition into the newly emerging field of golf course design. In 1886, at age 22, he laid out his first course at Innerleithen, Scotland. He did not charge a fee, but instead secured the supply of William Park and Sons clubs to members. While winding down his competitive play, Willie Park Jr. became more active in planning and modifying courses, first with his father and later on his own (sometimes with his uncle Mungo Park I). He later became so successful that he was able to employ both his brothers, Mungo Park II and John “Jack” Park, in the construction of golf courses. However, it was not until 1901 that his true talents were revealed when two courses opened in the “heathlands” southwest of London. When Sunningdale and Huntercombe opened for play they stood in stark contrast to the geometric Victorian style designs that had dominated inland golf course design (Cornish and Whitten, 1981). The two courses had large greens with rolling contours and bold, manmade hazards which appeared to be natural. These two projects secured Park’s success, allowing him to become one of the first full time golf
course architects. His business became so prosperous that he was able to employ a “loyal gang of construction bosses” to complete his projects (Cornish and Whitten, 1981).

Willie Park Jr. made two early trips to America to explore the potential to expand his newly growing business. The first occurred in 1895 and lasted 6 months. A second, shorter visit, occurred in 1896. Between 1916 and 1923 he spent much of his time in the United States and Canada. He was able to establish a base office in New York and a branch office in Toronto. Except for a few visits home, he would spend the rest of his working life in North America. Willie was in such demand that in the end, it was said, he literally worked himself to death. He was brought back to Scotland at the end of his life by his brother Mungo Park II (Stephen, 2005).

Willie’s best courses resulted where he personally supervised the construction processes. Courses such as Sunningdale Golf Club (Old), Huntercombe Golf Club, the Maidstone Club, and Mount Bruno Country Club are examples of such a process. Other notable projects include Formby Golf Club, Silloth on Solway Golf Club (with Mungo Park I and David Grant of North Berwick), Notts Golf Club, Worplesdon Golf Club and Olympia Fields (North) in the United States. Canadian projects include Calgary Golf and Country Club, Weston Golf and Country Club and Royal Ottawa (Cornish and Whitten, 1985).

Willie Park Jr. was also a notable writer. The Game of Golf, published in 1896, was the first book about golf written by a professional golfer. It was an instant success and one that is still in publication. This early work also included the first chapter to reference golf architecture, titled “Laying Out and Keeping Golf Links” (Park Jr., 1896).
A.12 - Tom Bendelow

Born: 1868 in Aberdeen, Scotland
Died: 1936 in River Forest, Illinois

Portfolio Highlights:
- known as the “Johnny Appleseed of American Golf”
- credited with having designed some 400 to 600 courses in a 35-year span
- contributed to the growth of the game in North America more than any other architect

Bendelow was one of nine children. He did not come from a wealthy family, but his parents owned a popular pie shop in Aberdeen. His father taught him the game of golf starting at the age of 5. These early lessons were imparted on the Balgownie Links, now Royal Aberdeen Golf Club. He made several trips as a teenager to St. Andrews. He was trained as a typesetter and his first job in Scotland was with the Aberdeen Free Press (Bendelow, 2006).

While an excellent player, there were no defined careers in golf course design at that time. In 1892, Bendelow was married and would immigrate to the United States. His family followed in 1893. In the United States his first job was as a typesetter with the New York Herald. In 1885, Tom replied to an advertisement in the classified section seeking an instructor to teach the game of golf to a family. He was soon hired by the Platt family. Mr. Platt was a co-founder of Standard Oil. In addition to lessons,
Bendelow laid out a short, six-hole golf course on the grounds of the Platt estate on Long Island. This was likely his first paying job in golf course design. This short course would later become part of the Nassau Country Club (Bendelow, 2006).

In 1898, the New York City Park District employed Bendelow to redesign and manage the Van Cortlandt Park, in the Bronx. This was the country’s first eighteen hole municipal golf course. Here he would redesigned the existing nine holes, added a second nine, supervise the construction and maintenance of the course, direct play, organize tournaments and players associations, and offer instruction (Bendelow, 2006).

During his 1900 tour, dubbed the “The Vardon Invasion”, Harry Vardon played at Bendelow's Van Cortlandt Park and walked away impressed enough to invite Bendelow to play an upcoming exhibition match in Connecticut. The pair would develop a lasting friendship and a mutual respect. A.G. Spalding had financed Vardon's 1900 tour of America in hopes that it would help him expand his golf equipment business. However, while the matches had stimulated local interest in the game there was still an issue, there were not enough golf courses to increase sales. Spalding decided to provide, at no charge, golf course design services to anyone with desire and funds. Vardon nominated Bendelow for this new endeavour and he was soon hired as the A.G. Spalding and Company's first official golf course expert. For the next 16 years, Tom criss-crossed the U.S. and Canada, laying out courses, providing construction advice, encouraging players' associations, and promoting the growth of the game (Bendelow, 2006).

After WWI, Bendelow was moved to Chicago and assume the position of Director of Golf Course Development with A.G. Spalding & Bros. Bendelow spent the next five years traversing the country, laying out golf courses as far south a Florida and
as far west as California. In 1917, Bendelow accepted the position of Golf Department Manager with the Thos. E. Wilson Sporting Goods Company where he continued to promote the game. In 1920, Bendelow joined Myron Howard West's "American Park Builders Company" in Chicago, as Chief Golf Course Designer. Here he replaced designer William B. Langford, who had left to form a partnership with Theodore Moreau. Through this new position, Bendelow focus broadened to include comprehensive city plans, subdivisions, country clubs, golf courses, and golf course communities (Bendelow, 2006).

Bendelow’s contributions as a designer are often overlooked because of his early design practices. However, these early courses were intentionally simple as they were intended for new golfers, part-time players, women and families. As golfing interests and abilities matured, so did Tom’s course designs. He added more features, recommended bolder shaping of fairways and greens, and gave more thought to the strategic placement of hazards. Following WWI, opportunities to design and construct golf courses quickly resurfaced. Larger budgets and grandiose visions soon followed as economic prosperity increased. It was during this period that Tom was able to focus on perfecting his layouts (Bendelow, 2006).

Bendelow introduced plaster-of-paris models to his design process to aid his contractors in the final construction of golf course features (Bendelow, 2006). The use of topographic mapping and irrigation system plans became part of his design repertoire, especially during his time in Chicago with the American Park Builders. Where Bendelow had the time and money to perfect a course, such as the three courses at Medinah, the caliber of his work was outstanding (Bendelow, 2006).
A.13 - Henry “Harry” Shapland Colt

Born: 1869 in High Gate, England

Died: 1951 in East Hendred, Berkshire, England

Portfolio Highlights:

- first designer not to be a professional golfer
- made golf architecture a more serious discipline and a business
- considered the father of British golf course design
- first designer to use a drawing board consistently, prepare tree planting plans, and plan golf courses as part of residential areas

As a young boy, Harry Colt spent summer holidays at the Worcestershire Golf Club. It was here that he was taught the game under the mentorship of the head professional and greenkeeper Douglas Rolland. While attending Cambridge University for law, Colt became captain of the golf team. Colt won the R&A Jubilee Vase in both 1891 and 1893 on the Old Course at St. Andrews. Colt likely became a member of the R&A through John Low, a friend who was a year ahead of Colt at Cambridge (Colt Association, 2004) (Hawtree, 1991).

After admission to the bar, Colt practiced as a solicitor for several years in Hastings. In 1894, he was made partner in the law firm of Sayer & Colt. However, golf was still his main passion and in the same year he assisted his mentor, Douglas Rolland,
in the design of a new golf course at Rye. In 1895, he was made honorary secretary of the club. In 1897, Colt became a founding member of the Royal & Ancient Rules of Golf Committee. In 1901, he made a more serious shift toward golf when he applied for the position of secretary at the new Sunningdale Golf Club, a Willie Park Jr. design. He was awarded the job and it was from this base that he gradually developed his career as a golf course architect. Colt would make continuous improvements to Sunningdale until his departure in 1913 to focus on his booming golf course architecture business (Critchley, 2005) (Pugh and Lord, 2008).

Colt’s first solo project was near London during the early 1900s, but this quickly lead to more. Demand for his design services soon became so great that he required the addition of several associates. The first was Charles H. Alison who started assisting Colt with the design and construction of golf courses in 1906. During the construction of Stoke Poges, now Stoke Park, in Buckinghamshire, Alison was made secretary of the club. Colt and Alison continued in their duties as secretaries while simultaneously growing their business in golf course design. While secretary at Stoke Poges, Alison assisted Colt in the creation of many courses, including nine-holes at Kingsthorpe in 1908, Northampton County in 1909, Denham in 1910, St. George's Hill in 1912 and Camberley Heath in 1913. St. George's Hill and Camberley Heath secured them position of the top golf architects in the world before the First World War (Colt Association, 2004) (Hawtree, 1991) (Pugh and Lord, 2008).

In 1907, while still working as club secretary at Sunningdale, Colt was requested to provide a second opinion on the newly completed Alwoodley Golf Club in Leeds. It was there that he would meet with the Club Secretary and course designer, Dr. Alister
MacKenzie. Colt felt that the course was an extension of his own design ideals and provided a glowing review of the course at a meeting with the club’s Committee. This relationship would lead to the eventual formation of the London firm of Colt, MacKenzie & Alison in 1919. Four years later, in 1923, MacKenzie withdrew from the partnership (Colt Association, 2004) (Hawtree, 1991).

In 1922, Colt was hired to design and construct a second course, referred to as the “New” course, at Sunningdale. It was during its construction that Colt met course member John S.F. Morrison. Morrison was also a Cambridge graduate, who studied both history and law. He had captained the golf team in his final year in 1919. After leaving Cambridge he became a golf architect and wrote golf articles on a regular basis. Through their meeting a friendship grew and in 1923 Morrison joined the partnership. However, it was not until 1928 that Colt formed a limited liability company, creating the firm Colt, Alison and Morrison Limited. That same year Morrison was appointed Director (Colt Association, 2004) (Hawtree, 1991).

Colt’s influence can be seen in the USA, Canada, Australia, France, Germany, Holland, Spain and Sweden. His first courses in Canada at Toronto (1912) and Hamilton (1914) established high standards for golf that would influence young golfers like Stanley Thompson. On one visit to the United States, Colt spent a week advising George Crump at Pine Valley and assisted with the routing of the holes, amongst other matters. Colt believed that his courses should be part of the land, residing in them rather than on them. He suggested that courses should be given a chance to grow into their surroundings and become part of the landscape itself. Unfortunately, Colt outlived many of his friends and family and passed away deaf and lonely (Hawtree, 1991) (Colt Association, 2004).
Harry Vardon was born in Grouville on Jersey, the largest of the Channel Islands southwest of England. Harry was one of seven children and the second oldest of five brothers. His father, Philippe George Vardon, was a gardener, a career that Harry would later apprentice in before turning to golf. Harry’s family had little wealth and he was a thin and frail as a child. However, from a young age he loved sports and succeeded at cricket, football, and golf (New Work Encyclopedia, 2008).

In 1877, a group of local enthusiasts turned a piece of land in Grouville into the areas first golf course. The course was named the Golf Inn, now the Royal Jersey Golf Club. Harry became a caddy at the course and soon learned the sport himself. However, since the course was off limits to all caddies, Vardon and his friends were forced to create their own layout. They found some vacant land and made a miniature course with four holes (New Work Encyclopedia, 2008).
At the age of 12, Harry left school and began work for a local farmer as a gardener. Harry was content with his life in Jersey, and at the age of 16 joined a local workingman’s club where he won first prize in a golf event that same year. However, it was the success of his younger brother Tom who prompted Harry to look at opportunities in the world of golf. Tom had finished second in a golf tournament at Musselburgh and had achieved some success with a shop in St. Anne’s-on-the-Sea making and selling golf clubs. In 1890, at the age of 20, Harry secured a job as a greenkeeper at a new nine-hole course in Ripton. In 1891, Harry left Ripton and became club professional at Bury Golf Club (New Work Encyclopedia, 2008).

In 1893, Vardon’s focus turned to competitive golf when he entered the Open Championship at Prestwick. While he finished the tournament well off the leader board, the opportunity allowed Vardon to get his first real taste of competitive golf and would allow him to foster some friendships that would last throughout his lifetime. In 1896, Harry became the club professional at Ganton Golf Club, in Yorkshire. However, that same year he would win his first Open Championship at Muirfield, a triumph that would bolster him into the spotlight (New Work Encyclopedia, 2008).

In 1898, Harry won his second Open Championship at Prestwick, beating Willie Park Jr. by a single stroke. Park had missed a makeable putt on the 18th hole, a putt that would have sent the match to a playoff. Willie was so upset at his mistake that he challenged Vardon to a match on the spot. Willie wagered £100 that he could beat Vardon over 72-holes, 36-holes at his home course of Musselburgh and 36-holes at a golf course of Vardon's choosing. However, Vardon had nothing to gain from such a match and did not want to compete with Park at Musselburgh. Eventually, it was agreed that
36-holes would be played at North Berwick, instead of Musselburgh, and 36-holes would be played at Vardon’s home course of Ganton in Yorkshire. The match took place in July of 1899, by which time Vardon had won his third Open Championship and was in top form. *Golf Week* magazine acted as both promoter and stakeholder for the event and billed the encounter as the greatest golf competition of all time. Ten thousand Scottish fans attended the first phase of the match at North Berwick, in which Vardon finished with a two hole lead (match play format). The second leg took place two weeks later at Ganton, and Vardon completed the thrashing, winning eleven holes up with ten holes to play. This victory, over one of Scotland’s leading professional golfers, bolstered Vardon’s reputation as one of the world’s best (New Work Encyclopedia, 2008).

In 1900, Vardon became golf’s first international celebrity when he toured the United States and Canada, together with J.H. Taylor. Vardon played in more than ninety matches during a tour dubbed the “Vardon Invasion”. He would conclude his trip with a two-shot victory in the 1900 U.S. Open, an event where J.H. Taylor placed second. Returning to the British Isles in 1903, Vardon won his fourth Open Championship at Prestwick, beating his brother Tom Vardon, who placed second, by six strokes. That same year, Vardon’s popularity was at an all-time high and requests for his design services began to increase (New Work Encyclopedia, 2008).

In 1903, Harry was employed to re-design the existing nine-hole course at Woodhall Spa. Course construction was not straightforward due to the nature of the ground and the weather conditions. After two years the course was ready for play and J.H. Taylor advised the placement of bunkers before the course was official opened in June of 1905 with an exhibition match. Harry Vardon, James Braid and J.H. Taylor, also
known as Britain’s “Great Triumvirate”, were among a number of leading players that took part in the event (New Work Encyclopedia, 2008).

Later in 1903, Vardon was diagnosed with tuberculosis. This illness forced him out of competition and into sanitariums for long spells until 1910. Still, Harry managed to design Little Aston in 1908 and created nine-holes at Copt Heath in 1910. In both 1908 and 1919, Vardon was asked to consult at Royal County Down in Northern Ireland. Vardon, like several famous golfers of the time visited the course and made recommendations, many of which were adopted by George Combe, the keeper of the greens from 1900 to 1913 (Cornish and Whitten, 1993) (New Work Encyclopedia, 2008).

Unfortunately, by the time of his return to form in 1911, the Heathland Era had gained traction in England and many other architects had secured their reputations as excellent designers. While he continued to design the odd project, Vardon was no longer in great demand. However, Vardon did win two more Open Championships in 1911 and 1914, and still holds the record for most career Open Championship victories with six (New Work Encyclopedia, 2008).
A.15 - James Braid

Born: 1870 in Earlsferry (Elie), Fife, Scotland

Died: 1950 in London, England

**Portfolio Highlights:**

- one of Britain’s “Great Triumvirate”
- won the Open Championship five times in 1901, 1905, 1906, 1908 and 1910
- feared the ocean, so he never ventured far from the British Isles. Completed some courses on the Continent. Completed one course in America and one course in Singapore, but both were done solely from topographic maps.
- The founder and one-time president of the British PGA

James Braid was born in the golf obsessed town of Elie in Scotland. James’ father was a ploughman, who never played the game of golf. However, James was the nephew of Douglas Rolland, who finished in the top 10 in the Open three times including two second place finishes. Braid started golf at the age of four and won his first local tournament over the Elie golf links at the age of eight. Elie was a mecca for golf stars at that time producing not just Rolland and Braid, but also the Simpson brothers, most notably Jack and Archie. Braid spent time as a schoolboy caddying and frequently engaged in matches with the other boys in town (Darwin, 1952).

Braid left home for the first time at the age of nineteen for an apprentice position in St. Andrews as a joiner. He had expected to use this time to hone his skills and compete against the best players in the world, but his employers frequently kept him busy
with jobs around the country. However, kept up his game during the long summer evening when the shop was closed and soon realized he was able to match the skills of his best competitors, apart from his abilities at putting (Darwin, 1952).

In 1891, James moved again, this time to Edinburgh. He joined the Edinburgh Thistle Club and played his golf at Braid Hills (course name refers to the larger hilled area on the south-western edge of Edinburgh). Here he served on the Council of the Thistle Club and won the Gold Scratch Medal and the Aggregate Scratch Medal that same year. The following year he would repeat as the Gold Medal winner. In 1893, James had a turning point in his golf career when he won the Braid Hills tournament, which was open to all Edinburgh and Leith Clubs. Braid set the course record and beat a field of 140 players (Darwin, 1952).

In 1893, on a vacation home to Elie, James ran into his old friend Ralph Smith. Smith was working for the Army and Navy Stores as a club maker in England and asked Braid if he would like a position. James leaped at the chance and soon moved to London. At the time, club making was a new discipline and was viewed as a small step up from a caddie. James father and mother did not approve of the career change, a fact that did not deter the young golfer. James played in his first professional golf tournament in 1894, but did not achieve wider public attention until December of 1895 when he halved a 36-hole match with J.H. Taylor at West Drayton (Darwin, 1952).

In 1896, Braid became the head professional at Romford Golf Club in England. In 1901, Braid won his first British Open at Muirfield in Scotland. This victory brought on several golf design opportunities, which included Kirkistown Castle Golf Club in Northern Ireland in 1902 and Barnehurst Golf Club in England in 1903. In 1904, Braid
moved to the newly opened Walton Heath Golf Club, where he served as head professional for the remainder of his life. Braid would win most of his playing titles over the next five years, including four more Open Championships in 1905, 1906, 1908 and 1910, and a French Open in 1910 (Darwin, 1952).

In 1912, Braid retired from competition golf to focus on golf course design. However, his fear of water and susceptibility to motion sickness made the traveling life of a golf course designer difficult. Braid dreaded travel by boat and car and as a necessity became proficient in the creation of accurate and detailed working drawings. These drawings were most frequently made a reality by contractor John R. Stutt. While most of Braid’s design work was a solo affair, he did on occasion partner with other designs such as Ben Sayers (North Berwick East Links), F.G. Hawtree (Croham Hurst Golf Club) and C.K. Hutchinson (Gleneagles Hotel Golf Club). Braid is most remembered for the courses were he was actively part of the construction process. His best works include Royal Aberdeen, Royal Troon (Old), Ganton, Royal Cinque Ports, St Enodoc (Church), Gleneagles (King’s and Queen’s), Nairn, Formby, Pennard, Sherwood Forest and Brora (Cornish and Whitten, 1993) (Darwin, 1952).
A.16 - Dr. Alister MacKenzie

Born: 1870 in Yorkshire, England
Died: 1934 in Santa Cruz, California

**Portfolio Highlights:**

- pioneer of strategic golf course design in Australia
- merged strategic design principles with natural artistry
- wrote one of the most concise and prudent books on the subject of golf course design in 1920, *Golf Architecture*

Born Alexander MacKenzie, Alister was born in Normanton in West Yorkshire. His parents preferred the Gaelic form of his name and always referred to him as “Alister”. His father was the Medical Officer for Health in Normanton, near Leeds. His parents were from the Highlands of Scotland, a connection MacKenzie would cherish and espouse throughout his career. As a boy, his family spent annual holidays in Scotland where Alister would fish, hunt and sail. As a young student, Alister attended the Queen Elizabeth Grammar School in Wakefield (Burt, 2008).

In 1888, MacKenzie passed the Previous Examination and was admitted to start medical studies at the University of Cambridge. In 1891, he passed the Natural Sciences Tripos and graduated with a BA. In 1892, MacKenzie passed the second Bachelor of Medicine (MB) examination at Cambridge. However, the University of Cambridge did
not offer clinical training to students at the time. As a result, MacKenzie moved back to Leeds in order to use his father’s medical connections to secure an apprenticeship (Burt, 2008).

In 1892, Alister registered with the Leeds Medical School to apprentice at the Leeds General Infirmary. From 1892 to 1894, Alister held several medical positions in the Outpatient Department of the Infirmary including medical clerk, surgical and casualty dresser and gynaecological clerk. From 1894 to 1895, he held similar positions in the Inpatient Department of the Infirmary. In 1895, he passed the London Licentiate examinations for Royal College of Surgeons to become registered as a licensed physician (Burt, 2008).

While qualified to practice as a physician in the United Kingdom, MacKenzie desire the prestige of graduating from a University. So, he returned to school and graduated from Cambridge University Medical School in 1897 with a Bachelor of Surgery (MA and MB Bac.S). Upon graduation, Dr. Alister MacKenzie joined his father’s medical practice in Leeds. However, this only last a short time before he was called into service as a surgeon during the Boer War (Burt, 2008).

From 1899 to 1902, MacKenzie served with the Somerset Light Infantry in South Africa where he saw action at the battle of Colenso. During this time, MacKenzie closely observed the enemy soldiers and their ability to camouflage themselves on the open battlefields. He stored these memories until the outbreak of WWII, when he would leave his role as a surgeon to join the Royal Engineers. It was here that MacKenzie pioneered the science of camouflage. He would later be credited with saving thousands of lives as the result of his camouflage principles. Years later, MacKenzie would link these
camouflage principles with successful golf course design through his ability to disguise manmade features by imitating nature (Burt, 2008).

Between the Boer War and WWI, MacKenzie returned to Leeds to practice medicine. While never a great golfer, MacKenzie was a member at several golf courses near Leeds starting in the early 1890s. One such course was the Leeds Golf Club, which he joined sometime between 1898 and 1899, likely just before his stint in the Boer War. Upon his return from South Africa, he wrote two or three pages in the Club’s suggestion book summarizing his thoughts on how the course could be improved. MacKenzie suggested that if the design utilized the site’s natural features to a greater extent, and all manmade features were made to look more natural, then the course would be more comparable to the great seaside courses. These were likely his first writings on the subject of golf course architecture, but were sadly dismissed by other club members due to their unconventional nature, and Mackenzie’s lack of design experience and playing skill (Burt, 2008).

In January of 1907, Mackenzie became one of fourteen founding members of the Alwoodley Golf Club near Leeds. He was elected to the club’s Green Committee and was appointed as the club’s first Honorary Secretary. In addition to his managerial roles with the club, MacKenzie saw an opportunity to start a career in design. Alister offered his services and presented a layout and series of drawings for the course. The founding members called in Harry Colt to offer a second opinion. Colt walked the property with MacKenzie and even stayed at his house. Colt largely agreed with the routing and general layout that MacKenzie had devised. Colt gave a glowing review of the proposed
design to the membership and MacKenzie was left to build the course on his own. His design career was underway (Burt, 2008).

In 1908, as a result of the success of Alwoodley, MacKenzie was asked to layout 18-holes for a new course at Moortown near Leeds. The course was officially opened in 1910 with a match between James Braid and Harry Vardon. In 1913, MacKenzie completed his third course, Sitwell Park in Rotherham. Sitwell Park was the first course Alister MacKenzie completed for a private client, rather than for a committee. As such, MacKenzie took the opportunity to push the envelope. When his course was finally revealed to Sir George Sitwell, some of his ideas were not well received. In particular, Sitwell disliked the steeply contoured greens, believing them a little too wild, and ordered them to be flattened. This decision upset Mackenzie who felt the result was "dull" (Burt, 2008).

In 1914, MacKenzie entered and won a design contest held in *Country Life Magazine*. The purpose of the contest was to create an ideal two-shot hole. The contest was judged by Bernard Darwin, Horace Hutchinson and Herbert Fowler. MacKenzie won £20 for his winning entry, but more importantly gained international recognition for the accomplishment when his entry was published in 1915. In 1915, he was elected as a member of the Royal and Ancient Golf Club of St. Andrews, after his friend Harry Colt gave the nomination. Unfortunately, the onset of WWI prevented him from capitalizing on these successes (Burt, 2008).

In 1919, after the completion of WWI, Alister returned home to re-establish his medical practice. He also started his first book, titled *Golf Architecture*, which would be published in 1920. In 1920, a partnership was announced and the London firm of Colt,
MacKenzie & Alison was born. However, the partnership was never clearly defined and personality conflicts between Colt and MacKenzie were soon evident. MacKenzie withdrew from the partnership in 1923. Also in 1923, MacKenzie was commissioned by the R&A to create a map of the Old Course at St. Andrews. He completed the map in 1924 and it still hangs in the Great Room of the Clubhouse (Burt, 2008).


In June of 1926, MacKenzie ventured to St. Andrews to watch the Walker Cup matches. There he watched several matches including one between Bobby Jones and Watts Gunn. This would be the first meeting between Jones and MacKenzie. In September of 1926, MacKenzie boarded a ship and sailed to Australia. Between October of 1926 and February of 1927, MacKenzie visited and made plans for numerous golf courses including Royal Adelaide, Royal Melbourne, Metropolitan, Royal Sydney, Victoria, Kingston Heath, Royal Queensland, New South Wales and Yarra Yarra. MacKenzie appointed Alex Russell as his partner in Australasia near the end of 1926. Russell would oversee the majority of the new construction projects (Beck, et. al, 1990).

In July of 1927, MacKenzie attends the Open Championship at the Old Course at St. Andrews. MacKenzie would again encounter Bobby Jones, following him on at least one of his four days of play. Jones won the event. Shortly thereafter, MacKenzie presented Jones with a signed copy of his book, *Golf Architecture*. It is believed that this gift, which included MacKenzie’s thirteen essential features of an ideal golf course, led to his later partnership with Jones at Augusta National (Beck, et al., 1990).


MacKenzie’s visit back to the British Isles was a shot one. In August of 1928, he would again depart for North America, this time headed for Quebec, Canada. As part of British Senior’s Golfing Society team, MacKenzie played many matches in Quebec, Ottawa, Toronto, Winnipeg, Jasper, Vancouver and Victoria. While in Toronto,
MacKenzie met with Stanley Thompson to discuss the formation of an International Association of Golf Architects. Thompson was quoted by the Canadian Golfer as being “strongly in favour” of the idea. Before returning to England, with the rest of the British golfers, MacKenzie capitalized on his location and visited California. He played the newly completed Cypress Point Club with Robert Hunter and made a site visit to Pasatiempo to finalize some design ideas. Before leaving out of New York at the end of October, MacKenzie travelled to Michigan to meet with Perry Maxwell and visit the proposed site of Crystal Downs Country Club. MacKenzie created detailed green sketches before his departure, leaving Maxwell to complete the work (Beck, et. al, 1990).

Upon returning home to England in 1928, MacKenzie met with both Country Life Magazine (Bernard Darwin) and Golf Illustrated to drop off photographs of Cypress Point. The work was very well received. In early 1929, the International Society of Golf Architects was formed. The founding members included A. MacKenzie, Harry Colt, Messrs. John F. Abercromby, Herbert Fowler, John Morrison, P. Mackenzie Ross, Tom Simpson, Cpt. Hugh Alison, Mgr. Guy Campbell, Cpt. C.K. Hutchison, Horace Hutchinson (Hon. Member), Bernard Darwin (Hon. Member) and J. Stewart Paton (Hon. Member). The Society’s offices were located at Tom Simpson’s offices and he was made Honorary Secretary of the European Section. Unfortunately, this endeavour would not survive the Depression and WWII (Beck, et. al, 1990).

MacKenzie returned to the United States for the spring of 1929. He made a visits to both Cypress Point and Pasatiempo. Before his departure, MacKenzie entered into a partnership with Chandler Egan, a result of the retirement of long-time associate Robert Hunter. MacKenzie then traveled home to England, briefly, before returning to
California in August to watch a match between the pairs of Bobby Jones and Roger Lapham vs. Francis Ouimet and Henry Lapham. The match was played at Cypress Point and served as an excellent introduction for Bobby Jones to the design work of MacKenzie. Before leaving the United States for Argentina in January of 1930, MacKenzie inspected the property for Sharp Park Golf Club in California. While in Argentina, MacKenzie would create plans for several courses including: The Jockey Club, Buenos Aires; Club Mar del Plata, Mar del Plata; and, Club Golf Argentino, Buenos Aires. MacKenzie would return to England in April (Beck, et. al, 1990).

MacKenzie arrived back in England in April. He had been divorced in 1929, while in the United States, and was now engaged to a long-time friend and widow, Hilda Haddock. The couple were married in May of 1930. In June of 1930, the newly married couple moved to California. MacKenzie decides to locate his new house at his Pasatiempo Country Club in Santa Cruz, California (Beck, et. al, 1990).

In the spring of 1931, Alister MacKenzie acquires his greatest commission yet. He has been selected to partner with Bobby Jones in the design of Augusta National Golf Club. In July, MacKenzie arrives in Augusta for a multi-day inspection of the site. MacKenzie and Jones walked the site for three days, resulting in an initial routing plan by MacKenzie. After the clearing of playing areas was completed, MacKenzie and Jones returned to the site to layout the proposed routing on October 6, 1931. In November of 1931, the final coloured plan of Augusta Nations Golf Club is drawn and signed by Dr. Alister MacKenzie. In March of 1932, MacKenzie makes a two to four week visit to Augusta to oversee the construction and grading of the green surfaces. Augusta National was official opened on the weekend of January 13-15 in 1933. There was supposed to be
a doubles match on Saturday the 14th, between the teams of Dr. Alister Mackenzie and Bobby Jones vs. Francis Ouimet and Jess Sweetser, however MacKenzie decided to skip the event. MacKenzie never made it back to Augusta to see his finished work and passed away, in 1934, at his home at Pasatiempo in Santa Cruz. At the time of his death, MacKenzie had just completed the writing for his second book. *The Spirit of St. Andrews* would become known as his “lost manuscript” and would not be published until 1995 (Beck, et. al, 1990).

MacKenzie was a master of strategic and playable designs. His routings never followed a set formula, as he let the land dictate the order of holes (e.g. Cypress Point). His green contours were often bold, and sometimes bordered on the extreme, however they always rewarded the player who approached from appropriate angles. MacKenzie loved to present multiple options within a hole and valued variety in approach styles, leaving the player to choose where to attack from and how to execute the correct shot. Finally, he believed that controversy was a clear indicator of excellence (Shackelford, 1999).
A.17 - John Henry Taylor

Born: 1871 in Northham, Devon, England
Died: 1963 in Northham, Devon, England

Portfolio Highlights:
- one of Britain’s “Great Triumvirate”
- first Englishman to win the Open Championship
- Won the Open five times in 1894, 1895, 1900, 1909 and 1913
- attributed as the inventor of the 'dogleg', though holes of that style already existed

John Henry Taylor was born into a family of modest means in rural north Devon in England. When his father passed away, Taylor was forced to leave school at age 11 to find work. He secured a position as a mason’s labourer, where his stocky and muscular build helped him to complete the tedious work. Next, he worked as a gardener’s assistant at the childhood estate of Horace G. Hutchinson, an excellent golfer who was one of the earliest writers on golf, golf architecture and the golf swing. A friendship between the two was quickly developed. Taylor soon upgraded to a caddie and labourer position at the nearby Westward Ho! golf course, now known as the Royal North Devon Golf Club. It was here that Taylor would learn to play golf. He also frequently caddied for Hutchinson during his return trips home from school at Oxford. Taylor was soon promoted to the greenkeeper staff, a move which strengthened his interest in golf (Cairns, 2015).
At the age of 19, Taylor turned pro. He would take the position of club professional and greenkeeper at several clubs, including Burnham, Winchester and Wimbledon, before finally settling at Royal Mid-Surrey. In 1894, Taylor won his first Open Championship at Royal St. George’s Golf Club in England, winning by five strokes in strong winds over Douglas Rolland. Taylor became the first Englishman to win the Open Championship. He would capture the Open Championship again the following year at the Old Course at St. Andrews. Taylor would win the Open three more times in 1900, 1909 and 1913. He added to this victories with wins at the French and German Opens. In 1900, Taylor traveled to America with Harry Vardon to compete in exhibition matches in the New World. At the end of the trip Taylor placed second in the U.S. Open, losing to Harry Vardon by just two-strokes (Cairns, 2015).

In 1901, Taylor was a co-founder and the first chairman of the British Professional Golfers’ Association (PGA). This stood as the first association for professional golfers in the world. This was Taylor’s first attempt to bring equality to golf, a state exemplified by the fact that golf professionals were not allowed access to the locker rooms at most clubs until the 1925 Open Championship at Prestwick. Coming from a lesser background, Taylor understood these issues and fought for fairness. In fact, Taylor was a strong supporter of the first artisan clubs in England, which were early attempts to provide access to private courses for the lower working class individual, and was himself a member of the first ever artisan club, the Northam club, attached to the Royal North Devon Golf Club. He later co-founded the Artisan Golfers’ Association (Cairns, 2015).
In 1904, Taylor was a regular visitor to Dornoch and apparently consulted for free on the changes made by Sutherland. He would return in 1907 to make further changes to the golf course. His success as a professional golfer garnered much attention and he soon found himself in high demand as a golf course designer. Taylor built several courses before the war, however it was the original course at Hainault Golf Club, the Upper course which opened for play in 1909, which he favoured most. The layout was a simple 18-hole course, with no sand or water hazards. The course was purpose-built to serve as the first municipal course in England (Cairns, 2006). Fred G. Hawtree provided most of the technical knowhow for this course, and others before the war, creating the foundations for their future partnership. Taylor also made some excellent pre-war contributions to design without Hawtree, which included the 1911 re-model of Royal Mid-Surrey with Peter W. Lees and the solo redesign of Machrihanish Golf Club in 1914. Unfortunately, this progress was soon put on hold with the outbreak of WWI (Cairns, 2015) (Cornish and Whitten, 1993).

In 1922, the firm of Hawtree & Taylor was officially founded and the pair was active in the design of golf courses throughout the British Isles. Their most successful projects include the 1925 re-model of Royal Porthcawl, which included the addition of four holes, and the 1932 redesign of Royal Birkdale. However, it was the 1922 design of Richmond Park which once again made public golf a priority for the duo, or as Taylor would define it, the “cause” (Cairns, 2015) (Cornish and Whitten, 1993).

Taylor had an extensive design career spanning more than thirty-five years. Over this period, his views on design changed. His ideas on bunkers and hazard features evolved, including the eventual introduction of the feature now commonly referred to as
“Mid-Surrey Mounding”. However, Taylor lamented the loss of the cross-bunker. His argument, which was endorsed by his long-time friend H.G. Hutchinson, was that no feature is entirely good or bad, but that it can be simply overused. Eliminating a feature entirely from one’s toolbox limits the variety available in the final design (Cairns, 2015).

Though Taylor had little formal education, he later became an avid reader. With years spent reading the likes of Dickens and Boswell, Taylor was well prepared when he authored his autobiography – *Golf, My Life’s Work*. Earlier, in 1902, he authored *Taylor on Golf*, which was published by his friend Horace G. Hutchinson. Taylor spent his final years in his hometown of Northam, overlooking Westward Ho! (Cairns, 2015).
A.18 - Donald James Ross

Born: 1872 in Dornoch, Scotland

Died: 1948 in

Portfolio Highlights:

- founding member and the first president of the American Society of Golf Course Architects (ASGCA)
- Built or re-worked more than 450 golf courses
- The first architect to create detailed hole plans to serve as construction drawings
- went through many style phases, which often reflected the era in which a course was built

Donald Ross was one of six children born in the northern Scottish coastal town of Dornoch to Lillian Campbell Ross. Donald’s father, Murdoch “Murdo” Ross, was a mason. Murdoch left the family for work in the United States when Donald was very young. As a result, Donald was raised by his mother. As a young boy Donald worked as a caddie at the local golf links, Dornoch Golf Club. It was here that his love for golf was first sparked (Klein, 2001).

Records show that golf in Dornoch was played along the sandy shoreline as early as 1616. However, the club was not officially incorporated until 1877. Further, it would take an additional ten years to collect enough members to fund the actual design and
construction of a golf course. A driving force for the club in the early years was John Sutherland, who acted as club secretary and treasurer from 1883 to 1941 (Klein, 2001).

In 1886, when Donald was 13 years old, four-time British Open champion Old Tom Morris was invited to Dornoch for the first time to layout nine proper holes over the paths that had long been played. Donald Ross was reportedly among those in attendance and was likely captivated by St. Andrews’ “Grand Ol’ Man” of golf (Klein, 2001).

At the age of 14, Donald had completed his studies and began an apprenticeship with local master carpenter Peter Murray. An avid golfer, as well as a skilled craftsman, Murray took the young Donald under his wing. Murray enjoyed an arrangement with the Dornoch Golf Club where he constructed wooden boxes to contain sand at the teeing area. Ross’ passion for golf soon resurfaced, when he realized that his woodworking skills could prove more lucrative if focused back onto golf and club making (Klein, 2001).

Under the watchful eye of John Sutherland, Ross developed his abilities in greenkeeping and club making. In 1892, Old Tom returned to Dornoch to renovate the course into a full 18-hole layout. By this time Donald Ross was a keen student of the game and took great interest Morris’ handiwork. The next year, with Sutherland’s blessing, Ross headed to St. Andrews to apprentice under Old Tom as a keeper of the greens. Ross also utilized his early experiences in carpentry to secure an apprenticeship in club making with David Forgan, whose shop was just up the street from the first tee at the Old Course (Klein, 2001).
Ross returned to Dornoch in November of 1893 and spent the next golf season as an apprentice at Carnoustie. In November of 1894, Ross was hired by John Sutherland to serve as the head professional, club maker and greenkeeper at the Dornoch Golf Club. Through Sutherland, Ross gained a lifelong interest in the propagation and maintenance of grasses for golf and developed a keen understanding of the fundamental qualities of a good golf hole (Klein, 2001).

In 1898, Robert Wheeler Wilson and his wife visit Dornoch on vacation and spend time golfing at Dornoch. Based on club records, it seems the couple purchased extended privileges to the course. This likely included instruction from the young Donald Ross. More importantly, Wilson who had just become a charter member of the fledgling Oakley Country Club in Watertown, Massachusetts. Wilson was impressed with Ross and asked that he consider coming over to the United States. In March of 1899, Donald Ross received his last pay from the Dornoch Golf Club and set off for North America (Klein, 2001).

Arriving in New York harbour in April of 1899, Ross had a mere two dollars to his name. He started the next day at the Oakley Country Club and slowly worked to improve the existing eleven-hole layout completed previously by Willie Campbell and Richard Dana. Ross set to work with 50 labourers, but the prevalent boulders, gravel and heavy clay delayed his anticipated opening of the “New Course”. The revised layout was opened for play in 1901 and stands as Ross’ first design-build project. It was at Oakley that Ross would meet members of the wealthy Tufts family of Medford. The Tufts would convince Ross to become winter golf professional at the resort they were developing in Pinehurst, North Carolina. For several years he would continue to work summers at
Oakley and later at Essex Country Club, while working and developing the courses at Pinehurst. Ross served as the golf manager at Pinehurst until his death and would contribute to the design and construction of courses 1, 2, 3, 4 and 5. Course No. 2 stands as his most prolific design, one that he continuously perfected throughout his tenure at the resort (Klein, 2001).

From 1912 to 1948, Ross was considered by many to be America’s best-known and most active course designer. Throughout his long career Ross built or re-worked more than 450 golf courses. At his peak, Ross had 5 offices including a winter office in Pinehurst, a summer office (first in Massachusetts and then Rhode Island), and three branch offices. During this time he employed many associates who would oversee the construction and implementation of his detailed drawings. For his works in the Northeastern United States and Pinehurst, Ross was more intimately involved. By 1925, three-thousand men were employed annually in the construction of Donald Ross courses (Shackelford, 1999).

Ross was the first to advocate and create naturalness in the construction of courses. His routings took full advantage of a site’s best natural features. His greens were bold and create with a characteristic style. Ross believed in moulding green contours seamlessly into the existing terrain. His green sites almost always put a premium on short recovery shots (Shackelford, 1999).

Ross was a founding member and the first president of the American Society of Golf Course Architects, which held its first meeting at Pinehurst in December of 1947. The organization's highest honour bears his name and society’s official jacket is the Ross family tartan (Klein, 2001).
George C. Thomas Jr. was born in Philadelphia into a wealthy family. His father, was a partner with the investment banking firm of Drexel & Company. As a boy, George attended the Episcopal Academy and took to gardening. He graduated from the University of Pennsylvania in 1884. Thomas soon joined his father at Drexel & Company, where he worked until 1907. However, Thomas’ real passion was still gardening. He became a nationally recognized authority on the care and breeding of roses and wrote several books on the subject. Thomas was an average golfer, but became deeply interested in the landscaping aspects of golf course design (Shackelford, 1996).

In 1904, Thomas got his first opportunity to design a golf course and completed a nine-hole layout at Marion in Massachusetts. Soon after, Thomas designed and
constructed an eighteen-hole layout on his family’s suburban estate outside Philadelphia. The golf course was named the Mount Airy Country Club and was purchased in 1908 by a local group of golfers, who later renamed the course the Whitemarsh Valley Country Club. Thomas then built a course in New Jersey, in 1910, called Spring Lake Golf and Country Club. This was his last major design commission before his blossoming design career was halted by WWI. However, it was during this pre-war period in Philadelphia that Thomas would develop some exceptional friendships. Together, this group would later be referred to as the Philadelphia School of Golf Course Design (Shackelford, 1996).

From 1910 to 1914, George C. Thomas Jr. would observe and aid some of the great pioneers of golf course architecture in America. Throughout this period he would become friends with Donald Ross, A.W. Tillinghast, Hugh Wilson and George Crump. While a founding member and committeeman at the Sunnybrook Golf Club, Thomas first met Donald Ross. Then, between 1914 and 1915, Thomas served as a committeeman again with Ross during the construction of the original Flourtown Country Club in Pennsylvania. It was at his home course, The Philadelphia Cricket Club, were Thomas met fellow member A.W. Tillinghast, who was already active in the design of golf courses, such as the Shawnee Country Club, completed in 1911. However, it was not until 1912 that the possibilities of golf course architecture were revealed with the development of two revolutionary projects – Pine Valley Golf Club and Merion Cricket Club’s East Course. These two projects introduced Thomas to both Arthur Crump, the owner and developer of Pine Valley, and Hugh Wilson, the man selected by the Merion Cricket Club’s Golf Committee to create its new course (Shackelford, 1996).
During WWI, Thomas served in the Army Air Service and attained the rank of Captain. The nickname “The Captain” would remain with him for the remainder of his life. Upon returning home, Thomas decided to relocate to California in 1919. While his main reason for the departure from Philadelphia was to find a climate more suitable for the breeding of roses, it would be on the West Coast where his design career would truly blossom (Shackelford, 1996).

In 1920, after arriving in California, Thomas joined the Los Angeles Country Club. The following year, the club sought to upgrade its two existing courses, which had been originally laid out by club members. At the time, English architect Herbert Fowler enjoyed one of the biggest names in golf course architecture, having built several well-known courses in England prior to World War I, including Walton Heath and the remodel of Westward Ho!. After World War I, Fowler’s design services were in demand in America and his creation of Eastward Ho! on Cape Cod cemented his reputation in the United States. As such, he was hired by Los Angeles Country Club to complete the renovation work. Fowler called on Thomas, due his background in design in the East, to oversee the construction of his proposed plans. Fowler would return to England before the openings leaving Thomas to complete the work. However, the results were not comparable to Fowlers previous works and six years later, in 1927, Thomas would return to overhaul the North Course (Shackelford, 1996).

Between those six years, Thomas managed to design several layouts with the assistance of William P. Bell, an engineer and construction specialist who had been working for Willie Watson. The duo would collaborate on eight designs including La Cumbre Golf and Country Club (1925), Ojai Valley Inn and Country Club (1925),
Baldwin Hills Golf Club (1926), Fox Hills Golf Club (1926), Bel-Air Country Club (1927), Riviera Country Club (1927), and Stanford Golf Club (1930) (Shackelford, 1996).

Thomas never accepted a fee for his services as a golf course designer. He was a master of strategic design and course routing. In California, his bunkers were large, sand faced, with laced edges. He often made creative use of barrancas and swales for drainage purposes. In 1927, Thomas published arguably one of the greatest books on golf architecture ever written, *Golf Architecture in America: Its Strategy and Construction*. However, it was after its release, and at the peak of his design career, that Thomas would decide to retire from design in order to focus on other interests. He spent the last years of his life working on a book about Pacific game fishing (Shackelford, 1996).
Albert Warren Tillinghast was born in Philadelphia as the only son of wealthy parents. His father, Benjamin Collins Tillinghast, was the owner of a rubber goods company. Albert was spoiled as a youth and was somewhat of a rebel. He was a member of a local street band known as the “Kelly Street Gang”, with whom he frequently engaged in scandalous behaviour. In 1895, at the age of 20, Tillinghast abruptly left the thug life and worked hard to polish his image in an effort to join a more refined social circle. He became a collector of art and furnishings, wrote novels, and became active in aristocratic sports such as cricket, polo and golf. Tillinghast and his father would become founding members of the Belfield Country Club, a George C. Thomas Jr. layout (Cornish and Whitten, 1993).
In 1896, at the age of 21, Tillinghast travelled to St. Andrews for the first time. Tillinghast fell in love with the town and the game of golf. It was during this visit that he first met, and took lessons from, Old Tom Morris. Tillinghast would return to St. Andrews each summer for several years to visit with his friend Old Tom Morris. After returning home from such a visit in 1898, Tillinghast was invited out to nearby Frankford where he laid out his first course. While the design was undeniably rudimentary, and unfortunately no longer exists, it would stoke the fires of creativity (Cornish and Whitten, 1993).

In the United States, Tillinghast’s golf game had improved and he was competing in various events, including the U.S. Amateur on several occasion between 1905 and 1915. In 1907, at the request of Charles Worthington, Tillinghast was asked to layout a course on the Worthington family farm in Shawnee-on-Delaware in Pennsylvania. The project was a triumph and Tillinghast quickly formed a design-build firm to capitalize on the success. He used his outgoing personality and ability to write to promote his talents. The 1912 Shawnee Open brought the great players of the world, including those from the British Isles, to the course. The design proved Tillinghast to be an architect of excellent talent. This publicity would help him win major design commissions over the following years (Cornish and Whitten, 1993).

Tillinghast enjoyed a remarkable career with many excellent works, including: Somerset Hills (1917); Quaker Ridge (1918 and 1926); San Francisco (1920 and 1924); Winged Foot, East (1923); Winged Foot, West (1923); Baltusrol, Upper (1922); Baltusrol, Lower (1922); Newport Country Club (1923); Scarboro (1924); Baltimore, East (1926); and, Bethpage, Black (1936). Tillinghast is known as a master of variety,
because no two courses are alike. He believed every hole should be unique and was a strong believer in naming his golf holes after some intrinsic characteristic they possessed. Tillinghast spent a great deal of time on-site during his early projects and had a well-organized construction team. In later years, he made less frequent visits and simply wrote letters with his instructions, sometimes with hand-drawn plans (Cornish and Whitten, 1993).

Ultimately, Tillinghast was more than just a designer, he was also a prolific writer on the subjects of golf and course architecture. He published numerous articles in The American Golfer, Country Life and Golf Illustrated between 1908 and 1935, and was named Editor of Golf Illustrated in June of 1933. Between 1935 and 1937 he published frequent articles in The Professional Golfer of America. Finally, after moving from New Jersey to California, Tillinghast published a monthly article and served as Associate Editor with the Pacific Coast Golfer between 1938 and 1940 (Tillinghast, 1995).
A.21 - Seth Jagger Raynor

Born: 1874 in Manorville, New York, USA

Died: 1926 in West Palm Beach, Florida, USA

Portfolio Highlights:

- famous right-hand man of Charles Blair MacDonald
- Princeton graduate, studied engineering
- utilized template holes and cross-bunkering in his designs

Seth J. Raynor was born on May 7, 1874 in Manorville on Long Island, New York. He attended Princeton University where he studied engineering and graduated with the Class of 1898. Raynor had a successful business in Suffolk County, Long Island where he completed various engineering related projects, including drains, roads and waterworks. In 1907, Charles Blair MacDonald employed Raynor to survey the future property of the National Golf Links of America. MacDonald was so impressed with Raynor’s knowledge of engineering that he retained him to supervise the construction of the golf course (Morris County GC, 2011).

Once the National was complete, Raynor assisted MacDonald at several other courses, including Piping Rock (1913), Sleepy Hollow (1914) and the Greenbrier (1915). In 1915, Raynor joined MacDonald as a partner. Over the next ten years, Raynor completed nearly one-hundred projects under his own name. MacDonald viewed golf architecture more as a hobby than a serious discipline, and only concentrated on a half-
dozen courses over his lifetime. However, together the pair created some of their best works, including the Lido GC (1919), Mid Ocean Club (1924), and Yale University GC (1926) (Cornish and Whitten, 1993).

On his own, Raynor completed layouts at Carmago (1921), Shoreacres (1921), Yeamans Hall (1925), Fox Chapel (1925) and Fishers Island (1926). In 1926 Seth Raynor died of pneumonia, leaving his assistant Charles Banks to complete his remaining projects. Before his death, Raynor had completed a routing plan for the proposed Cypress Point Club in California. However, after his death, Alister MacKenzie was hired to complete the work and ignored Raynor’s ideas (Cornish and Whitten, 1993).

Seth Raynor was an engineer turned designer. His exposure to golf course design through Charles Blair MacDonald provided an ideal foundation. MacDonald believed that there were about twenty-five golf hole designs in the entire world, and that the best variations of each should be used to guide in the creation of the ideal course. This logical approach to design would have made sense to an engineering mind and allowed Raynor to balance form and function. Template holes used frequently by both MacDonald and Raynor include the Redan, Alps and Biarritz. The one great exception to this occurrence was Raynor’s desire and ability to combine one or two additional concepts on to one hole. Though, it was through this practice that many believe he created his greatest holes (Pioppi, 2010).

Raynor was an innovator in creating improved drainage systems for golf courses. His greens were large and bold, and his bunkers were deep and typically placed in strategic location. However, he was known to use bunkers more sparingly than his mentor, C.B. MacDonald. Seth Raynor never wrote about golf course architecture. Only
a few short quotes have ever been uncovered to suggest his philosophies. He stood in contrast to his contemporaries as the non-Scottish, non-golfing designer (Pioppi, 2010).
A.22 - Thomas “Tom” G. Simpson

Born: 1877 in Lancashire, England

Died: 1964 in Hampshire, England

Portfolio Highlights:

- designed for all golfers, especially the average player
- co-wrote *The Architectural Side of Golf* with Herbert N. Weathered in 1929
- worked with Herbert Fowler, John Abercromby and Arthur Croome
- mentor to P. M. Ross and Molly Gourlay

Tom Simpson came from a wealthy mining family and was born in Lancashire, England. In 1895, he started studies at the University of Cambridge in Trinity Hall. A scratch golfer, Simpson was a member of the Oxford and Cambridge Golfing Society. In 1902, he graduated with a MA degree in law. In 1903, he was called to the Bar. He was originally satisfied with his chosen career, until two members at his home course of Woking Golf Club began making changes to the golf course. Fearing the worst, Simpson went out to inspect the alterations. Not only did he like the changes, but on more than one occasion he found himself defending the work to other club members. What he was defending was the combined work of John Low and Stuart Patton, between 1904 and 1907, who had simply looked to the Old Course at St. Andrews for inspiration and applied its principles to the golf course. As a result, Simpson began to develop his own
ideas about golf course architecture. These ideas were first defined in 1908 and 1909 when he wrote several letters to *Golf Illustrated* describing the merits of good golf course architecture and feature design/placement (MacKenzie, 2008) (MacKenzie, 2016).

In 1910, Simpson closed his legal practice and joined Herbert Fowler’s design firm. The pair worked on a variety of projects together, however Simpson handled most of the firm's work on the Continent. Simpson was an excellent businessman who knew how to cultivate relationships. His clients included the Duke of Windsor, Lord Mountbatten and two different Barons de Rothschild. Simpson quickly developed an excellent portfolio in both original and redesign work. Projects where he modified an existing layout include Ballybunion and County Louth in Ireland, Cruden Bay in Scotland, Royal Porthcawl in Wales, Liphook in England and the Royal Golf Club of Belgium. Simpson also added key holes to St. Enodoc, Rye, Carnoustie and Muirfield. His original course designs occurred mainly in Europe, particularly France, where he was responsible for several excellent works including Hardelot (Les Pins), Chiberta, and Fontainebleau. However, his most impressive layouts are located just north of Paris at Morfontaine and Chantilly (MacKenzie, 2008) (MacKenzie, 2016).

In 1923, the firm of Fowler, Abercromby, Simpson and Croome was formed. This partnership would last until 1928, when Simpson withdrew and founded Simpson & Company. A young Philip MacKenzie Ross, who had been hired by Simpson on a whim while still with Fowler, was made partner. Together, the duo collaborated on several course before the outbreak of WWII. These courses include, Club de Campo de Malaga in Spain (1928), New GC in France (1929), Golf de la Barouge in France (1935), and Royal GC du Fagnes in Belgium (1936) (MacKenzie, 2008) (MacKenzie, 2016).
In the 1930s, Simpson also involved famed golfer, Molly Goulay, as a consultant. In doing so, he became the first designer to solicit a woman’s architecture suggestions. Together they created an original layout at Schloss Mittersill in Austria (1936), and completed three renovations in Ireland at the Old Course at Ballybunion (1936), Carlow (1937), and County Louth (1938) (MacKenzie, 2008) (MacKenzie, 2016).

Simpson prided himself on supervising his own projects, a fact which likely limited his recognition in relation to his contemporaries. However, his career in golf course design took him throughout the British Isles, France, Belgium, Austria, Germany, Indonesia, Spain and Switzerland. With the onset of WWII, Simpson would retire from golf course design. He continued to write on the subject, but spent his final years in seclusion at his estate in Hampshire (MacKenzie, 2008) (MacKenzie, 2016).

Simpson was an eccentric character, often appearing on projects in a beret and cape. He never lacked an opinion and always happy to promote his own work. When he attained new commissions he would often arrive in a silver Rolls Royce to prove that he did not need the money. In the same way, his fees were often substantially more than his competitors, likely a ploy to scare off those who were not totally convinced of his skills (MacKenzie, 2008) (MacKenzie, 2016).

As the consummate writer and artist, Simpson authored The Architectural Side of Golf with Herbert N. Weathered in 1929. He also contributed to two other publications, namely The Game of Golf (1931) and Golf Course: Design, Construction and Upkeep (1933). Simpson illustrated his works with pen and ink, sometimes accented with colour washes. His sketch plans and pen and ink illustrations were featured regularly in Bernard Darwin’s Country Life articles (MacKenzie, 2008) (MacKenzie, 2016).
A.23 - George Cumming

Born: 1879 in Bridge of Weir, Scotland

Died: 1950 in Toronto, Ontario, Canada

Portfolio Highlights:

- won the Canadian Open in 1905
- pioneer and Captain of the Canadian PGA
- served as the head golf professional at Toronto Golf Club for 50 years
- mentor to Nicol and Stanley Thompson

George Cumming was born in 1879 in Bridge of Weir, located just west of Glasgow, Scotland. At the age of ten, Cumming began caddying at the Raefurly Castle Golf Club. Here he would be mentored by the course’s designer and head professional Willie Campbell, who had finished second in the 1886 Open Championship at his home course of Musselburgh. The nine-hole course at Raefurly Castle Golf Club opened for play in 1888, and it is likely Cumming began working there as a caddy shortly thereafter. In 1894, the course was upgraded to an eighteen-hole layout, opening for play again in 1895. It is not known whether Cummings was a participant in this renovation because, at age fourteen, he began an apprenticeship with the Forgan Golf Company in Glasgow (Barclay, 2007) (Long, 2011).

At sixteen, and still employed by Andrew Forgan, Cumming moved to the Dumfries and Galloway Golf Club where he began his career as a golf professional. Here he made clubs and gave instruction to players. Within his first three years at the club,
Cumming came into contact with Stewart Gordon, the Honorary Secretary of Toronto Golf Club. This meeting led to an offer to come to Canada and join the Toronto Golf Club as its first head professional. In March of 1900, at the age of twenty-one, George Cumming arrived in Toronto, Canada (Barclay, 2007) (Long, 2011).

In 1909, Cumming received one of his first design commissions when he expanded the Mississauga Golf and Country Club from nine to eighteen holes. Cumming likely received this opportunity because of his prominent position at the Toronto Golf Club, playing skill and Scottish heritage. In 1911, Cumming added a second nine holes at the Oshawa Golf and Country Club (Barclay, 2007) (Long, 2011).

In 1910, the Toronto Golf Club lands, known as the Fernhill property, had been recently included in the expanded limits of the City of Toronto. As these lands were now available for urban development, the decision was made to acquire new land and sell the existing site at a profit (Toronto Golf Club, 2016). The famous Harry Colt was selected to complete the design. However, before Colt’s arrival in 1911, Cumming was given the responsibility to source the club’s new property. Cumming made several suggestions to the club. After a thorough search land was purchased on the banks of the Etobicoke River. The new golf course was completed in 1912, and in the spring of 1913 the club gave up possession of its old property. Because of his previous experiences with golf course design and construction, it is likely Cummings would have taken great interest in Harry Colts design ideas for his selected site, possibly assisting with the design in some capacity (Barclay, 2007) (Long, 2011).

Through his search for land, Cumming was able to turn two other sites not selected for Toronto Golf Club into additional design commissions, both of which opened
in 1912. Firstly, he recommended that the founders of The Summit purchase their current site, where Cumming would complete the original layout with the assistance of professional golfer George S. Lyon. Secondly, he used another site not selected to create an eighteen-hole layout for the Scarboro Golf Club. Also in 1912, Cumming would create a nine-hole layout for the Sarnia Golf and Curling Club, however the course did not open until 1919 (Barclay, 2007) (Long, 2011).

Cumming would go on to design layouts at North Halton, Couchiching, Rivermead, Windermere, Sault Ste. Marie, Highland, and Oakville. He also designed layouts at Graydon Hall, Humber Valley and Glen Stewart which no longer exist. Immediately after WWI, Cumming would partner with his protégées, the brothers Stanley and Nicol Thompson. The firm was named Thompson, Cumming & Thompson and operated initially as a side business for the trio. Cumming still held the position of head professional at Toronto Golf Club, while Nicol served as the head professional at Hamilton Golf and Country Club, the other Colt course near Toronto. Stanley worked for his older brother Nicol at Hamilton. However, the partnership was short lived. With the completion of Brantford Golf and Country Club in 1920, and the popularity of golf rising in Canada, the pressure to do two jobs became too much for both George Cumming and Nicol Thompson. Stanley Thompson would take over the company reigns and soon forge his own remarkable legacy (Barclay, 2007) (Long, 2011).

Cumming has been hailed as an accomplished golfer, a wonderful teacher of club professionals (including Charlie and Albert Murray, Karl Keffer, Frank and Willie Freeman, Norman Bell, Dick Borthwick, Willie Lamb, Gordon Brydson, Nicol Thompson, and his son Lou Cumming), a master club maker, and a gentleman.
Cumming won the Canadian Open in 1905 and finished runner-up in 1906, 1907, 1909 and 1914. He pioneered the start of the Canadian PGA as Captain from 1911 to 1913, and went on to win the CPGA Championship in 1914. Most importantly, he pioneered golf course design in Canada and served as a mentor to perhaps the greatest course designer in Canadian history, Stanley Thompson (Barclay, 2007) (Long, 2011).
A.24 - Perry Duke Maxwell

Born: 1879 in Princeton, Kentucky
Died: 1952 in Tulsa, Oklahoma

**Portfolio Highlights:**
- best known for his greens and “minimalist” approach to design
- was hired to re-build greens at Augusta National (1937), Pine Valley (1933) and the National Golf Links (revised 1 hole)
- designed some 70 courses and re-modelled nearly 50 others

Perry Duke Maxwell, later know as P.D. to his close friends and associates, was of Scottish decent and was born in Kentucky in 1897. He grew up wealthy as his father, James Maxwell, was a doctor. However, his father passed away when Perry was just nine years old, leaving him to be raised by his mother and uncle. Perry’s uncle was a man of some means, who had never married. When his uncle later died, the inheritance left Perry well financed (Elliott, 2002).

As a teenager, Perry was educated at the both the University of Kentucky and Stetson University in Florida. However, his poor health kept him from completing his formal education. In 1904, Perry moved to the Ardmore Indian Territory, now known as the state of Oklahoma, to recover from an attack of tuberculosis. He had decided that the
climate would be good for his health. He was employed as a cashier and slowly worked his way up to become Vice President of the Ardmore National Bank (Elliott, 2002).

Perry’s health eventually recovered and he once again became active in sports, including his favourite pastime tennis. However, it was banking that never truly captured Perry’s full interest. His wife, Ray Woods Maxwell, obviously understood this fact and suggested golf as an alternative outlet to her husband, fearing that tennis was too harsh an activity. Around 1909, he picked up the game of golf after reading an article by H.J. Whigham. In 1912, his wife pointed out an article on the National Golf Links of America, which had recently been completed on Long Island in New York. He soon scheduled a trip. He was so impressed with the golf course that on his return home he decided to create a course on the couple’s own property in Ardmore. In 1913, work began on a nine-hole layout. The course would be called Dornick Hills Golf and Country Club. However, with his work as a banker still taking up the majority of his time, the course was not completed until 1918 (Elliott, 2002).

In 1919, Perry’s world was shaken when his wife passed away. In order to take his mind off his loss, he travelled to Scotland where he studied the great golf courses and first met Alister MacKenzie. Upon his return, Perry cut back his work at the bank and poured his entire passion into the golf course. In 1921, he started his first venture as an architect for hire when he was commissioned to complete a course at Twin Hills Golf and Country Club in Oklahoma City. In 1923, he added a second nine-holes to Dornick Hills and installed the first grass greens in the state of Oklahoma. Soon business was booming and Maxwell completed projects at Riverside CC (1925), Hillside CC (1926), Cushing CC (1929), and Rochelle CC (1929). However, it was not until 1929, at the age of fifty,
when Perry decided to leave banking entirely to become a full-time golf course architect. After this change, with his focus solely on golf course design, Maxwell completed many of his best works, including Southern Hills CC (1936) and Old Town Club (1939) (Elliott, 2002).

In the early 1930s, Perry Maxwell achieved national fame when he partnered with Dr. Alister MacKenzie. The pair would complete three designs together. The first, opened in 1931, was designed and built for the University of Michigan. The second, a masterpiece laid out on a headland overlooking both Lake Michigan and Crystal Lake, is known as Crystal Downs and serves as the duo’s best work. Crystal Downs opened for play in 1933. The final course, opened in 1938, was completed at Ohio State University. The onset of World War II ended the duo’s collaborative efforts. However, it was also during the 1930s that Maxwell completed two of his most famous redesigns at Pine Valley (1933) and Augusta National (1937) (Elliott, 2002).

After the war, Perry Maxwell’s son, Press Maxwell, joined his father in the golf course design business. This father and son team completed several projects including the Dogwood Course at Lakewood GC (1947), Oakwood CC (1947), Grandview Muni (1947), Bayou de Siard CC (1949), University of Oklahoma GC (1950), Palmetto CC (1950), Riverside GC (1950), the North Course at Lake Hefner GC (1951), and Kentucky Dam Village GC (1952). However, the duo’s legacy would result from a course that would take, between them both, some 20 years to complete (Elliott, 2002).

In 1935, Perry Maxwell started construction on what would become Prairie Dunes. Located in the sand dunes of the Kansas prairie, this course would later be referred to as his masterpiece and would become a symbol of minimalist design. The
construction of the course was done with teams of horses and mules, 18 in all, pulling scrapers and wagons. There was not a single piece of mechanized equipment on the site, apart from the trucks which brought the workers to the course. Perry completed the first nine-holes on September 13, 1937. Due to the economic fallout of the Great Depression and impact of WWII, the second nine-holes, which had been planned by Perry, was never laid out or constructed. Perry Maxwell died in 1952. However, twenty years later in 1957, his son James Press Maxwell was asked to complete his father’s earlier work. While there is debate as to whether or not Press utilized his father’s original plans for the work, the course is hailed universally as a stunning success (Elliott, 2002).

Perry Maxwell, as a golf course designer, was known for his greens. His use of interior contours was exceptional. However, it was his ability to link these internal contours to the natural movements of the surrounding landscape which truly set him apart. This is especially important when one realizes how little earth he moved in the construction of a golf course. Maxwell believed in moving as little dirt as possible and that building courses could be completed at minimal expense. Most of his construction work was limited to bunkering and greens, where he would emphasize the strategies that he had prepared in his routing plans. Perry Maxwell has served as inspiration to many architects of the new “minimalist” movement, most notably Bill Coore of Coore & Crenshaw (Elliott, 2002) (Shackelford, 1999).
A.25 - Charles Hugh Alison

Born: 1882 in Preston, Lancashire, England

Died: 1952 in Johannesburg, South Africa

Portfolio Highlights:

- Most prolific designer in the Far East, who set the standard for all future Japanese architects (e.g. Hirona CC)
- published *Some Essays on Golf Course Architecture* in 1920 with H.S. Colt
- creator of the Alison style

Born into an upper middle class family in Preston, located north-west of Manchester, Charles Hugh Alison was educated at Malvern College in Worcestershire. It is unclear when Alison took to golf, but his skills were well honed when he arrived at New College at Oxford University. He was a double Blue, which is an award earned by athletes for competition at the highest level, and competed in both cricket and golf. In 1903, he was the youngest member of the Oxford and Cambridge Golfing Society team that toured the United States. He won every match he competed in during that tour. While talented at golf, his skills in the classroom were less impressive. Alison took studies in history, law and divinity. However, after failing divinity twice, and being sent home three different times between 1902 and 1903, Alison never took his final exams and did not obtain a degree. Luckily for Alison, the pre-war British golf scene was a small circle, and he had managed to make some key connections during his time at Oxford (Cornish and Whitten, 1993) (Lawrence, 2011).
After college, Alison worked as a journalist for a time before working as a club secretary for the newly formed Stoke Poges Golf Club near London. It was here that Alison met Harry Colt, who was completing the design of the course. Intrigued with the work, Alison eagerly assisted Colt with the construction, which was completed in 1908. While secretary at Stoke Poges, Alison assisted Colt in the creation of several other courses, including nine-holes at Kingsthorpe in 1908, Northampton County in 1909, Denham in 1910, St. George's Hill in 1912 and Camberley Heath in 1913. St. George's Hill and Camberley Heath secured them position of the top golf architects in the world. Unfortunately, the duos work was then temporarily interrupted by the onset of WWI (Lawrence, 2011).

After service with the British army during WWI, Major Alison returned to work with Colt. In 1919, they officially formed the London firm of Colt, MacKenzie & Alison. However, in 1923, MacKenzie withdrew from the partnership, allowing for the addition of a new partner, J.S.F. Morrison, that same year. Colt handled most of the firm’s work in Britain and on the Continent, while Alison worked almost extensively in North America and the Far East (Lawrence, 2011).

Alison’s nine year stay in North America, during the 1920s, saw him design more than twenty new courses. Highlights of this work include the Country Club of Detroit and the Sea Island course in Georgia. However, it was his experiences at Pine Valley which seem to have helped define his design beliefs. Later courses in his portfolio would seem to increase in difficulty, likely a direct influence from his time at Pine Valley (Lawrence, 2011).
However, his greatest influence on golf course design would occur in Japan. During a three month visit in the early 1930s, Alison laid out several very important courses which would define architecture for many future designers. His layouts at Fugi (1932), Tokyo (1932), Hirona (1932) and Kawana (1936), defined architecture in Japan for all future designers. Just as MacKenzie’s visit to Australia effectively defined how golf design would develop, so too did Alison’s time in Japan. Only MacKenzie influence in Australia dominates a major golf market in a similar way (Lawrence, 2011).

By the time of Alison’s return to Britain in the mid-1930s, Colt had all but retired. While Alison and Morrison continued the partnership in name, they operated individually. In 1949, Alison and his wife ventured to South Africa for what was supposed to be an extended business trip. However, he was still working to complete a course when he passed away in Johannesburg in 1952 (Cornish and Whitten, 1993).

Alison’s many influences contributed to his distinctive style. He followed strategic design principles and believed that risky shots should be justly rewarded with improved angles. However, for his time, his courses were often long and difficult, which was likely a result of his time at Pine Valley. Alison was excellent at routing a golf course and would capitalize on a site’s best natural features. However, he was not afraid to move dirt if he had to improve a feature or increase visibility. His greens utilized surrounding mounds as the basis for contour design, where external forms flowed into and through the green. His bunkering was not only grand in scale, but also deep and intimidating at times (Lawrence, 2011).

Alison produced two books which summarize his design philosophies. The first, which was co-authored by his design partner Harry Colt in 1920, was titled Some Essays
on Golf Course Architecture. The second, which was first published in 1933 before being updated and re-released in 1950, and was titled *Golf Courses: Design, Construction and Upkeep* (Cornish and Whitten, 1993).

Born: 1882 in Dublin, Ireland

Died: 1964 in Victoria, British Columbia

Portfolio Highlights:

- pioneer of golf course architecture in the Pacific Northwest
- designed his first course with William Chamber, formerly known as William Dunn, son of Tom Dunn
- made detailed clay models of the holes he designed
- lost the lower half of his left leg in WWI during battle at Vimy Ridge in France

Arthur Vernon Macan was born in Ireland to a father with the same name. Arthur Macan Sr. graduated from Dublin’s Trinity College with a degree in medicine in 1868. His father would serve with the Prussian Army as a field doctor, later earning knighthood in 1908. His father would later serve as Head Physician at Rotundra Hospital, pioneering antiseptic practices in the art of midwifery. Unfortunately, these procedures were not in place in 1882 when his wife died giving birth to Arthur Vernon Macan Jr. (PNGA, 2016).

Though sadly motherless, Macan Jr. grew up in a very wealthy family in Dublin. Once of age, he was sent to attend Shrewsbury School in England, a leading private boarding school for boys. Here, around the age of nine, Macan was exposed to golf and
likely played in matches against the other boys at Shrewsbury Golf Club near his school (PNGA, 2016).

In 1900, “Mac”, as he was called by his friends, enrolled at Trinity College in Dublin. However, instead of following his father’s medical path, he choose to pursue law. He earned a law degree from the University of London several years later. Returning home to Dublin, Macan had soon secured himself a position with one of Dublin’s leading law firms. In December of 1911, he would marry Juliet Richards, the daughter of a wealthy Dublin lawyer. With both social and economic position secured, Macan’s future looked bright in Dublin. However, Mac had no love for the law. His passion was golf. Between 1905 and 1912, Mac was one of Ireland’s top amateur golfers. He competed on Trinity’s golf team and competed in both the British and Irish Amateur Championships (PNGA, 2016).

Macan soon decided that a change of scenery would resolve his monotony. So, in 1912, he uprooted his family and moved to Victoria, Canada. Though he would establish himself again as a lawyer, Macan also made a quick impact on the local golf scene by winning the 1912 B.C. Men’s Amateur Championship. This event was held at his new home course of Victoria Golf Club. Spurred on by his new fellow club members, Mac enrolled in the 1913 Pacific Northwest Golf Association (PNGA) Men’s Amateur Championship at Butte Country Club. Macan would win the event, beating R. Baker 5&4 in the finals (PNGA, 2016).

These quick successes prompted interest into Mac’s design skills. In 1912, members of the Victoria Golf Club, who feared the club would not survive the burden of the growing population and increasing property taxes, began preparations for another golf
course. In 1913, Macan was commissioned to complete the design at Colwood (now Royal Colwood) on Vancouver Island. However, Macan was not foolish enough to attempt golf course design without any previous experience. As such, he consulted with Captain W. Chambers, a Scotsman and son to Tom Dunn. Captain W. Chambers, originally William Dunn, had married Nina Grace Chambers and adopted her surname in 1897. As such, Chambers had come from a long lineage of golf course designers and was more than qualified to assist. Colwood opened to great acclaim on November 8, 1914 (PNGA, 2016).

However, Macan’s new career path was cut short by the onset of WWI. In one of Canada’s most famous battles at Vimy Ridge in France, Macan lost his left leg below the knee. While recovering in a London hospital, he wrote several letters for his golfing buddies in Victoria. In them, he promising that he would continue to play competitive golf. Upon returning home in 1920, Macan's determination proved him right. Over the next three years Mac would become a medalist, semi-finalist or finalist in both the B.C. Men's Amateur and the PNGA Men's Amateur Championship. Equally as impressive, was the fact that his handicap only increased from a four to a six, even with the use of a wooden appendage (PNGA, 2016).

Though altered physically, Macan did not allow his misfortune to negate his abilities as a designer. While working full-time in government service, Macan successfully moonlighted as an architect. Between his return home in 1920 and his death in 1964, Macan would become a pioneer for golf course design in the Pacific Northwest. Between 1922 and 1925, Macan was at his most prolific, laying out new courses in Washington, Oregon, California, and British Columbia. Projects included Manito (1922),
Marine Drive (1923), Inglewood (1923), Fircrest (1925), Columbia-Edgewater (1925), California Golf Club of San Francisco (1926), and Broadmoor (1927). While the interwar period was his most active as a designer, Macan completed many course until his passing in 1964. These later projects include Overlake (1953), Shaughnessy (1960), and Kelowna (1962). Some have argued that Shaughnessy Golf and Country Club stands as his best course because he was given a freehand and a good budget (PNGA, 2016).

Arthur Vernon Macan was an intelligent man with an extreme passion for golf. In addition to course design, Macan was also a prolific writer. He frequently penned articles on many aspects of golf and was often quoted in newspapers and magazines, speaking about his golf course design projects. Macan based his design philosophy on John Low’s 1902 book, Concerning Golf, which promoted the principles of strategic golf course design. Macan cater to the enjoyment of all golfers, while at the same time provide an adequate challenge to better players (PNGA, 2016).
A.27 - Frederic George Hawtree

Born: 1883 in Ealing, Middlesex, England
Died: 1955 in Hayes, Kent, England

**Portfolio Highlights:**

- the first of three generations of British golf course architects
- collaborated with two members of British golf’s “Great Triumvirate” – James Braid and J.H. Taylor
- was a strong supporter of public golf
- was fundamental in starting the British Golf Greenkeepers Association
- was on the board for the Sports Turf Research Institute

Fred G. Hawtree started his career in golf as a greenkeeper and gradually broadened his interests to include golf course construction. Fred’s first design commission was completed in collaboration with James Braid, a member of British golf’s “Great Triumvirate”. Croham Hurst Golf Club, located in south London, opened in 1912. The duo designed a nine-hole and an eighteen-hole layout, of which the eighteen-hole course is still there, unchanged (Cornish and Whitten, 1993).

Following service with the British army during WWI, F.G. Hawtree practiced on his own. In 1922, he formed a partnership with J.H. Taylor, another member of British
golf’s “Great Triumvirate”, in the firm of Hawtree & Taylor. Between 1922 and 1939 (WWII), the pair would design and build more than fifty new courses and re-model many more. Hawtree handled the day-to-day logistics, while Taylor attended to early interviews and official openings. At one time, the firm also employed four highly regarded Irish foreman. These foreman, by the names of Regan, Ryan, Brick and Ward, all had special talents in the shaping of golf courses. The firm’s projects would include Addington Palace GC (1923), the Championship Course at Rosslare GC (1928), and Harpenden Golf Club (1931). However, their most successful project occurred with the renovation of the Royal Birkdale Golf Club in 1932 (Cornish and Whitten, 1993).

In addition to the design of private layouts, the pair had an affinity for public golf. F.G. Hawtree was fundamental in starting the National Association of Public Golf Courses, serving as President for some time, and worked to complete many public layouts in collaboration with Taylor. These courses include Norwich Muni, Martson Green Muni, Pype Hayes Muni, and White Webbs Muni. In 1931, F.G. Hawtree funded, designed and constructed Addington Court, a 27-hole daily-fee course open to the general public. It served as the first privately owned public golf course in Britain. For the next fifty years Addington Court would serve as the headquarters for the Hawtree family firm (Cornish and Whitten, 1993).

In 1938, Frederick William Hawtree joined his father’s practice. However, with the outbreak of WWII, the firm of Hawtree & Taylor was voluntarily liquidated. After the war, F.G. Hawtree came to realize that the future of golf course design should be conducted in a purely architectural form, independent of construction. As such, he founded a new firm named Hawtree & Son, Golf Course Architects. The father and son
team would complete many projects, including Hartsbourne CC (1946), Dyke GC (1947), and Maxstoke Park GC (1948). Frederic George Hawtree would pass away in 1955, leaving the family design business to his son and grandson, Martin Hawtree (Cornish and Whitten, 1993).
A.28 - Charles Henry Banks

Born: 1883 in Amenia, New York

Died: 1931 in New York City, New York

**Portfolio Highlights:**
- nicknamed “Steam Shovel” by his colleagues because he frequently used heavy equipment to move large amounts of earth
- apprenticed with Seth Raynor and Charles Blair MacDonald
- replicated his mentors use of template holes

In 1906, Charles Banks graduated from Yale University. He soon attained a teaching position at his former preparatory school, Hotchkiss in Connecticut. Here he served as an English teacher and track coach for fifteen years. While serving as a member of the school’s construction committee, Charles first met architect Seth Raynor, who had been commissioned to overhaul the course at Hotchkiss School. Charles worked closely with Raynor on the job and became captivated by the process. It seems Raynor also saw something in the school teacher, because he would soon convince Banks to leave his teaching position to assist with his, and partner Charles Blair MacDonald’s, growing commissions (Bahto, 2002).

Sometime in 1925, Charles would leave teaching to start a career in golf. In 1925 he assisted with the completion of the Yale University Golf Course, which was opened in 1926. Soon after, MacDonald would retreat from the design world, leaving Charles to
join Seth Raynor as a partner in a new firm. The duo soon opened a New York office and were busy with commissions across the country. In 1925, the pair worked to complete layouts at Lookout Mountain, Waialae, and Fox Chapel. In 1926, while on a job in Florida, Seth Raynor dropped dead at age fifty-one. Charles banks was left, after only a little more than year in the business full time, with some 25 projects to complete all over the country. Doing his finest, he finished Monterey Peninsula GC in 1926, and then went on to complete Mid-Pacific CC, Rock Spring CC, and Southampton GC in 1927 (Cornish and Whitten, 1993) (Bahto, 2002).

Between 1928 and 1931, Charles Banks completed many new layouts including Knoll GC (1929), Tamarack CC (1929), Westhampton CC (1929), Essex County CC (1930), Cavalier G&YC (1930), Forsgate CC (1931), and Caracas CC (1931). However, it would be his 1930 renovation of the Donald Ross course at Whippoorwill Country Club which is deemed by most as his best work. In 1931, at age 48, Charles Banks died suddenly of a heart attack. His last course was the Castle Harbour GC in Bermuda, located next door to the famous Mid Ocean Club, a course he had helped construct just after his start with Raynor and MacDonald (Cornish and Whitten, 1993) (Bahto, 2002).

Charles was nicknamed “Steam Shovel” Banks because he often used steam shovels, and other heavy earth moving equipment, to move massive amounts of earth in creating huge elevated greens and deep bunkers. He carried on the MacDonald/Raynor tradition of adapting template holes to suit a property. Inevitably, a rendition of the “Redan”, “Alps” or “Biarritz” hole can be found on almost all Charles Banks layouts. Banks also wrote several articles on design and construction (Bahto, 2002).
A.29 - William Stephen Flynn

Born: 1890 in Milton, Massachusetts, USA
Died: 1945 in Philadelphia, Pennsylvania, USA

Portfolio Highlights:
- many feel that he should be given co-design credit for his work at Merion with H. Wilson
- wrote extensively on issues facing the game (including the golf ball), turfgrass, and design for the USGCA’s Green Section
- was a mentor to many designers including William Gordon, Robert “Red” Lawrence, and Dick Wilson.

William Flynn was born in 1890 in Milton, Massachusetts. He graduated from Milton High school, where he competed in golf against his friend Francis Ouimet, who would win the U.S. Open in 1913. In 1909, he was commissioned to layout his first course at Hartwellville Country Club in Vermont. Shortly thereafter, he was hired by Hugh Irvine Wilson to assist with the completion of the East Course at Merion Golf Club in Merion, Pennsylvania (Morrison and Paul, 2011).

He began his career as construction supervisor, but remained on as superintendent to establish the course. Flynn soon found steady work laying out courses and would later resign from Merion to pursue a full-time career in golf course architecture. However, he would continue to remain good friends with Wilson and even assisted with a major
renovation of Merion in 1924. Ultimately, Flynn would make his own modifications to a series of holes in 1925, after the death of Hugh Wilson, leaving the general layout we know today. There are many who feel Flynn should get co-design credit at Merion because of his extensive work over a fifteen year period (Morrison and Paul, 2011).

Wilson and Flynn had hoped to form a design partnership, however Wilson’s failing health would prevent such collaborations. Instead, Flynn went out on his own. Before WWI, Flynn had several successful commissions, including Normandy Shores, Doylestown and Harrisburg. After WWI, Flynn joined forces with Howard Toomey, a civil engineer specializing in railroad construction, in the firm of Toomey and Flynn. Flynn was responsible for design, while Toomey was in charge of engineering, construction and finances. Before Toomey’s death in 1933, the pair were very productive and created some of Flynn’s best work. The firm’s projects included Lancaster Country Club (1920), Cherry Hills Country Club (1923), Cascades Golf Club (1923), Rolling Green Country Club (1926), Huntington Valley Country Club (1927), Philadelphia Country Club (1927) and a nine-hole addition at The Country Club (1927). However, Flynn’s best work was completed in 1931 when he reworked and rerouted Shinnecock Hills on Long Island, New York. Flynn was also responsible for assisting with the completion of Pine Valley, after the death of its founder and designer George Crump. Flynn was assisted on this project by his mentor Hugh Wilson of Merion. Finally, in 1938, Flynn partnered with Perry Maxwell to rework the Philadelphia Cricket Club (Morrison and Paul, 2011) (Cornish and Whitten, 1993).

As an architect, Flynn was an innovator, combining both classic ideas with modern philosophies. Flynn and Toomey first drew their layouts using topographic maps
but then modified them in the field, often adding hazards on site or after a course was open. Flynn was one of the first designers to use heavy earthmoving equipment with natural looking results. He was a pioneer in multiple tee complexes, and even named the front areas as “forward tees” to ensure men would use them. Finally, Flynn believed that each hole should have an individual character and problem to overcome (Morrison and Paul, 2011).

Flynn’s second love was greenkeeping, a science he was exposed to during his time at Merion. It was a relationship he would maintain throughout his career through the creation of a series of articles on turfgrass and design for the USGA Green’s Section. Flynn also lectured at Penn State University and produced several pamphlets on the subject (Morrison and Paul, 2011).

In addition to being mentored himself by Hugh Wilson, at one of the greatest projects of the pre-war era, Flynn also took many future designers under his own tutelage. Protégées like William Gordon, Robert “Red” Lawrence, and Dick Wilson would go to have their own successful careers in golf course design. In a similar way, Flynn’s keen interest in both turfgrass and greenkeeping, helped him start several men into that field of work. His most notable pupil in maintenance was Joe Valentine, the long-time superintendent at Merion (Morrison and Paul, 2011).
A.30 - Stanley Thompson

Born: 1894 in Toronto, Ontario, Canada

Died: 1952 in Toronto, Ontario, Canada

**Portfolio Highlights:**

- mentor to Robert Trent Jones Sr., Howard Watson, Robbie Robinson, Geoff Cornish, Ken Melton, Norman Woods and Bob Moote
- known as the “Toronto Terror”
- one of the first architects to setup a large design practice, employing a soil chemist, plant pathologists, landscape architects, an arborist, and a land planner
- founder (with Donald Ross) of the American Society of Golf Course Architects

Stanley Thompson was one of five brothers and four sisters born to Scottish parents, James and Jeannie Thompson. Originally spelt Thomson, the couple’s last name changed when it was spelt “Thompson” on their marriage certificate, a wedding which occurred after James got Jeannie pregnant out of wedlock in 1880. Their first child Nicholas, commonly referred to as Nicol, was born in December of 1880. Their first daughter, Marion, was born in March of 1882. In June of that same year, the family immigrated to Canada (Barclay, 2000).
James soon found work as a market gardener north of Toronto in the township of Markham. In 1883, the Grand Trunk Railway opened a new freight and repair yard in what is now the east end of Toronto. At the time, the area was called the Village of Norway, and the new yard attracted many families to the area with the prospect of work. James relocated the Thompson family after he secured a position as a labourer. He would later work his way up to become a boiler-washer, fireman, engineer, and machinist with GTR. However, it was the family’s proximity to the Toronto Golf Club, which at the time owned lands just southwest of the new GTR yards, which would prove to be auspicious for the Thompson boys (Barclay, 2000).

In 1894, the family’s fourth son, Stanley Thompson, was born in Toronto. From 1908 to 1911 Stanley attended Malvern High School. He played rugby for Malvern, and was on the St. Emmanuel’s soccer team. Stanley worked as a caddied at the Toronto Golf Club, a position his older brothers had worked previously. He golfed with his brothers and caddie friends when allowed on the course. Stanley was also being groomed by head professional, George Cumming, for a future in golf. In 1909, Stanley obtained his first design commission when hired as the first head professional at the Wa Wa Hotel at Norway Point, Lake of Bays, in the Muskokas. Here, at the age of 17, Thompson gave instruction and laid out, or helped to lay out, one or two golf courses (Barclay, 2000).

By 1912, Stanley’s oldest brother, Nicol, had already apprenticed with George Cumming as a club maker (1899-1902), worked as a golf professional at Hamilton Golf and Country Club (1903), travelled to the United States to work as a golf professional at several courses (1904-1911), and returned to Ontario to work as head professional at the Hamilton Golf and Country Club (1912-1945). Stanley’s other brothers, Matt (b. 1885),
Bill (b. 1889) and Frank (b. 1897), were also active in golf. Collectively, the brothers would later become so well known for their play in both Canada and United States competitions, that they became known as the “Amazing Thompsons.” Stanley, while possibly the most talented golfer of the boys, wanted more (Barclay, 2000).

In September of 1912, Stanley registered at the Ontario Agricultural College (OAC), now known as the University of Guelph, and took courses in math, botany, chemistry, farm mechanics, horticulture, and zoology. However, Stanley only completed two semesters of studies and left the OAC in 1913 to join his brother Nicol and George Cumming in their new golf course architecture company – Thompson, Cumming and Thompson. Unfortunately, the onset of WWII prevented the trio from completing any major projects (Barclay, 2000).

However, it is obvious from prior happenings that Stanley had two major influences which pushed him into the field of golf course architecture. His primary source of inspiration was George Cumming, his mentor in golf, who had recently completed some of the first real design work in Canada at Mississauga (1909), Oshawa (9-holes, 1911), Summit (1912), Scarboro (1912) and Sarnia (9-holes, 1912). Stanley’s second source of inspiration was likely British golf course architect Harry Colt. In 1911, Colt arrived in Canada and laid out the new Toronto Golf Club, on land selected by George Cumming. Here, Stanley got his first opportunity to view the work of the world’s top architect, and it likely that the young man took a keen interest into the work being completed. Further, in 1914, Colt completed a second project in Ontario when he was commissioned at Hamilton Golf and Country Club. Here both Nicol, the head professional since 1912, and Stanley would have had the opportunity to see Colt in action
and may have contributed to the construction. This would also explain why Stanley and Nicol did not complete any major projects in 1914 (Barclay, 2000).

After service with the Canadian Expeditionary Forces in France during WWI, Stanley returned to Canada eager to get back to golf course design. However, it would be with his play on the golf course that would bring Stanley his first fame. In June of 1919 Bill, Stanley and Frank played in the Toronto and District Championship, which at the time was the leading Ontario amateur golf tournament. Bill placed first, Stanley second, and Frank third. Bill won by nine strokes, and Frank was five shots better than George Lyon, who had won the gold medal in golf at the 1904 Summer Olympics in St. Louis (Barclay, 2000).

In 1920, the trio of Thompson, Cumming and Thompson completed Brantford Golf and Country Club. While the course was a great success, the writing was already on the wall for George and Nicol. Golf in Canada was experiencing rapid growth following WWI. Canadian soldiers stationed in Europe had been exposed to the game. Many soldiers had been stationed in camps in or near Aldershot in the south of England, where golf clubs, for a modest fee, had opened their doors out of respect for the troops. Returning home, these new golfers looked for places to play. This caused overcrowding on existing courses and the need for more layouts near the largest cities. With increasing pressures pulling both George and Nicol into design, the pair was strongly encouraged by their clubs to focus on their work as head professionals. As a result, Stanley Thompson officially started his own practice as a full time golf course architect in 1921 (Barclay, 2000).
Capitalizing on this golf boom, and earlier commissions from both Nicol and George, Stanley experienced a rapid rise to fame. From 1921 to 1924, Stanley was very busy and completed layouts at Highland (1921), Humber Valley (1921), Islington (1921), Muskoka Beach (1922), North Bay (1922), Old Ashburn (1922), Beach Grove (1922), Briars (1922), Cedarbrook (1922), Itanhanga (1922), Sleepy Hollow (1923), Squaw Creek (1924), and the Ladies Golf Club of Toronto (1924). However, it was the next three years (1925-1927) which would bring him world acclaim (Barclay, 2000) (Whitten and Cornish, 1993).

In 1925, Stanley completed Jasper Park Lodge Golf Club in Alberta. Completed for the Canadian National Railway, and sculpted between the grand mountains of the Alberta Rockies, Jasper furthered Stanley’s reputation as a designer. So much so, that he was retained by the Canadian Pacific Railway to create an eighteen-hole layout below the existing Banff Springs Hotel in Banff National Park. Banff Springs Hotel Golf Club opened in 1927, and is considered by many to be the more spectacular of the two layouts. Both courses, and their designer, quickly received international acclaim. Stanley soon had his choice of projects. Between 1928 and the onset of WWII, Stanley completed many new courses and reworked many others. His best works of this period include St. Georges Golf and Country Club (1929), Westmount Golf and Curling Club (1935), Capilano Golf and Country Club (1937), and Highlands Links (1941) (Barclay, 2000) (Whitten and Cornish, 1993).

While Stanley continued to work as a designer until his death in 1952, with projects such as Whirlpool Golf Course in Niagara opening in 1951, he would see a major decrease in commissions as a result of the Great Depression and onset of WWII.
Stanley lived his final years at Cutten Fields in Guelph, which he had bought in 1939 for only $22,500. In 1948, Mr. Thompson began selling some of the land for real estate development. It seems he had spent much of his earlier wealth (Barclay, 2000).

Thompson was nicknamed the “Toronto Terror”. He serves as one of the most colourful figures in the history of golf course design. It is said that he made and spent fortunes throughout his lifetime. However, those who knew him considered him a genius and could see past his flamboyant exterior. In addition to his courses, Stanley left a legacy of design protégés. His disciples include Robert Trent Jones Sr., Howard Watson, Robbie Robinson, Geoff Cornish, Ken Melton, Norman Woods and Bob Moote (Barclay, 2000).

As a designer, Stanley was known to spend countless days examining a site before finalizing a routing. He believed in strategic golf and that golf holes should have a variety of routes to the green. Stanley created intricate models for his crews to work off of in the field. Stanley’s principles for golf course design were penned in 1923 when he published the booklet *General Thoughts on Golf Course Design*. After completing Capilano, he updated his thoughts on design with the publication *About Golf Courses Their Construction and Up-Keep* later that same year. Stanley was one of the first architects to setup a large design practice, employing a soil chemist, plant pathologists, landscape architects, an arborist, and a land planner. He was also a co-founder, along with Donald Ross and others, of the American Society of Golf Course Architects (Barclay, 2000).
A.31 - Robert “Bobby” Tyre Jones Jr.

Born: 1902 in Atlanta, Georgia, USA

Died: 1971 in Atlanta, Georgia, USA

**Portfolio Highlights:**

- one of the greatest golfers of all time
- partnered with Dr. Alister MacKenzie to design Augusta National Golf Club
- His book, *Golf is my Game*, provides insight into his design philosophies and the principles behind Augusta National Golf Club

Robert Tyre Jones, known to his friends as Bobby, was born to Clara Thomas and Robert Purmedus Jones of Atlanta in 1902. Although not sharing the same middle name, Bobby later adopted “Jr.” out of respect for his father. In 1907 his father, as successful lawyer, joined the Atlanta Athletic Club where he played golf at East Lake Country Club. It would be here, at East Lake, that Bobby would learn the game of golf. Further, it would be under the guidance of the club’s head professional, Stewart Maiden, that Bobby would develop his famous golf swing (Lowe, 2014).

With each passing year his golf skills developed and in 1916, at the age of 14, he entered his first professional golf competition. The event was the U.S. Amateur, being held that year at the Merion Cricket Club near Philadelphia, and although he was eliminated in the third round, he exceeded expectations and was quickly dubbed a national prodigy. However, after this early success he floundered for the next seven
seasons winning nothing bigger than a regional event. His reputation became that of a spoiled, club-throwing hothead (Lowe, 2014).

However, Jones was a perfectionist and was simply too immature to handle his own mistakes. At the 1921 British Open at St. Andrews, after a series of bad mistakes on the front nine-holes, he simply picked up his ball and walked off the course in the middle of the third round. He quickly declared his dislike for The Old Course, a statement the locals press soon rebutted by writing, “Master Bobby is just a boy, and an ordinary boy at that.” Likely embarrassed by his actions, Jones experienced a metamorphosis between 1922 and 1923. He emerged a disciplined young gentleman, on and off the golf course. With a new outlook, Jones won his first Major title at the 1923 U.S. Open (Lowe, 2014).

His 1923 U.S. Open win represents the start of one of the greatest decades played by an amateur (or professional) golfer in the history of the sport. In 1924, Jones won his first U.S. Amateur Championship. He would go on to win the U.S. Amateur again in 1925, 1927 and 1928. In 1926, Jones won his second U.S. Open Championship, an event he would win again in 1929. In 1930, at the peak of his playing abilities, Jones completed was is now referred to as the pre-Masters “Grand Slam” (all four major championships in the same calendar year). Jones’ path to the 1930 Grand Slam title was: 1) The Amateur Championship at the Old Course at St Andrews; 2) The Open Championship at Royal Liverpool Golf Club; 3) The U.S. Open at Interlachen Country Club; and, 4) The U.S. Amateur at Merion Golf Club. Jones came to love links golf and especially the Old Course at St. Andrews (Lowe, 2014).

Jones was also successful outside of golf. In 1922, he earned a degree in Mechanical Engineering from Georgia Tech. Here he played on the golf team, and
lettered all four years. In 1924, he earned a degree in English Literature from Harvard. In 1926, he registered at the Emory University School of Law in Atlanta, Georgia. After only three semesters, Jones passed the Georgia bar exam. By early 1928, he was working with his father at his law firm of Jones, Evins, Moore and Powell (Lowe, 2014).

In 1930, at the age of 28, Jones retired from golf. He had become one of the most famous sports figures in the world, but wanted to concentrate on his Atlanta law practice. However, Jones had alternative motives for leaving the game. For several years he had searched for land around Atlanta on which to build his own golf course. When his friend, Clifford Roberts, turned him onto Fruitlands, an arboretum and plantation in Augusta, Jones was sold. The two purchased the site in 1931 for $70,000. The project would come to be known as the Augusta National Golf Club (Lowe, 2014).

While playing in Scotland, Jones had met architect Dr. Alister MacKenzie. After Jones’ 1930 Amateur Championship win at the Old Course, MacKenzie is said to have presented Jones with a personalized copy of this book *Golf Architecture*. In it, MacKenzie lays out his principles for the ideal golf course. Jones must have agreed with Mackenzie’s words, because in 1931 he selected Dr. MacKenzie to help design Augusta National (Lowe, 2014).

With a shared vision, Jones and Mackenzie met on site for three days in July 1931 to route and plan Augusta National. A design with wide playing corridors, subtle ground features and a limited number of well-placed bunkers (22 in total) was conceived. Jones and Mackenzie sought to import the intricacies and strategies of the Old Course at St. Andrews. However, both Jones and Mackenzie made it known that they were not simply building replica holes. Though severely modified and manicured today, the Augusta
National Golf Club stands as Jones’ legacy in golf course architecture. His summary of their design intent, and love for St. Andrews, is clearly summarized in his book *Golf is my Game*, published in 1959 (Lowe, 2014) (Jones, 1959).

With the death of Dr. Alister MacKenzie in 1934, Augusta would represent the only time the two would collaborate on a design. So, in the early 1940s when Jones’s friend Dick Garlington, a member of the United States Golf Association’s Green Section, approached him with idea to build a new course he was forced to look for a new partner. One of the hottest architects at the time was Robert Trent Jones Sr., who had studied at Cornell University and apprenticed under the legendary Stanley Thompson. Trent Jones was selected for the role and the first nine holes opened in October of 1947. Unfortunately, in 1948 Bobby was diagnosed with the spinal condition syringomyelia, which eventually restricted him to a wheelchair. He would never play the completed course (Lowe, 2014).
A.32 - Louis Sibbett “Dick” Wilson

Born: 1904 in Philadelphia, Pennsylvania, USA
Died: 1965 in Boynton Beach, Florida, USA

Portfolio Highlights:
- worked at Merion GC as a boy, including during the early years of construction
- construction supervisor for William Flynn and Howard C. Toomey
- designed 74 courses
- alcoholism kept him from greater achievements

Born in Philadelphia in 1904, Dick Wilson was the son of a contractor. Wilson got an early taste of the golf business when he served as a water boy during the construction of Merion Golf Club. A fine athlete, Wilson attended the University of Vermont on a football scholarship. In 1925, he completed school and returned home to Philadelphia, where he served on the construction crew during the re-working of Merion’s East Course, under the direction of architects Howard C. Toomey and William Flynn. Afterwards, Wilson was retained by Toomey and Flynn as a construction superintendent. He later became a design associate, staying with the firm until 1946 (Wind, 1955). During that time he assisted with the construction of the Cleveland Country Club, the two courses at Boca Raton, nine-holes at the Country Club in Brookline, Spring Mill, and Springdale. However, the firm’s most enduring work was completed at Shinnecock Hills on Long Island in New York. In the early 1930s, Wilson
moved to Florida to oversee the construction of Indian Creek. However, due to Toomey’s death in 1933, and a reduction in business due to the depression, Wilson was forced to take a job as a greenkeeper at Delray Beach Country Club (Wind, 1955) (Sherman, 2009).

During World War II (1939-1945), Wilson enlisted and worked to construct and camouflage airfields. In 1946, Wilson established his own design company and worked closely with a number of design associates, who later went on to independent careers, including Joe Lee and Robert von Hagge. Wilson’s new firm was also connected with a Miami based earth-moving firm, the Troup Brothers. His early projects, such as West Palm Beach Country Club which opened in 1947, established Wilson as one of the most sought after architects on the planet. He was also commissioned later that year to restore Seminole Golf Club, a Donald Ross course situated on Florida’s eastern coastline (Sherman, 2009).

From 1956 to 1962, Wilson was at his peak. His new build projects included three course at Royal Montreal (Black, Blue and Red, 1959), the Bay Hill Club (1961), two course at Doral Country Club (Blue and Red, 1962), and Pine Tree Country Club (1962). He also completed some excellent renovations to some classic layouts. These projects include Colonial (1956), the West Course at Winged Foot (1958), the East Course and West Course at Royal Melbourne (1959), Metropolitan (1961), Aronimink (1961), Rivera (1962), and courses One and Two at Cog Hill Country Club (1963). In 1964, Wilson completed a renovation to the East Course at Merion, the place where his career in golf had begun. Sadly, in the summer of 1965 at age 61, Wilson suffered a fall
at Pine Tree and died three weeks later of a pulmonary embolism (Sherman, 2009) (Cornish and Whitten, 1993).

In the end, Wilson’s legacy became more about his addiction than his courses. Many associate him with his alcohol dependence and what he could have accomplished otherwise. However, he should be remembered for what he did accomplish. Wilson designed relatively few courses in his later years so he could give more attention to each project. He maintained a skilled staff of designers who oversaw the detailed design work on all his projects. A third of Wilson's courses were built on the flat terrain of Florida. Here, built up his greens four to eight feet so golfers would have a defined targets and roll off areas would create increased risk-reward shot making. Maybe most importantly, of the designers of his era, he was the most skilled at working with an existing layout and adapting his style to suit the course. His time onsite is likely a major factor here. If Wilson had been able to control his demons, and had been able to market himself like his major rivals at the time, most notably Robert Trent Jones Sr., than golf course architecture may have been very different today (Sherman, 2009).
A.33 - Robert Trent Jones Sr.

Born: 1906 in Ince-in-Makerfield, England

Died: 2000 in Fort Lauderdale, Florida, USA

Portfolio Highlights:

- first recipient of the ASGCA’s Donald Ross Award for outstanding contributions to golf course architecture
- “hard par but an easy bogey”
- a great salesman, promoter and entrepreneur
- Father to Robert Trent Jones Jr. and Rees Jones
- nicknamed “The Father of Modern Golf Course Architecture” and “The Open Doctor”

Born in England, Robert Jones moved to the United States in 1911, at the age of 5, with his parents. The family settled in East Rochester, New York. In June of 1917, Jones first stepped onto a golf course at the Country Club of Rochester. In that first year, he worked under head professional Walter Hagen as a caddie. Jones was allowed to play the course occasionally when it was not busy. Though Hagen would leave the club in 1918 to assume the head professional position at Oakland Hills, Jones was able to caddie for Hagen on several occasions when he returned to Rochester, his hometown, for exhibition matches. Hagen’s influence, and later fame, inspired a young Jones to pursue a career in golf (Hansen, 2014).
However, while his caddying made Jones some money and got him the occasional round of golf, he actually learned to play golf at a little course called Hillcrest Golf Course (also called Genundewah, a Native American name for “Great Hill”). The head greenkeeper made a deal with Jones and a friend, where if they were to cut the greens each day after school, a process that took the strength of both to accomplish, then the boys could play the course for free. With this early start to golf, Jones became a scratch golfer while still a teenager. He set a course record in 1922 while playing in a 36-hole open tournament sponsored by the Rochester Journal-American at Genesee Valley Park (Hansen, 2014).

In 1922 many things changed for Jones, though a rising star in golf and foreseeing himself as the next Walter Hagen, Jones would develop a serious duodenal ulcer in his stomach which would place him in hospital for six months. Jones did not play golf again until almost two years later. Later that same year, after completing the eleventh grade at East Rochester High School, Jones dropped out of high school and began work with his father’s company Merchants Despatch Transportation, as a draftsman. However, he found this work both tedious and boring and quickly began looking for other opinions in the golf industry. Though Walter Hagen and his touring professional ways no longer represented Jones’ vision for himself, he soon found another (Hansen, 2014).

In the early 1920s, Donald Ross was in the process of completing two major projects in the Rochester area. The Monroe Golf Club opened in 1924 and both the East Course and West Course at Oak Hill Country Club opened in 1925. Oak Hill became the area’s most exceptional design, and is located right next door to the Country Club of Rochester, also designed by Donald Ross in 1912. Ross’ “highly publicized new projects
in the Rochester area coincided exactly with Jones’ growing frustration with his drafting apprenticeship at Merchants Despatch” (Hansen, 2014). Unsure how to make his way into the discipline, as there were no schools teaching the discipline, Jones approach Ray Hamburg, an engineer and golf enthusiast working at Merchants Despatch. Ray, a Cornell graduate, suggested that his alma mater in Ithaca could offer some answers. Cornell had school in various disciplines and Jones understood that golf course architecture was really a hybrid of various professions. However, without a high school diploma he did not meet the entrance criteria and was still at a loss (Hansen, 2014).

In 1925, at the age of nineteen, Jones’ reputation as golfer landed him a summer position as a golf instructor in Old Forge New York. The course, which had recently opened and was later named the Thendara Golf Club, was a nine-hole Donald Ross layout. It would be here that Jones would first develop his reputation as “a real instructor” (Hansen, 2014). In August of that same year, Jones was invited to play in an exhibition match for the opening day at Sodus Bay Heights Golf Club, a small and private nine-hole course on the shore of Lake Ontario’s Great Sodus Bay. Jones won the match (by two strokes) and the respect of the members. The club immediately offered Jones the position of head professional, greenkeeper, and manager, all in one (Hansen, 2014). Jones would remain at the club for the next three years. During this time he would gain a friend in member James Bashford.

James Bashford owned a vinegar factory in Lyons, New York and had played a major role in the formation of the Sodus Bay Heights Golf Club. Jones joined Bashford that winter in south Florida, where he spent the season teaching golf at the Hollywood Beach Hotel Country Club. Here, Jones’ met English war hero Captain Herbert Charles
Coningsby Tippet who had just completed a golf course on the resort’s property. Jones and Captain Tippet engaged in several conversations contrasting both American and British golf. This experience again whetted Jones’ appetite for design. As such, in the spring of 1928, Jones told Bashford of his dream to design golf courses. Sympathetic, Bashford drove him to Cornell University, his alma mater, in his limousine and introduced Jones to the Dean of the College of Agriculture, Dr. Albert Russell Mann (Hansen, 2014).

Dr. Mann was also a golfer and he listened carefully a young and passionate Robert Jones about his dream to become a golf course architect. Though the request was an odd one, the following agreement was reached; if Jones could obtain the approval of the other department heads and would agree to take tutoring in mathematics, chemistry and drawing, then he would be allowed “special student” status at Cornell. At Cornell between 1928 and 1930, Jones was allowed to craft his own curriculum. Though his course work would not lead to a degree, he would be exposed to Ivy League level studies in landscape architecture, hydraulics, surveying, engineering, agronomy, horticulture, economics, chemistry, public speaking, journalism, and business law. While some his grades were barely passing, and most others were mediocre at best, Jones got what he wanted from his time at Cornell – the advanced education and fundamental knowledge needed to design and build golf courses (Hansen, 2014).

While at Cornell, Jones was given the opportunity to design several greens at the Sodus Bay Heights Golf Club. Though much of this work was later re-worked, it stands as his first venture into the field of golf course design. Upon the completion of his studies in 1930, Jones left school with no money and no degree. The Great Depression
was in full effect in the United States and investors were nowhere to be found. Further, Jones faced competition from well-established architects such as Donald Ross, Dr. Alister MacKenzie, A.W. Tillinghast, William S. Flynn, and the British firm of Colt, Alison and Morrison. Luckily, Jones’ mother had read in the local newspaper that a group of Rochester gentlemen had met on September 23, 1929. This meeting would soon lead to the incorporation of the Midvale Golf and Country Club. Perhaps aided by the stock market crash one month later, the group purchased 144 acres on the Fairfield-Penfield line. Though still in his studies at Cornell, Jones wrote to the group expressing his interest in the design. The members were impressed by his passion and education, and offered him the work in the spring of 1930. However, and most beneficial to the future of his career, Jones was required to have a leading architect oversee his work. The architect chosen by the club was none other than Canada’s leading golf course designer, Stanley Thompson (Hansen, 2014).

After some initial probing into Jones’ proposed design and approach, Stanley informed the Midvale Golf Club that he thought he could work with Jones. Further, it is clear that Stanley saw this initial partnership as a significant opportunity to expand his business into the US market, because in June of 1930 Jones was invited to Canada to spend time with Stanley. Jones spent about a week in Canada playing golf and visiting Stanley’s Toronto office. Jones stayed as a guest at the Royal York Hotel. Jones’ bill was paid by the Canadian Pacific Railway, who owned the hotel and a series of golf course at which Stanley was consulting. The two played golf at the Royal York Golf Club, later re-named Royal St. George’s Golf Club, and Mississauga Golf and Country Club, both projects of Stanley Thompson. At some point during their visit Stanley would
make an informal proposal to Jones to form a partnership, where Stanley would run the Toronto office and Jones would be responsible for the US operations. Jones returned to the United States excited about his new prospects in golf (Hansen, 2014).

Jones then set to work planning the final design and construction of Midvale. However, because of Thompson’s busy schedule at courses in Ontario, Quebec and Nova Scotia, he was unable to make visits to the project. As such, Jones was given the freedom to finalize the layout of the golf course. Though the design of Midvale can fully be attributed to Robert Jones, the construction of the project was a Jones-Thompson collaboration. As per normal Thompson company practice, at least three foremen were sent by the Toronto office to oversee the work of the local general contractor who was building Midvale. As the Midvale course was technically created by both architects, “Thompson and Jones Inc.” was formally incorporated in September of 1930. With both men sharing an even $2,000 worth of initial stock, the Midvale contract was transferred over to the newly formed company. Unfortunately, due to the effects of the Depression, neither man would ever receive compensation from the Midvale Golf Club (Hansen, 2014).

The Great Depression was extremely tough on the golf course design business, especially in the United States. In the summer of 1931, Thompson & Jones completed minor modifications at Stafford Country Club near Rochester, a Walter J. Travis design from 1928. However, while a more substantive re-modeling was supposed to be done, the work consisted of little more than the construction of one new green. Similarly, the duo was hired by the Country Club of Ithaca to create a plan for a 27-holes layout. Again, this project ended in disaster when only $1,000, of an agreed $2,250, was paid for
the plans and construction never commenced. By October 1931, Jones could no longer afford his car payments and lost his vehicle to repossession. Very few of Jones’ ambitions were panning out, and those that did could either not afford to pay their bills, like Midvale, or the work was postponed indefinitely, like Ithaca. Jones was just barely able to keep his New York office open and suffered battles of deep depression, a fight that becomes evident through letters to his future wife Ione Tefft Davis (Hansen, 2014). Luckily, his friend and partner Stanley Thompson was finding success with his work in Canada and frequently came to the aid of Jones (Hansen, 2014).

In 1932, with so little work in the States, Stanley Thompson asked Jones to come to Canada to assist with his ongoing projects. Jones was asked to visit Banff Springs Golf Course, on Stanley’s behalf, to complete an annual review of the course. All expenses were covered by the Canadian Pacific Railway and Jones enjoyed some additional time to familiarize himself with Thompson’s Rocky Mountain masterpiece. On the same trip, Jones would venture to the future site of Capilano Golf and Country Club in Vancouver, British Columbia. Stanley had already been on-site in the spring, with his designs in hand, and some clearing had begun immediately (Andrew, 2015). It is likely that Jones was sent to survey the site to ensure the clearing work was proceeding as planned (Hansen, 2014).

However, Jones was eager to strike out on his own. Reflecting on his time in Alberta and British Columbia, Jones wrote to Ione that, “the trip has convinced me that my future in golf is assured. The whole things gives me confidence. I certainly needed confidence a few months ago, but all is much better now, and I am much stronger. It takes real experience to make you that way… I am going to work like hell to get some
business even though it may not be large commissions…. I know that I have something special in the art of golf course design. With a well designed attack I can go places (that means us) and without a Dr. MacKenzie or Stanley Thompson behind me. When the new era in golf course construction is at its peak you will be the wife of the country’s most famous golf architect” (Hansen, 2014). It is interesting to see in this letter that even after Stanley had made great efforts to provide work for Jones, he was already looking elsewhere. That winter, Jones spent his time crafting a few articles about golf with the objective of spreading his name. Unfortunately, the works were “too long” and “had too many ideas” for magazine or news publication (Hansen, 2014).

Though still busy in Canada, with projects like Westmount Golf and Country Club (1935) and Highlands Links (1941), Stanley saw big potential in South America. In a cablegram sent from Rio de Janeiro on January 30, 1935, Stanley informed Jones about some major leads, including a confirmed 18-hole design for the Gavea Golf and Country Club. Stanley believed that golf projects in South America could provide an excellent outlet for winter work. He advised Jones to board the next ship and expect to spend at least three months in Brazil. Jones did not cable Thompson a reply. Instead, he wrote a detailed letter admitting that his recent pursuits through Franklin D. Roosevelt’s New Deal program, which started in 1933 through the efforts of the Civil Works Administration, were beginning to look promising. Stanley did not reply until his return home in May of 1935 in which his letter simply stated his “great disappointment” that Jones had not come down to help. This incident was the beginning of the end of the partnership, as Thompson likely took this act to heart given all he had done to help Jones previously.
In the four years following Jones’ decision not to go to Brazil, New Deal funding allowed him to build five public golf courses on his own. Four of the courses were located in New York, including the highly profitable Green Lakes State Park Golf Course which opened in 1935, and one in St. Charles, Illinois. During this time Jones married Ione, who would become his business manager and the “real brain and steady hand of the outfit” (Hansen, 2014). However, the partnership between Thompson and Jones was still in effect, even though the pair was effectively operating as separate entities (Hansen, 2014).

In 1938, Jones published a promotional brochure titled *Golf Course Architecture by Robert Trent Jones*. In it, Jones makes no specific mention of Stanley Thompson, apart from the brochure’s last page where the office address is listed as “Thompson & Jones.” However, the address is Jones’ New York office. Further, numerous pictures of Banff Spring Golf Course are illustrated and many other projects completed by Stanley Thompson, including those which predate the partnership of Thompson & Jones, are listed as though they were completed by Jones himself. Finally, numerous quotes are provided in a “Comment” section, wherein a number of leading individuals impart great praise onto the work of Jones. However, as described in the book *A Difficult Par* by James R. Hansen, many of the quotes twist the truth. An example of this is cited from a letter Jones had written to Thompson in February of 1935. As Hansen describes it, “Robert (Jones) had mentioned that Hilda MacKenzie felt that her husband regarded the architectural principles of both Thompson and Jones as quite similar to his own. In the brochure, Jones quoted from the letter MacKenzie’s widow had sent him: “My late husband had the greatest admiration for your work, its strategy and beauty. He
considered you among the world’s finest.” Mrs. MacKenzie might have been using the plural “you,” as in both Thompson and Jones, or even the singular “you,” as in the firm of Thompson & Jones; in Jones’s brochure it could only be interpreted to mean Robert Trent Jones alone.” Interestingly, Hansen is guessing at the letter’s specific wording and the quote may in fact be about Thompson only. Hansen also states that “this may be why Jones didn’t send copies of the brochure to Stanley, despite repeated requests” and why Jones wrote in his autobiographical retrospective, *Golf’s Magnificent Challenge*, that his partnership with Thompson “remained strong until 1938.” It is clear that this public insult may have been the final affront that undermined their relationship and partnership (Hansen, 2014).

While Jones may not have spent a lot of time on-site working with Thompson on actual design work, he did take some other qualities from the Canadian legend which would lead to his eventual success. Thompson showed Jones that much could be accomplished through smooth-talk and self-image. Stanley is known to have told even his design associates that he was born in Scotland, when in fact he was actually born in Toronto. These little lies helped support one’s image in a competitive industry. Unfortunately, Jones’ fabrications came at the expense of Thompson, a man who had shown him compassion during the Great Depression. Jones abilities as a self-promoter are further exemplified his use of the middle name ‘Trent’. Jones actually changed his middle name to Trent in the 1930s after Robert “Bobby” Tyre Jones won the Grand Slam of golf in 1930. Jones would use this association and name confusion to add to his fame throughout his career (Hansen, 2014).
Following WWII, Robert Trent Jones further capitalized on this association through an actual partnership with Bobby Tyre Jones. The Peachtree Golf Club in Georgia opened for play in 1948. This would be the pair’s only collaboration. Next, it would be another famous golfer, Ben Hogan, who would again allow Robert Trent Jones to increase his fame.

Following a car crash that almost ended his professional golfing career in 1949, Ben Hogan returned to golf at the 1950 U.S. Open and won the event. The following year he would win the Masters. Following Hogan’s wins, writer Herbert Warren Wind penned an article in the August 4th issue of The New Yorker, in which he profiled Robert Trent Jones and his renovation work at Oakland Hills Country Club, the selected venue for the 1951 U.S. Open. This article would be hugely important for Robert Trent Jones and his future career in golf course design. When Hogan won the U.S. Open in 1951 it would be his words that would change the focus of modern golf. Hogan is famously quoted as saying, “I'm glad I brought this course – this monster – to its knees.” Hogan, undeniably the best golfer in the world at the time, was politely stating how tough the course had played. His proclamation, combined with the previous Wind article, turned Jones into a celebrity architect. Even though, the combination of Robert Trent Jones’ renovation work, and the actions of the United States Golf Association (USGC) to toughen the course against longer ball flights, resulted in a narrow and penal test. Golf writer John Gordon has dubbed the 1951 version of Oakland Hills as "the birthplace of target golf." Robert Trent Jones created what he called target golf by pinching most landing areas on both sides with bunkers and heavily bunkering the greens to create
difficulty. He ushered in the tactics that the USGA still embrace as the way to conduct a US Open today (Hansen, 2014).

By the mid-1960s, Jones had become the most widely known and probably the most influential golf course architect in history (Cornish and Whitten, 1993). He served as architectural consultant to numerous courses hosting major championship tournaments, many of those being courses of his own creation. Jones soon achieved the nickname “The Open Doctor.” By 1990, and having been engaged in golf course architecture for sixty years, Jones had planned over 450 new courses in forty-two states and twenty-three counties, in addition to re-working many others. His best work is arguably Spyglass Hill Golf Links, which he completed in 1966. Oddly enough, the Spyglass project is also one of his most economical designs (Cornish and Whitten, 1993).
A.34 - Clinton “Robbie” E. Robinson

Born: 1907 in St. Amadee, Quebec, Canada

Died: 1989 in Paris, Quebec, Canada

Portfolio Highlights:

- design associate of Stanley Thompson, starting in 1929, and assisted with numerous layouts such as St. George’s, Banff Springs, Capilano and Highlands Links.

- served as director of the RCGA Greens Section for many years

- served as President of the ASGCA for two separate terms

Robbie Robinson received a B.S.A degree from the Ontario Agricultural College (now the University of Guelph) in Guelph, Ontario in 1929. Robinson got his first opportunity in golf course architecture while still in school when he re-worked the private course of Sire Joseph Flavelle, a Canadian magnate and prominent WWI statesman, in Fenelon Falls, Ontario. After graduation, Robinson secured an apprenticeship with Stanley Thompson. Stanley arranged for Robinson to serve as manager and superintendent at Sunningdale Country Club in London, Ontario until 1936. Stanley thought it important for Robinson to get some on-the-job training in the management and maintenance of golf courses, before starting a career in design. Robinson joined Thompson’s Toronto office in 1936 until the onset of WWII. During this time he assisted
with numerous layouts, including St. George’s, Banff Springs, Capilano and Highlands Links. Robinson became Thompson’s right hand man, and did a significant amount of finishing and aesthetic work for the firm (Young, 2007) (Cornish and Whitten, 1993).

Robinson served with the Royal Canadian Air Force during WWII. Following military service, Robinson was employed in the site selection and development of housing projects with the Canadian government’s Central Mortgage and Housing Corporation (CMHC). Robinson continued to work part-time as a golf course architect and designed and re-worked several courses. Robinson entered full-time private practice as a golf course architect in 1961. Notable works in Robinson’s design portfolio include, the original nine-hole layout at Terra Nova National Park in Newfoundland; Northumberland Links in Pugwash, Nova Scotia; Gowan Brae in Bathurst, New Brunswick; Brudenell River on Prince Edward Island; Twenty Valley in Beamsville, Ontario; Beverly in Copetown, Ontario; Craigowan in Woodstock, Ontario; the West Course at Sunningdale in London, Ontario; Dalewood in Port Hope, Ontario; Windermere in Edmonton, Alberta; a third nine at the Hamilton Golf and Country Club in Ancaster; and, a second nine at the St. Thomas Golf and Country Club in St. Thomas, Ontario (Young, 2007).

Robinson’s renovations are just as impressive. They include: Calgary Country Club in Alberta; Vancouver Golf Club in Coquitlam, British Columbia; Pine Ridge in Winnipeg; Riverside in Saint John, New Brunswick; St. George’s in Toronto, Ontario (which he did for the 1968 Canadian Open); Rosedale in Windsor, Ontario; Credit Valley in Mississauga, Ontario; St. Catherines Golf and Country Club in Ontario; Sarnia Golf and Country Club in Ontario; Brantford Golf and Country Club in Ontario; Westmount
Golf and Country Club in Kitchener, Ontario; Whirlpool in Niagara Falls, Ontario; Kanawaki Golf Club in Quebec; Beaconsfield in Pointe Claire, Quebec; and, Royal Ottawa in Ottawa, Ontario (Young, 2007).

Robinson designed or re-modeled more than 140 golf courses throughout Canada, the United States and South America. However, many historians consider him to be under appreciate as a golf course architect. Money, or a lack thereof, helps explain a good deal about Robinson's career in design. Growing up in the Depression, Robinson was good with small budgets, a skill that would aid him in his post-war career. A review of his portfolio reveals that much of what he built was in smaller towns across Canada and under the confines of limited budgets. However, Robbie was excellent at getting the most out of a design for the least money (Young, 2007).

Though Robinson was inducted into the Canadian Golf Hall of Fame in 2002, many believe that his single most significant contribution to the game of golf was in the study of turfgrass. Robinson served as the Director of Greens Section of the Royal Canadian Golf Association for many years and was instrumental in the establishment of the Canadian Turfgrass shows starting in the 1950s.

Though an apprentice of Thompson’s, Robinson’s style was a combination of some of the philosophies of Stanley, in terms of strategic character, but was also reminiscent of the style of the day, which was heavily influenced by the success of Robert Trent Jones Sr. Near the end of his career Robinson would continue the Thompson lineage with the mentorship of two young protégées, Doug Carrick and Tom McBroom (Young, 2007).
Eddie Hackett was born in Dublin, Ireland in 1910. As a boy he suffered from tuberculosis, the effects of which left him without the strength or stamina to play physical sports. He began playing golf with his father at a young age, and as a teenager got a job in his hometown at Royal Dublin Golf Club. Hackett attended the Catholic University School in Dublin. Eddie’s became an amateur at the Hermitage Golf Club, located just west of Dublin, before taking up golf as a career in 1932. Eddie started as an apprentice to Fred Smyth, the famous club maker, in Dollymount (a suburban area on the north coast of Dublin Bay). He later spent five months in Belgium with Henry Cotton at the Royal Waterloo Golf Club, and six months with Sid Brews in South Africa at Johannesburg Country Club. Eddie then moved back to Dublin for a position as head professional at Elm Park Golf Club. He would remain at Elm Park for a brief time before succeeding Willie Nolan as head professional at Portmarnock in 1939. In the 1940s, as head golf
professional at Portmarnock, Hackett served as Honorary Secretary and Captain of the Irish Professional Golfers Association (IPGA). In 1950, Hackett retired from his position at Portmarnock due to illness. In 1963, Hackett announced his return to professional golf, however he was not affiliated with any club and operated under the Golfing Union’s Temporary Professional Scheme as a “professional-for-hire” (Irish Golf Archive, 2016).

An eighteen-hole layout in 1963 at Letterkenny Golf Club in County Donegal, Ireland was Hackett’s first venture into the field of golf course architecture. In 1971, Hackett worked closely with Fred W. Hawtree, who was re-working six holes and adding twelve holes at the Killarney Golf and Fishing Club and creating an eighteen-hole layout at Westport Golf Club, both in Ireland. Over a design career spanning the next 33 years, Hackett would work to design or re-work almost 85 golf courses, all of which are in Ireland. Hackett was known to work with little money and get the most out of piece of land. He believed, as a Catholic, that “his job was to find the holes that God provided him, not create those that were not there” (Goodale, 2008). His approach and abilities brought him commissions to design 10 courses on exquisite links land, extending along the West Coast of Ireland, including: Waterville and Ceann Sibeal in County Kerry; Connemara in County Galway; Enniscrone and Strand Hill in County Sligo; Donegal Golf Club in Murvagh, County Donegal; Carrigart Hotel golf course and Rosapenna Hotel golf course in County Donegal; Greenore in County Louth; and, Carne Golf Club in Belmullet, County Mayo. Many consider his work at Waterville to be his finest accomplishment. Hackett was also the consulting architect to the Golfing Union of Ireland, Bord Failte, and Great Southern Hotels (Cornish and Whitten, 1993) (Goodale, 2008).
A.36 - John Jacob Frank Pennink

Born: 1913 in Delft, Netherlands

Died: 1983 in Reading, England

Portfolio Highlights:

- successful amateur golfer
- partnered with C.K. Cotton and C. Lawrie
- prolific designer with courses in Britain, Europe, Africa, and the Far East

Like his father before him, Frank Pennink was an avid sportsman. He was educated at Tonbridge School in Kent, where he played cricket. In 1930, Pennink won the Boy’s International title for golf. He then attended Magdalen College at Oxford, where he played golf between 1933 and 1935. He served as captain of the golf team in 1935. Upon graduation, Pennink acquired a position at an insurance company and continued to play golf. In 1937 and 1938, he won the English Amateur and in 1938 won the Royal St. George’s Challenge Cup (Gold Vase). He served as a member of the 1938 Walker Cup team and was on the English international teams for many years. Pennink had a very successful amateur career in golf before WWII (Fine Golf, 2008).

After serving as a Squadron Leader for the Royal Air Force during WWII, Pennink turned to sports journalism. He penned articles for the Sunday Express and then the Daily Mail on golf. Through his writings he developed an interest in golf course architecture. In 1962, Pennink published Golfer’s Companion (Cornish and Whitten, 1993).
In 1954, Frank Pennink joined the established golf course design practice of C.K. Cotton and Charles Lawrie in England. As partner of the new firm Cotton (C.K.), Pennink, Lawrie and Partners, Ltd., Pennink became the most active designer in the firm, handling course in Britain, continental Europe, Africa and even the Far East. Pennink himself would appoint Donald Streel and Cameron Sinclair to the firm. He was one of the most highly acclaimed architects of this day and some of his courses, such as Vilamoura (Old) in Portugal and Noordwijk in Holland, are consider amongst the best in the world. He did a lot of design work in the Netherlands, probably because one of his parents was Dutch. His design philosophy was very much in line with the golden age architects such as Colt and Simpson. However, in many cases he had to deal with very modest budgets. This made him focus on creating high quality greens, limiting the use of fairway bunkers, and creating relatively simple green surrounds to save his client’s money (Fine Golf, 2008).
A.37 - Geoffrey S. Cornish

Born: 1914 in Winnipeg, Manitoba, Canada

Died: 2012 in Amherst, Massachusetts, USA

**Portfolio Highlights:**

- apprenticed with Stanley Thompson
- founder of the ASGCA Historical Committee and is largely responsible for the current body of knowledge on the evolution of golf course architecture
- recipient of the ASGCA Donald Ross Award and the Golf Course Superintendents Association of America Distinguished Service Award
- member of the Canadian Golf Hall of Fame

Born in Canada, Geoffrey Cornish received a Bachelor’s degree from the University of British Columbia and a Master's degree from the University of Massachusetts, both in agronomy. Upon graduation, in 1935, Cornish was hired to evaluate soils for the new Capilano Golf Club in Vancouver, British Columbia. The course, then under construction by Stanley Thompson, opened Cornish’s eyes to the world of golf course architecture. Following his work at Capilano, Cornish joined Thompson as an intern. Four years later, just before WWII, Cornish served as the greenkeeper at St. Charles Country Club in Winnipeg. Cornish served overseeing with the Canadian Army during World War II (ASGCA, 2012).
After the war, Cornish returned to work with Stanley Thompson as an associate for one year. In 1947, Cornish started a five-year association with pioneer turfgrass scientist Lawrence S. Dickinson at the University of Massachusetts. In 1952, Cornish opened his own golf course architecture practice in Amherst, Massachusetts (ASGCA, 2012).

Cornish soon established himself as a competent designer, and in 1964 took on a partner, young Penn State graduate William G. Robinson. The firm of Cornish and Robinson, Golf Course Designers Ltd. was established. Cornish joined the American Society of Golf Course Architects in 1967. He served as ASGCA president in 1975-76 and co-chaired the ASGCA History Committee with Dr. Michael Hurdzan, ASGCA. In 1977, Robinson moved to the Pacific Northwest and established a branch office in Calgary, Alberta, Canada. Together, the duo prepared the publication Golf Course Design: An Introduction. This would be the first such endeavour, of many, for Cornish in the literature of golf course architecture (Cornish and Whitten, 1993).

By 1980, Cornish had designed more courses in the New England area than any other architect ever, and had designed or re-worked many other layouts throughout the United States, Canada and Europe. Continuing with his writing, in 1981 Cornish collaborated with Ronald E. Whitten and published The Golf Course, the first comprehensive assessment of the evolution of golf course architecture and its practitioners. In 1983, Cornish hired Brian M. Silva, a graduate landscape architect and agronomist. Throughout the 1980s and 1990s, in addition to his design work, Cornish and fellow golf course architect Robert Muir Graves conducted numerous design seminars across the continent through separate sponsorships from the Harvard Graduate
School of Design, the Golf Course Superintendents Association of America (GCSAA), and the Professional Golfers’ Association (PGA). In 1998, Cornish and Graves co-authored a summary of this knowledge in the text titled *Golf Course Design.*

Though he designed or re-worked more than 200 golf courses worldwide, including the Country Club of Ithaca and the Pines Course at the International Golf Course in Massachusetts (the longest golf course in the world from the back tees), Cornish’s legacy is defined more so by his literary contributions to golf course architecture. A follow-up to *The Golf Course* was published in 1993 and was titled *The Architects of Golf.* In 2002, Cornish authored a limited publication titled *Eighteen Stakes on a Sunday Afternoon.* Finally, in 2002, Cornish published *Classic Golf Course Design.* These books represent a lifetime of dedication to research, and a strong passion for the history and artistry of golf course architecture and its practitioners (ASGCA, 2012).
A.38 - Frederic William Hawtree

Born: 1916 in Bromley, Kent, England

Portfolio Highlights:
- son of golf course architect F.G. Hawtree and father to Martin Hawtree
- founding member, and later President, of the British Institute of Golf Course Architects
- served on the board of the Sports Turf Research Institute at Bingley and was a member of the Turfgrass Advisory Committee

The son of golf course architect F.G. Hawtree, Frederic William Hawtree was born in England in 1916. He was educated at Tonbridge School between 1932 and 1935, and studied modern languages at Queen’s College, Oxford University from 1935 to 1938. After graduation, F.W. Hawtree joined his father’s firm of Hawtree & Taylor. However, soon after the onset of WWII ended all work. During WWII, F.W. Hawtree served with the Royal Artillery in the Far East, where he was captured as a Japanese POW. On his return home to England, F.W. Hawtree joined his father under the new partnership Hawtree & Son. In the early 1950s the construction company his father had started was dissolved and the firm focused solely on design (Cornish and Whitten, 1993) (EIGCA, 2000).
After his father’s death in 1955, F.W. Hawtree continued the firm’s legacy and completed numerous courses over the next 25 years. His most famous work is the re-model of Royal Birkdale, which he completed in both 1967 and 1974. In 1969, he was joined by A.H.F. Jiggens, and in 1974 his own son, Martin Hawtree, joined the firm. Together, the firm created courses in Britain, Ireland, France, Italy, Spain, Belgium, Holland, Germany, Switzerland, Iran, South Africa, El Salvador, Morocco, and the United States (Cornish and Whitten, 1993).

In addition to his golf course design work, F.W. Hawtree, like his father before him, was a very enthusiastic supporter of the British Golf Greenkeepers’ Association, which his father founded in 1912. F.W. Hawtree served as Vice Present of the organization for many years. Further, he edited *The Greenkeeper* and regularly contributed editorials between 1960 and 1974. During the 1960s and 1970s he served on the English Golf Union Council and the Golf Development Council. For many years F.W. Hawtree devoted time as member of the board for the Sports Turf Research Institute at Bingley and was also a member of the Turfgrass Advisory Committee. Finally, F.W. Hawtree was influential in founding the British Institute of Golf Course Architects in 1970, and later served as President (Cornish and Whitten, 1993).

A.39 - Pete Dye (nee Paul Dye Jr.)

Born: 1925 in Urbana, Ohio, USA

**Portfolio Highlights:**

- between 1944 and 1945, Dye spent 6 months playing golf at Pinehurst No. 2 and befriended Mr. Donald Ross
- travelled to Scotland in 1963 to make a detailed study of golf courses
- member of the ASGCA and recipient of the coveted Donald Ross Award
- considered by many to be the most influential golf course architect since WWII
- has produced many disciples including: Bill Coore, Tom Doak, John Harbottle, Butch Laporte, Tim Liddy, Scott Poole, David Postlewaite, Lee Schmidt, Keith Sparkman, Jim Urbina, Bobby Weed, Rod Whitman and Abe Wilson

Paul Dye Jr., known as Pete from an early age to distinguish him from his father, was born in December of 1925 to Paul and Elizabeth Dye. Paul Dye Sr., also known as “Pink,” got hooked on golf just a couple years before Pete’s birth and decided to build a nine-hole course on family land in Champaign Country. The course would become known as the Urbana Country Club and Pete would work and play at the course while
growing up. He won the Ohio State High School Championship and was a medalist in the Ohio State Amateur. He attended Asheville School, a boarding school in Asheville, NC, with his brother Andy Dye (Cornish and Whitten, 1993).

In 1944, World War II interrupted his high school education and Pete served in the 82nd Airborne Infantry of the United States Army. Although Dye entered the United States Army Airborne School at Fort Benning in Georgia to become a paratrooper, World War II ended before he was sent overseas. As such, he was stationed at Fort Bragg in North Carolina where he served the rest of his time as greenkeeper of the base’s golf course. This happening has been, in retrospect, very good for golf, because while stationed at the base, Pete was able to play golf at Pinehurst No. 2 for “six solid months, and… got to know Mr. Donald Ross… (who) had built the Fort Bragg golf course” (Florida Golf Magazine, 2009) (Cornish and Whitten, 1993).

Upon his discharge, Pete attended Rollins College in Winter Park, Florida where he met Alice Holliday O’Neal. Pete would then enrolled in law school at Stetson University in Florida. The couple were married in early 1950 and would go on to have two sons, Perry and P.B. (Paul Burke). They moved to Indianapolis, Indiana, Alice’s hometown, and Pete began selling insurance for The Connecticut Mutual Life Insurance Company. Within a few years Pete had distinguished himself as a million dollar salesman. However, the work was just not stimulating enough for Pete. Though he was still actively competitive in golf, placing runner-up in both the 1954 and 1955 Indiana State Amateur Championships and winning the event in 1958, Dye decided to leave insurance and become a golf course designer. Even though he was in his mid-30s and had a young family to support, Pete made the move. Alice, a fantastic amateur golfer in
her own right, supported the career change and became partner in the new venture. In 1961, the couple visited and talked to noted golf course architect Bill Diddle, who lived nearby. He warned them about the economic uncertainties of the industry, but they persisted anyway (Florida Golf Magazine, 2009) (Cornish and Whitten, 1993).

Dye’s first design was the nine-hole El Dorado course, located just south of Indianapolis. The course crossed a creek thirteen times in just nine holes. In 1962, Dye created his first 18-hole course, also located in Indianapolis. The course was named Heather Hills, but is now known as Maple Creek Golf and Country Club. That same year, Dye started on the Radrick Farms Golf Course for the University of Michigan, however the course did not open until 1965. At this time Dye was heavily influenced by the work of Robert Trent Jones Sr., as he was by far the most famous architect in the world at the time. However, during this time at the University of Michigan, Pete was exposed to the older Michigan course, which was designed by Dr. Alister MacKenzie in 1931. Pete would mimic two of the courses greens on his next project. In 1963, Dye spent six months in Scotland and made a thorough study of the classic links courses. In Scotland, Dye’s eyes were opened to the traditional use of pot bunkers, bulkheads constructed of wood, the use of ground contour to alter depth perception, and the use of small greens. All these features would heavily influence his subsequent designs (Florida Golf Magazine, 2009) (Cornish and Whitten, 1993).

Following, and likely due to these experiences, Pete produced his first notable work at Crooked Stick Golf Club in Carmel, Indiana. Work began on the course in 1964. In 1967, Pete designed The Golf Club near Columbus, Ohio, where he solicited design advice from a young Jack Nicklaus. Pete and Jack would then collaborate on the Harbour
Town Golf Links, which opened to critical acclaim in 1969. Also in 1969, Dye opened his first Florida course, named Delray Dunes (Florida Golf Magazine, 2009).

Now in his 90s, Pete Dye is still designing and building golf courses. He has more than 90 designs at last count, a smaller number than his contemporaries due to his presence on-site throughout the construction of a project and his passion to shape golf course features himself using various forms of construction equipment. However, what is most impressive is ability to produce world class layouts seemingly every time. In *Golf Course Architecture Magazine*’s “Top 100 Golf Courses: The architect’s choice” Dye was voted to have six world class layouts, a total that is two more than any other modern golf course architect (Golf Course Architecture, 2013). In addition to the aforementioned courses, his portfolio includes: Casa de Campo, The Honors Course, Whistling Straits, the Stadium Course at TPC Sawgrass, Amelia Island Plantation, Oak Tree, Firethorn, the Ocean Course on Kiawah Island, Bulle Rock, and the Colleton River Plantation Club (Florida Golf Magazine, 2009) (Cornish and Whitten, 1993).

Although he has been critiqued in his later career for departing from the Scottish inspiration of his earlier years, Pete’s major legacy is his effect on modern golf through his protégées. Many of today’s best golf architects started “pushing dirt” for Pete Dye, including Bill Coore, Tom Doak, John Harbottle, Butch Laporte, Tim Liddy, Scott Poole, David Postlewaite, Lee Schmidt, Keith Sparkman, Jim Urbina, Bobby Weed, Rod Whitman and Abe Wilson. Pete Dye was inducted into the World Golf Hall of Fame in the class of 2008 in the Lifetime Achievement category and was presented the Donald Ross award in 1995 by the American Society of Golf Course Architects (Florida Golf Magazine, 2009) (Cornish and Whitten, 1993).
A.40 - Donald MacLennan Arklay Steel

Born: 1937 in Hillingdon, Middlesex, England

Portfolio Highlights:
- apprenticed with C.K. Cotton, Frank Pennink and Charles Lawrie
- prolific golf writer
- only architect to have advised every Club or course on which the Open championship has ever been played

Donald Steel attended Fettes College, a private boarding school in Edinburgh, from 1950 to 1956. Well regarded as both a fine rugby and cricket player, Steel became a scratch golfer and represented England in many international amateur matches. While studying for a BA in Agriculture at Christ’s College, Cambridge University, Steel played on the golf team. Shortly after graduation in 1960, Steel secured a position with the newly founded *Sunday Telegraph* in London as a golf correspondent. Steel would retain this position until 1990. He also wrote frequently for *Country Life Magazine* starting in 1983. Steel penned an assortment of articles and books throughout his career in golf, they include: 13 Editions of *The Telegraph’s Golf Course Guide; The Shell International Encyclopedia of Golf* (1975, edited with Peter Ryde and Herbert Warren Wind); *The Classic Links of Great Britain and Ireland* (1997); and, *The Open - Golf’s Oldest Major* (2010) (Donald Steel, 2011).
Steel’s writings soon opened doors in the field of golf course architecture. In 1965, he would join the firm of Cotton (C.K.), Pennink, Lawrie and Partners, Ltd. as a consultant trainee. In 1971, Donald Steel was made a partner of the firm. In 1987, Steel started his own firm Donald Steel & Co. Ltd., hiring young architects Tom Mackenzie and Martin Ebert as associates. Since that time, Steel has worked in more than 25 countries and stands as the only architect to have advised every Club or course on which the Open championship has ever been played. These courses include: Prestwick; Musselburgh; St Andrews; Muirfield; Sandwich; Hoylake; Deal; Troon; Lytham & St Annes; Prince's; Carnoustie; Portrush; Birkdale; and, Turnberry (Donald Steel, 2011).
A.41 - Robert Trent Jones Jr.

Born: 1939 in Montclair, New Jersey, USA

Portfolio Highlights:

- son of Robert Trent Jones Sr.
- in a career spanning more than 4 decades, RTJ Jr. has designed more than 270 courses in more than 40 countries
- mentored many including: Donald Knott, Gary Linn, Bruce Charlton and Kyle Phillips
- former president of the ASGCA
- published *Golf by Design* in 1993
- deemed a “signature” designer

The son of famed golf course architect Robert Trent Jones Sr., and older brother to golf course designer Rees Jones, Robert Trent Jones Jr. (RTJ Jr.) was born into a golfing family. RTJ Jr. learned about golf at Winged Foot Golf Club from the legendary Tommy Armour. After studying geology, and majoring in history and American Studies at Yale, RTJ Jr. spent a year studying law at Stanford University. Uninspired by a future in law, he left school in 1960 and joined the family business. His first experiences in golf course design and construction were at his father’s side during the construction of Spyglass Hill, which opened for play in 1966. Eventually, RTJ Jr. was given control of the firm’s Western and Pacific Basin practice, through management of the California
office. Here he would work to expand the company’s interests in Asia (Robert Trent Jones Jr., 2008) (Cornish and Whitten, 1993).

In 1972, RTJ Jr. left his father’s firm and formed Robert Trent Jones II Group, also based in California. Over the next four decades, RTJ Jr. would design more than 270 courses in more than 40 countries. RTJ Jr. relies on a series of design associates and project leaders to produce work that fits the company’s philosophy of appealing, visually exciting golf. Many have noted that Chambers Bay, located in Washington State overlooking the Puget Sound, is the firm’s best work to date. The projects was designed by Bruce Charleston (President of RTJ II) and Jason Blasi (who many credit with the quality of the work). The course is a links-style design and was the host venue of the 2015 U.S. Open. Robert Trent Jones Jr. is one of the game’s largest and most prolific “signature” firms, and is hugely popular with developers (Robert Trent Jones Jr., 2008) (Cornish and Whitten, 1993).
A.42 - Jack William Nicklaus

Born: 1940 in Columbus, Ohio, USA

Portfolio Highlights:

- considered by many to be the best golfer who ever lived, with 18 professional major championships (not including two U.S. Amateur Championships)
- started in golf course design under the mentorship of Pete Dye
- deemed a “signature” designer

Jack Nicklaus was raised in Upper Arlington, and attended Upper Arlington High School. The high school’s sports teams were referred to as the “Golden Bears”, a nickname that later become synonymous with Jack throughout his golfing career. Like his father, Charlie Nicklaus a pharmacist, Jack was an excellent athlete. Nicklaus took up golf at the age of 10, and shot a 51 during his first ever round of golf, played at the Scioto Country Club. At age 15, Jack shot a 66 at Scioto Country Club, which set a new amateur course record, and qualified for his first U.S. Open. Tutored by Scioto club pro Jack Grout, Nicklaus won the Ohio Open at age 16 and the International Jaycee Junior Golf Tournament at 17. As a student at Ohio State University, he won the U.S. Amateur title in 1959 and 1961, as well as the NCAA Championship in 1961. Nicklaus made his first significant impression on the professional stage when he finished second at the 1960

Jack turned pro in November of 1961. Nicklaus won his first U.S. Open title in 1962, and claimed his first Masters and PGA Championship the following year. In 1966, he secured the only major title missing from his collection by winning the British Open Championship at Muirfield Golf Links. Though Nicklaus surpassed Bobby Jones's career record of 10 major titles in 1973, and was elected to the World Golf Hall of Fame the following year, he was far from finished. In 1975, he captured both the Masters and the PGA Championship. In 1980, he won the PGA title and the U.S. Open. In 1986, at the age of 46, Nicklaus mounted a Sunday charge and won the Masters, rallying from a four shot deficit to beat Greg Norman (Nicklaus, 2014) (Cornish and Whitten, 1993).

However, though Jack was a fiercely competitive athlete, it is well known that he was also a dedicated family man. Having made a vow to his wife soon after turning pro, Nicklaus promised that, unless he could have Barbara and the children with him, he would never be away from home for more than 14 days at a time. As such, Jack is known to have skipped many PGA tour events in an effort to be with his family. He would use the time to practice and prepare for the major championships. This downtime also afforded him the ability to seek out other avenues of business. In the mid-1960s, Jack was invited to The Golf Club, in his hometown of Columbus, Ohio, to meet with golf course architect Pete Dye. Dye asked Jack to look at what he was doing and to offer some suggestions. This experience would spark a deep interest for Jack in the field of golf course design. A few years later, Jack partnered with Dye to create Harbour Town

In 1974, Jack founded his own golf course architecture firm, utilizing Bob Cupp and Jay Morrish as full–time designers. Due to his continued involvement in golf, Jack would allow his associates to create the plans before he would review them in detail and make necessary suggestions for improvement. Cupp and Morrish would eventually leave to start their own practices, however Jack would continue his business through the employment of many other young designers, including: Scott Miller; Tom Pearson; Jim Lipe; Gene Bates; Ron Kirby; Rick Jacobsen; Bruce Borland; Andrew Raugast; and, Paul Clute. Jack’s first solo design, Glen Abbey Golf Course in Oakville, Ontario, Canada, opened for play in 1976. To date, Nicklaus Design is responsible for more than 375 courses in some 36 countries, with another 45 currently under construction (Nicklaus, 2014) (Cornish and Whitten, 1993).

Jack is widely recognized as a “signature” designer. The Nicklaus name is well known throughout the world, and that admiration is highly sought after by developers or owners seeking to heighten their project’s reputation. However, achieving signature status comes at a price. Nicklaus has been sometimes criticized for catering only to deep-pocket clients who funded big-budget layouts. Further, perhaps more so than any other modern architect, Nicklaus has repeatedly changed his design style and marketing focus over the years to cater to the most popular social trends (links style golf for example). Nevertheless, his abilities as a designer have produced several Top 100 golf courses in the world (Cornish and Whitten, 1993).
A.43 - Rees Lee Jones

Born: 1941 in Montclair, New Jersey, USA

Portfolio Highlights:

- son of Robert Trent Jones Sr.
- has designed or renovated more than 170 courses
- earned the nickname “The Open Doctor”, a moniker previously bestowed onto his father, for his redesign work in preparation for major championships

Rees Jones was born into a golfing family. His father, Robert Trent Jones Sr., is widely credited as the most influential golf course architect of the modern era. Rees learned golf as a youngster and competed in junior golf events. Traveling with his family for his father’s projects, allowed Rees the experience of visiting many of the world’s best courses. Rees’ first exposure to the golf course design industry was as a boy assisting his father surveying courses. Later he worked on various projects with his father while on summer vacation from school. After studies at Yale University, where he graduated with a degree in history in 1963, and Harvard, where he obtained a master’s degree in landscape architecture from the Graduate School of Design, Rees joined his father’s firm in 1965. Over the next 10 years, Rees would become a principle of the firm and would be responsible for the design or supervision of more than 50 golf course projects (Rees Jones, 2016) (Cornish and Whitten, 1993).
In 1974, Rees founded his own design firm, Rees Jones Inc., headquartered in his hometown of Montclair, New Jersey. At a time when his brother Robert Trent Jones Jr. was establishing himself on the West Coast of the United States and throughout Asia, Rees focused on the East Coast. This turned out to be a wise decision for the young entrepreneur as the abundance of golf courses on the Eastern seaboard provided no shortage of work. Over the next 40 years Rees would design or re-work more than 170 golf courses. Jones has earned the moniker “The Open Doctor”, a name first given to his father. This name comes from his work in the redesign of courses in preparation for major championships. His re-modeling skills have been applied to seven U.S. Open venues, eight PGA Championship courses, five Ryder Cup events, and two Walker Cup tournaments. Rees was also the consultant for the renovation work completed at The Royal Montreal Golf Club in preparation for the 2007 President's Cup. Further, several of his redesigned courses have been selected as FedEx Championship sites. Unfortunately, many have suggested that his work, and that of the USGA, has effectively “ruined” many classic golf layouts in an effort to toughen them for the world’s best players (Rees Jones, 2016) (Cornish and Whitten, 1993).

Rees Jones’ original designs set new standards for clarity and playability. Jones preached and practiced what he termed “definition of design.” He believes that golf holes should clearly dictate to the player where to go, and that bunkers should be clearly visible and suggest the ideal line of play. Rees used mounding to deflect errant balls back into play. However, this has caused many of his courses to look and feel the same, regardless of their natural features. Further, his philosophy of “definition” contradicts classic principles of strategy which defined the Golden Age of Design. Finally, the
mounds he believes deflect errant balls back into play only work for the seasoned or semi-regular golfer. For the higher handicapped player, or true beginner, they simply become obstacles when a shot inevitably goes past them (Rees Jones, 2016) (Cornish and Whitten, 1993).
Michael Hurdzan grew up in Columbus, Ohio. His father, who was a self-taught golf instructor, worked at the Beacon Light Golf Course. The course was owned by Jack Kidwell who was a Class A PGA member, a Class A golf course superintendent, a golf course architect who was also a former president of the ASGCA, and an inductee of the Ohio Historical Society. For Mike Hurdzan, Jack Kidwell would become a major influence. In 1957, Mike would get his first exposure to golf course design after he was hired to work on the summer maintenance staff at Beacon Light Golf Course. After seeing his deep fascination with golf and course design, Jack invited Mike to assist with work being completed at Oakhurst Country Club. Mike was instantly hooked (Michael Hurdzan, 2015) (Cornish and Whitten, 1993).

In the years following, Jack continued to mentor Mike through his completion of high school, followed by a Bachelor of Science degree in Turfgrass Management from the Ohio State University, and finally through a Ph.D. in environmental plant physiology.
from the University of Vermont. After completing his studies in 1970, Mike accepted Jack’s offer to come and work in golf course design full-time. In 1976, the firm of Kidwell and Hurdzan Inc. was formed. By the late 1970s, the firm was one of the most productive design operations in the country. Over a 15 year span, the duo would be involved more than 100 golf course projects across the Midwest. In addition, both Jack and Mike would serve as President of the ASGCA in 1979 and 1984, respectively. Further, both would be recognized as Man of the Year by the Ohio Turfgrass Foundation in 1982 and 1988, respectively. Finally, both would be inducted simultaneously into the Ohio Golf Hall of Fame in 1997 (Michael Hurdzan, 2015) (Cornish and Whitten, 1993).

In 1985, when Jack retired due to health reasons, Mike sought to expand the firm. He employed the services of many talented and diverse individuals. At the 1988 Golf Course Superintendents’ Association of America show, Mike was introduced to Dana Fry, who was there to interview with (Pete) Dye Design. Disappointed that the Dye’s had him slated to work with their son Perry and not Pete, Dana Fry was open to discussions. Mike described the new course he planning in the Toronto area called the Devil’s Pulpit. He offered to fly Fry up to Toronto to see if I would be interested in moving there to oversee the construction of the course. The two came to an agreement and a relationship was started. The Devil’s Pulpit opened for play in 1990 and was followed up two years later by the Devil’s Paintbrush. In 1997, Mike made Dana Fry, the former field designer of Tom Fazio, his partner in the firm of Hurdzan & Fry (Michael Hurdzan, 2015) (Cornish and Whitten, 1993).

The next decade would be Hurdzan & Fry very successful for the duo. Building on the first Hurdzan Top 100 with the Devil’s Pulpit in Canada, the pair followed up with
six other Top 100 Canadian designs and three Top 100 courses in the United States.

With bigger budgets, Mike Hurdzan began to move away from his reputation of producing only simple, low-budget projects and into the world of “signature” designers (Michael Hurdzan, 2015) (Cornish and Whitten, 1993).

In early 2012, Mike and Dana decided to form separate firms to allow Dana to pursue his Asian interests and Mike to remain focused in North America. Further, it is likely that Mike’s son Chris, a long time business associate with the firm, was a pivotal factor in the decision. Chris was made business partner of the new firm, and the partnership was made official through the formation of Hurdzan Golf, LLC (Michael Hurdzan, 2015) (Cornish and Whitten, 1993).

Hurdzan has designed or re-worked more than 400 golf courses around the world. Many of these are ranked on the “Top 100” or “Best in State” lists of Golfweek, Golf Digest and Golf Magazine. Mike has been a prolific writer on the subjects of golf course architecture, turf science, and environmental management. His works include: Evolution of the Modern Green (1985); Golf Course Architecture: Design, Construction and Restoration (1996); Golf Greens: History, Design, and Construction (2004); Golf Course Design: An annotated bibliography with highlights of its history and resources (2006, with Geoffrey S. Cornish); and, Golf Course Architecture: Evolutions in Design, Construction, and Restoration Technology (2006). Hurdzan’s devotion to the academic side of the discipline has been instrumental to his success, and to the evolution of golf course architecture (Michael Hurdzan, 2015) (Cornish and Whitten, 1993).
A.45 - Tom Fazio

Born: 1945 in Norristown, Pennsylvania, USA

Portfolio Highlights:

- designed or re-worked more than 200 courses
- mentored by his uncle and golf course architect George Fazio
- architect of the most expensive course ever created, Shadow Creek Golf Course in Las Vegas
  (approx. cost is $45-$60 million)

Tom Fazio was born in Pennsylvania. His uncle, George Fazio, was a PGA tour player in the 1930s, 1940s, and early 1950s. During those same years, George served as the resident golf professional at several clubs, including the famed Pine Valley in New Jersey. George entered golf course architecture in 1959 when a friend asked him for help in routing a golf course. He soon began to design courses on the side, while still operating a car dealership and a series of golf courses in the Philadelphia area. Among the young labourers at these courses was his nephews Jim Fazio and Tom Fazio. In 1963, Tom entered the business of golf course architecture when he was asked to assist his uncle in course construction (Tom Fazio, 2016) (Cornish and Whitten, 1993).

In 1974, Tom became a partner with George and his brother Jim, in the firm Fazio Golf Course Designers. The team gradually became one of the most successful firms in the nation. By start of the 1980s, Tom was handling most of the firms work, as George was now semi-retired. Tom’s re-modeling of Inverness in 1979 and Oak Hill in 1980
gave him his first national recognition, however most of it was unfavourable (Cornish and Whitten, 1993). However, in 1980 Tom Fazio completed the Wild Dunes course in South Carolina. The course’s success quickly changed his prospects (Tom Fazio, 2016) (Cornish and Whitten, 1993).

Fazio then completed the Mountain Course (1981) and the Desert Course (1984) at the Vintage Club in California, before completing Wade Hampton Golf Club in 1987. The Wade Hampton project was named “Best New Private Course” in 1987 by *Golf Digest*. The following year, Tom’s Black Diamond Ranch in Florida was given the same honour. Finally, this fame secured Fazio the commission to construct the most expensive golf course project ever conceived. When Shadow Creek Golf Club in Las Vegas opened for play in 1989, it received rave reviews, including being named “Best New Private Course” by *Golf Digest*. Tom Fazio was at the top of the industry (Tom Fazio, 2016).

Over a career spanning more than 40 years, Fazio has designed or re-worked more than 200 golf courses worldwide. His most prominent designs in the United States include: Edgewood Tahoe (1968); Juniper Hills (1970); Butler National Golf Club (1974); World Woods Golf Club (1991); and, Hudson National Golf Club (1996). Fazio is also responsible for the design of the National Golf Club of Canada, which was opened for play in 1976, and remains one of Canada’s top ranked golf courses. While it has been argued that the Fazio name moves real estate in a big way, even more so than other “signature” designers, there is also concern for how the actual quality of his golf courses will stand the test of time. Fazio is also known for designing “pretty golf courses where the aesthetics are remarkable, but the golf is, well, just good” (Thompson, 2006) (Tom Fazio, 2016) (Cornish and Whitten, 1993).
A.46 - William “Bill” Ernest Coore

Born: 1945 in Richmond, Virginia, USA

Portfolio Highlights:

- known as “minimalist” or “low-profile” designer who, with partner Bill Coore, is credited with launching the new era in golf course architecture
- not a self-promoter, has gained a superlative reputation due to the quality of his portfolio and his gracious manner

Growing up in North Carolina, Bill Coore attended Wake Forest University on an academic scholarship. While studying Classical Greek, and planning for a future as a professor of Classic Mythology, Bill Coore also played for the University’s golf team. While on the team he played most of his golf at Old Town Club in Winston-Salem, a classic Perry Maxwell design, and now and then at Pinehurst No. 2, the famed Donald Ross design. Shortly after graduating in 1968, Bill happened upon a course called Oak Hollow, located about 90 miles west of Raleigh. Bill liked the look of the course and inquired with the maintenance staff as to who had designed the layout. The crew said that the architect had been a Mr. Pete Dye. Bill soon tracked down Dye’s phone number and after repeatedly asking for an opportunity he got his chance (Cornish and Whitten, 1993).

Pete Dye found a position for the young Bill Coore on the maintenance staff at Cardinal Golf Club in Greensboro, North Carolina. The work was not glamorous, as
Bill’s task was to cut trees in a swamp. However, with hard work and persistence Bill was able to persuade Dye to let him tag along when the designer was out walking the golf course. Bill ended up working with Dye on projects for the following three years, but never rose to position of lead shaper or project manager. However, Coore did become very good friends with both Pete and Alice Dye, occasionally staying at their home and watching their beloved dogs Otto and Gypsy. This may have been a better outcome for Coore, who used this time to explore Pete’s massive golf architecture library. Bill took detailed notes on many books, including those by Alister MacKenzie, Robert Hunter and others. Though Coore had planned to explore golf course architecture for just one year, he was now hooked (Dear, 2011).

Dye then sent Coore to Texas to work with his brother, Roy Dye, on a course called Waterwood National in Huntsville, located 50 miles north of Houston. However, soon after Coore’s arrival construction stopped due to the oil embargo of 1973-1975. With nowhere else to go, Bill remained at the course eventually becoming superintendent. Bill stayed with at Waterwood for almost 6 years. In that time he discovered a low-budget, nine-hole golf course in Rockport, which had just terminated dealings with their golf course architect. Bill secured the work with the understanding that the project would be finished for the amount the club had already committed. When completed, the first nine-holes at the Rockport Country Club was so well received that Bill was retained to complete a second nine. Soon after, Bill was commissioned to complete a layout within the real-estate development of Kings Crossing. Bill had officially started his career in golf course architecture. However, in an era where architects like Pete Dye and Robert Trent Jones Sr. were well established and utilizing
big budgets, and others were partnering with PGA Tour stars to try to compete, Bill Coore was still small time (Dear, 2011).

In 1984, developer Charlie Bellair approached Bill about an opportunity to build a golf course on a site near Rockport. The course was to be named Cape Velera, but Coore quickly realized that the site was unsuitable for golf. However, Charlie, understanding the current marketing strategies within golf course architecture, asked Bill why he had not yet partnered with a PGA Tour pro. Bill simply said he hadn’t given it much thought. So, Charlie asked, “if you had to pick who would you choose?” Having recently read an article about Ben Crenshaw, and his thoughts on golf, Bill suggested the recent Masters champion. Interestingly, it had recently been suggested to Ben Crenshaw, while he was visiting the construction site of the future Austin Country Club in his hometown, that he should talk to Bill Coore. This recommendation had come from Rod Whitman, Pete Dye’s project manager at Austin and a man who had gotten his start in golf course design while working for Bill Coore at Waterwood National. Following a phone call to Crenshaw’s manager from Bellair, the two finally met at the proposed site of Cape Velero. Though the pair quickly agreed that there was no potential for the site, Ben suggested that they should venture over to Bill’s design at Rockport and continue to talk. While at Rockport, it became evident that the duo shared many of the same ideals and that their laid-back attitudes were a good match. However, while the pair continued to talk over the next year, there was no discussion of a partnership (Dear, 2011).

In 1985, Bill and Ben met for a lunch with Ron Whitten of Golf Digest. Ron asked the pair what they were planning to name their new golf architecture company. The pair, caught off guard, did not have an answer prepared. Eventually, Ben spoke up
and said “Coore & Crenshaw”. The company became official in January of 1986, but it would be five years before the pairs first 18-hole layout was opened for play. Although their first two years were fraught with disappointments, in 1988 Coore and Crenshaw began working on the Plantation Course at the Kapalua Resort on the Hawaiian island of Maui. Soon after, the pair were commissioned to complete an 18-hole layout at the Barton Creek Resort in Austin. Both courses opened as planned in 1991 and gave the world a glimpse of what the duo was capable of. The courses were wide enough to accommodate resort guests, but were sufficiently challenging and strategically designed to challenge top players (Dear, 2011).

In 1990, the pair received a call from former building architect turned developer Dick Youngscap, about an opportunity in Nebraska. Youngscap invited the pair to Mullen in the Sand Hills region of the state to look at his 11,000 acre site. Although Youngscap had just recently completed a course called Firethorn in Lincoln, Nebraska with Pete Dye, he hired the pair of Coore & Crenshaw with the belief that they would be the least invasive designers. As such, what Bill and Ben were presented with is considered by many experts to be some of the best land for golf in North America. The pair did not disappoint and used their “minimalist” methods to construct 18-holes for less than $1.1 million dollars, seventy-five percent of which went to the irrigation system. Not only was the golf course economical but it was also excellent. Sand Hills opened in 1995 to international acclaim and shocked the world as to what could be done with talent and a good site (Dear, 2011).

Over the next 8 years, Bill and Ben worked on another half dozen courses, including the highly regarded Friar’s Head course on Long Island in Baiting Hollow,
New York. In 2003, the pair were commissioned by Mike Keiser, a former recycled greeting card mogul turned golf developer, to layout the third course at his property in Bandon, Oregon. Keiser had passed on Bill and Ben for his first two courses at his seaside resort for fear that the overwhelming success of Sand Hills would make the golfing world see Bandon as their second best course. However, when Bandon Trails was completed in 2005 Keiser, and the rest of the golfing world, was impressed. Keiser would again hire the pair of Coore & Crenshaw for courses at Barnbougle Lost Farm (2010) in Tasmania, Bandon Preserve (2012) in Oregon, and Cabot Cliffs (2015) on Cape Breton Island in Nova Scotia, Canada (Dear, 2011).

In 2010, Bill and Ben completed the Dormie Club in North Carolina. The project was very well received. Critiques even compared the result to the quality of Pinehurst No. 2. Somewhat ironically perhaps, the next project the pair would be commissioned to complete in North America would be the restoration of Pinehurst No. 2 in preparation for the 2014 U.S. Open. The loving restoration completed by the duo, reverting the style back to that originally created by architect Donald Ross, was also an environmental success story. The design called for the removal of more than 35 acres of Bermuda rough grass across the almost 150 acre site. Further, the original irrigation system was restored, reducing water usage by more than twenty-five percent. Yet again, Coore and Crenshaw were able to deliver a world class golf course while creating a relatively small design footprint. Through their approach, Bill Coore and Ben Crenshaw, along with architect Tom Doak, are credited with founding the current “minimalist” movement in golf course architecture. Before their partnership, Bill Coore completed eight projects and Ben Crenshaw completed one. However, their best work would be completed together. Since
their partnership formed in 1986, Bill Coore and Ben Crenshaw have designed or re-worked 36 golf courses, 18 of which are ranked in the “Top 100 Golf Courses in the World” or “Top 100 Golf Course in the United States” by either Golf Digest or Golf Magazine. This limited number of projects is due to their belief that an architect should devote all their attention to one or two projects (maximum) at one time. This design practice mirrors their belief that less is more (Dear, 2011).
A.47 - Martin Grant Hawtree, Ph.D.

Born: 1947 in Beckenham, Kent, England

Portfolio Highlights:
- third generation golf course architect (world’s longest continuous golf architectural practice, dating from 1912)
- consultant to the R&A on many Open Championship courses

Martin Hawtree is a third generation golf course architect. Martin’s grandfather Frederic George Hawtree founded the firm in 1912, and was later joined by his son (Martin’s father) Frederic William Hawtree. Martin attended the University of Liverpool where, in 1968, he achieved a Bachelor of Arts degree (BA Hons). Martin would continue with his studies, eventually achieving a Master’s degree in Civic Design in 1970, followed by a Ph.D. in Philosophy in 1975. In 1972, even before completing his schooling, Martin joined his father’s firm, Hawtree & Son, as a fulltime associate (Hawtree, 2016).

By 1980, Martin had completed more than 60 new projects, including: Royal Waterloo (Belgium), Simon's (Denmark), Bearwood Lakes (England), China Fleet (England), Les Baux (France), Caen (France), Carquefou (France), Mazury (Poland), Country Club Johannesburg (South Africa), and Golden Greens (India), all with his father F.W. Hawtree. In the early 1980s, Fred W. Hawtree reduced his work schedule to concentrate on writing. This left the reigns of the company in Martin’s hands. Upon his
father’s retirement, Martin expanded the Hawtree firm. He completed a series of courses in conjunction with former European PGA Tour player Simon Gidman and also trained several new associates, including Stephen McFarlane (Hawtree, 2016).

In addition to new golf course projects like Tarandowah Golfers Club, opened in 2006 in Canada, and Trump International Golf Links, opened in 2007 in Scotland, Martin has made a career on the redesign of many classic courses. Since 2006, Martin Hawtree has served as the Royal & Ancient’s consulting architect at many of the Open Championship venues, including Royal Birkdale, Royal Liverpool, Muirfield, Carnoustie Championship Course, and St Andrews Old Course (Hawtree, 2016).

In 1976, Martin was elected a full member of the British Association of Golf Course Architects (BAGCA), now the European Institute of Golf Course Architects (EIGCA). From 1980 to 1996, Martin served on the BAGCA Committee, and from 1996 to 1998 he served as President. In 2001, he served as Chairman of the Library Committee for the EIGCA (Hawtree, 2016).
A.48 - Ben Daniel Crenshaw

Born: 1952 in Austin, Texas, USA

Portfolio Highlights:

- “minimalist” or “low-profile” designer who, with partner Bill Coore, is credited with launching the new era in golf course architecture
- two time Masters champion and winner of 19 PGA Tour events
- known by the nickname “Gentle Ben”

Ben Crenshaw was introduced to the game of golf by his father, a school teacher. When he was eight, his father placed his under the guidance of the legendary golf instructor Harvey Penick. Growing up in Austin, Ben attended Austin High School. Crenshaw then went to the University of Texas and played on the golf team. Ben would win three consecutive NCAA Championships from 1971 to 1973. In 1973, Crenshaw turned professional and became only the second player in PGA Tour history to win the first event of their career. Though finishing runner-up in five Major events between 1973 and 1983, Crenshaw still totalled nine PGA Tour wins. However, in 1984, Ben successfully won his first Major Championship with a victory at the Masters. Between 1985 and 1994, Crenshaw would earn another eight PGA victories. Finally, in 1995, and just days after the death of his golfing mentor Harvey Penick, Ben Crenshaw won his second Masters title (Coore and Crenshaw, 2016).
Crenshaw’s love and appreciation for the history of the game is well documented. One simply has to look at the numerous forwards he was written to significant golf books, including Tom Doak’s *Anatomy of a Golf Course* and Richard Mandell’s *The Evolution of Pinehurst*, to see that his education in golf has not just occurred on the golf course. This love of golf literature would lead to Ben’s next feat, a career in golf course architecture. In 1982, Crenshaw stepped on-site at the Pete Dye project in Austin, which would become the Austin Country Club. There he would meet Pete’s onsite foreman and shaper, Rod Whitman. The two got to talking and Bill mentioned his interest in the work. Rod told Ben that he had to go see a guy by the name of Bill Coore, who Rod has worked for at the Waterwood National Golf Club in Huntsville, Texas. Eventually, the two did meet and in 1986 the firm of Coore & Crenshaw was formed (Coore and Crenshaw, 2016).

For additional information on the Coore & Crenshaw partnership, please refer to Appendix A.46.
A.49 - Roderick “Rod” K. Whitman

Born: 1953 in Ponoka, Alberta, Canada

Portfolio Highlights:
- mentored by Pete Dye
- has collaborated with Bill Coore and Ben Crenshaw
- he is a world renowned shaper, turned golf course architect, who is highly sought after throughout the world
- has designed and built several courses ranked in the Top 100 in Canada
- his project Cabot Links in Inverness, Nova Scotia, Canada has been ranked in the Top 100 golf courses in the world

Born and raised in rural Alberta, Canada, near the Town of Ponoka, Rod Whitman worked on the grounds crew at the Ponoka Golf Club as a teenager. After graduating from Ponoka Composite High School, Rod enrolled at Sam Houston State University where he was a student from 1976 to 1979. While working to achieve a Bachelor of Science degree, Whitman also played on the golf team in his senior year. In addition to his studies, Rod also worked on the grounds crew at the nearby Waterwood National Golf Club, under the management of course superintendent Bill Coore. In addition to the normal maintenance practices, Rod also helped Coore renovate some of the golf holes...
and learned to operate various pieces of construction equipment in the process (Whitman, 2016).

After graduation, Rod worked for a year as the superintendent of the Devon Golf and Country Club in Alberta, Canada. In the spring of 1981, Pete Dye was in Texas looking for a construction foreman to assist with his upcoming design of the Austin Country Club. Bill Coore, impressed with Whitman’s work ethic and understanding of the game, recommended Rod for the position. From 1981 to 1984, Rod served an intern designer for Pete Dye and ran the construction crew for the Austin Country Club. However, over the same time period (1981-1984) Rod was offered the opportunity to design and construct an 18-hole golf course in his home town. The offer came from Ryan Vold, a friend of Rod’s from high school. Wolf Creek Golf Resort opened for play in 1984 and soon garnered national acclaim in Canada (Whitman, 2016).

From 1985 to 1989, Rod continued with his work for Pete Dye, this time as a design associate. Rod completed two major projects in that time. The first was at Crooked Stick in Carmel, Indiana from 1985 to 1987, where he rebuilt the greens at one of Dye’s first courses. The second was at Oaktree National in Edmond, Oklahoma from 1987-1989. Between these two projects, Rod would reunite with Bill Coore to design the Chateaux course at Golf du Medoc in France from 1987 to 1988. From 1989 to 1993, Rod again set out on his own and completed two major projects at Schloss Langenstein Der Country Club (1991) in Germany and Lacombe Golf and Country Club (1993) in Alberta (Whitman, 2016).

From 1994 to 1998, Rod again joined golf course architect and friend Bill Coore, now partnered with PGA Tour star Ben Crenshaw in the design firm of Coore &
Crenshaw, to assist with the construction of two major projects. Firstly, Rod spent two years in Indonesia, from 1994 to 1996, working to complete the Klub Golf Rimba Irian. Secondly, Rod spent two years, from 1997 to 1998, in Scottsdale, Arizona working to complete Talking Stick. From 1998 to 2000, Rod designed and constructed a nine-hole addition to the Firethorn Golf Club in Lincoln, Nebraska. This additional layout was added to the existing golf course created in the 1980s by his former mentor Pete Dye (Whitman, 2016).

In 2000, Rod returned to Alberta and completed an 18-hole layout in Edmonton. The Blackhawk Golf Club opened to critical acclaim in 2003. Next, Rod’s services as a shaper would again be requested by Bill Coore and Ben Crenshaw. Rod would assist with the construction of two major projects. Firstly, Friar’s Head on Long Island in Riverhead, New York opened for play in 2002. Secondly, Old Sandwich in Plymouth, Maryland opened for play in 2004 (Whitman, 2016).

Starting in 2004, Rod would return to Canada and his solo work. A nine-hole addition at Wolf Creek Golf Resort opened for play in 2008, and Sagebrush Golf and Sporting Club opened for play in 2009 in Quilchena, British Columbia. In 2012, Rod completed his most significant solo work to date with the opening of Cabot Links in Inverness, Nova Scotia, Canada. Cabot Links is currently ranked in the “Top 100 Golf Courses in the World” by both Golf Magazine and Golf Digest. From 2013 to 2014, Rod again joined the firm of Coore & Crenshaw to complete the Cabot Cliffs project in Inverness, Nova Scotia. Rod is currently working to complete a renovation project in St. Andrews-by-the-Sea, New Brunswick at the historic Algonquin Golf Club (Whitman, 2016).
Rod’s work, like that of his friend Bill Coore, is of the “minimalist” or “low-profile” era. Rod believes that each site is unique and that it is the job of the architect to reveal a site’s natural attributes relative to interesting golf. Although Rod has been recognized as one of the finest bulldozer operators on the planet, he uses a light touch when approaching a golf course site. Rod spends almost the entirety of a construction project on site to ensure that every detail is either personally constructed or approved. This method allows the design process become to a fluid progression, one which evolves as construction progresses (Whitman, 2016).
A.50 - Michael J. Strantz

Born: 1955 in Toledo, Ohio, USA

Died: 2005 in Awendaw, South Carolina, USA

Portfolio Highlights:

- mentored by Tom Fazio
- utilized his background as an artist in his work as a golf course architect
- before his premature death from cancer in 2005, he was considered by many to be the most sought after golf course designer in North America

Mike Strantz was born in Toledo, Ohio and raised in Walbridge. In 1973, he enrolled at Miami University in a studio art program. However, though his talents in art were excellent, his passion soon shifted to golf. Mike’s objective was to become a golf course superintendent and in 1978 he graduated from Michigan State University with a degree in turf grass management. He began his career in golf on the grounds crew at the Inverness Club in Toledo where Tom Fazio was preparing the course for the 1979 U.S. Open. Fazio quickly recognized that Strantz had a gift for the work and eventually invited him to work with him at his next project in Hilton Head, South Carolina at the Moss Creek Plantation. For the next eight years Strantz travelled the country for Fazio working as an on-site associate. His projects included the Links and Harbour course at Wild Dunes near Charleston, the Wade Hampton Club in North Carolina, Osprey Point
on Kiawah Island, and Black Diamond Ranch in Florida, among others (Strantz, 2001) (Hiseman, 2013).

In 1987, Strantz left Fazio to spend more time with his young family and to devote more time to his abilities as an artist. In 1988, Mike started his own artistic practice called Mike Strantz Studios, where he was free to apply his own artistic abilities to projects of his choosing. However, in September of 1989, Hurricane Hugo would cause significant devastation to the highly acclaimed Wild Dunes project in South Carolina, where Mike had overseen construction previously for Tom Fazio. Knowing his understanding and connection to the project, the owners contacted Mike and asked him to complete the required renovation work. With Tom Fazio’s blessing, Mike almost singlehandedly put the golf course back together. After things had settled down, Mike stayed on with the grounds crew at Dunes West, while continuing his artistic work on the side. However, Mike’s career path would forever change when Larry Young and son Danny Young came knocking in the early 1990s (Strantz, 2001) (Hiseman, 2013).

In 1994, Mike’s first solo design opened on Pawley’s Island in South Carolina. The course was named the Caledonia Golf and Fish Club and it was well received by the golf industry. Mike’s design firm, Maverick Golf Design, was formed and would come to employ the talents of Mike’s good friend and golf professional Forrest Fezler as his project supervisor, plus the shaping talents of Jeff and Mike Jones. The success of Caledonia led to a commission for Stonehouse in Virginia, which in turn led to the design of Royal New Kent in Virginia. When both courses were ranked “Best New Golf Course” by Golf Digest in consecutive years, 1996 and 1997 respectively, Mike Strantz became the first designer to repeat as winner of the “Best New” category. As such, many
opportunities followed for the budding designer. Strantz followed up these projects with True Blue Golf Club in 1998 and Tobacco Road in 1999. Many consider Tobacco Road to be Mike’s most enduring and influential design. Golf critics immediately echoed these feelings, as Strantz was named “Architect of the Year” by Golf World, which a year later also cited him as the “most in-demand course designer in the U.S.” In 2000, the praise reached a climax when GolfWeek followed suit and named Mike among its "Top 10 Greatest Golf Architects of All Time" (Strantz, 2001) (Hiseman, 2013).

In 2000, Mike completed Tot Hill Farm Golf Club in Asheboro, North Carolina. The following year, in 2001, he completed Bulls Bay Golf Club on the Intercostal Waterway in Awendaw, South Carolina. In 2002, Mike and his team would complete the re-design of the private Silver Creek Valley Country Club in San Jose, California. In 2004, Mike would complete his final work at the Monterey Peninsula Club in Pebble Beach, California. Here, Mike and his team re-designed the Shore Course, transforming a once bland layout into a rugged and artistic vision. However, it was soon obvious that Mike was losing a personal battle. In the fall of 2001, Mike had visited his doctor due to issues with his throat. The diagnosis had been cancer. Though Mike had been through two previous stints of chemotherapy, and both time he was told he was “cancer free,” the cancer had again returned and his was in a fight for his life. Sadly, Mike lost his battle with cancer and passed away at his home in South Carolina in 2005 (Strantz, 2001) (Hiseman, 2013).
A.51 - Kyle Donald Phillips

Born: 1958 in Atlanta, Georgia, USA

Portfolio Highlights:

- mentored by Robert Trent Jones Jr.
- solo design career was accelerated by the success of Kingsbarns in Scotland, near St. Andrews
- member of the ASGCA

As a young boy, Kyle Phillips worked and played golf at Swope Park, an A.W. Tillinghast design, near Kansas City, Missouri. In 1981, Kyle graduated from Kansas State University with a degree in Landscape Architecture. Later in 1981, after completing golf course re-modeling plans for the City of Springfield, Missouri, he was hired as a design associate by Robert Trent Jones Jr. He would later become a Vice President with the firm, and was responsible for the firm’s work in Europe, Africa and the northeastern United States. Kyle’s work for the firm include both Penha Longa and Seddiner See (South Course). These courses are recognized by many to been “elevated beyond the typical standards achieved by the RTJ II firm thanks to Phillips’s work” (Oliver, 2014) (Phillips, 2014).

In 1997, Kyle Phillips started his own design firm, Kyle Phillips Golf Course Design. Since that time he was worked with more than 60 clients, in more than 30 countries on five continents. His solo design career was ignited with the debut of Kingsbarns in 2000. Located near St. Andrews in Scotland, the immediate success of Kingsbarns promoted many more commissions for Phillips throughout Europe. His
popularity has resulted in new course projects in Italy (Sicily), Greece, France (near Calais), Ireland, Spain, Sweden, and Slovakia. Further, this success has welcome Phillips back home to his native America. Particularly impressive is his recently completed re-design of the wonderful California Club of San Francisco, which reopened in 2008 (Phillips, 2014) (Oliver, 2014).
A.52 - Thomas H. Doak

Born: 1961 in New York, New York, USA

Portfolio Highlights:

- “minimalist” or “low-profile” golf course architect
- four courses in the “Top 100 in the World” as ranked by Golf Digest
- prolific writer
- is the only golf course architect to offer an intern program to mentor future architects (established in 1987)
- NOT a member of the ASGCA, due to mutual disagreements

Like golf course architect Robert Trent Jones Sr., Tom Doak attended Cornell University. However, Doak actually graduated. Further, during his studies, Tom also found time to write free-lance design articles for Golf Magazine. He would later become a contributing editor and handled the publication’s golf course rankings. In 1982, Tom received an undergraduate degree in Landscape Architecture and then spent 8 months touring and studying the classic courses of the British Isles, funded by the Frederick Dreer Award from Cornell’s Horticulture Section of the School of Integrative Plant Science (Cornell, 2016). Returning to the United States, Tom apprenticed under Pete Dye and then Perry Dye, working on construction crews, drafting plans, and handling
shaping work for various projects. After just a few years, in 1987 Tom felt that he was ready for his own opportunities and started his own firm. To emphasize his philosophies, which were based on old fashioned, lay-of-the-land type designs he had studies in Europe, he named his new company Renaissance Golf Design Inc. (Doak, 2016) (Cornish and Whitten, 1993).

In 1988, while simultaneously working on his earliest solo project, Doak published his first book, titled *The Confidential Guide to Golf Courses*. In this detailed review of the golf courses he had studied throughout his life, Doak did not hold back. He developed his own ranking system (1 to 10), now commonly referred to as the “Doak Scale,” and gave no second thought in announcing his true feeling about the work of his new colleagues in the field of golf design. When the book became a true cult classic, many practitioners took offence to the negative light placed on their portfolio of work. Doak made no apologies, believing his work was simply a critique of work, and it was not meant to be personal (similar to a peer review in allied professional fields, except public). Many see this publication, which is sometimes referred to as the “controversial guide to golf courses,” as the primary reason why Doak is not a member of the ASGCA. However, Doak has often stated that his non-member status has been his choice, and that it is the structure and practices of the society itself that has kept him from joining (Doak, 2016).

In 1989, at the age of 28, Tom completed his first design. When High Pointe Golf Club in Williamsburg, Michigan opened for play it reflected all the opinions put forth the previous year in Doak’s Confidential Guide. The routing was based on the site’s natural features, which resulted in some unique holes and some awkward angles. Further, the
original fescue greens, reminiscent of Scotland’s links courses, proved to be unpopular with players and were difficult to maintain in Michigan’s northern climate. However, the course was ranked in several “Top 100” lists and, when combined with the success of his book, gave Tom the publicity needed to secure more work (Doak, 2016).

In 1990, Tom was joined by another graduate landscape architect from Cornell, Gil Hanse. Together, the pair worked to complete several designs until Hanse’s eventual departure in 1993 to start his own firm. These courses include: the Heathland Course at The Legends (1990); Black Forest at Wilderness Valley (1991); Charlotte Golf Links (1993); and, the Old Course at Stonewall Golf Club (1993). Doak would then go on to create the following courses: Beechtree Golf Club (1997); Riverfront Golf Club (1999); Lost Dunes Golf Club (1999); Apache Stronghold Golf Club (1999); Atlantic City Country Club (2000); and, The Village Club of Sand Point (2000). However, it would be his next course, which opened in 2001, which would propel Tom Doak to international acclaim. Pacific Dunes was widely praised as the truest expression of links golf in North America and launched Doak into the ranks of America’s top golf course architects. Huge commissioned followed at Cape Kidnappers Golf Resort and Barnbougle Dunes Golf Links. Both courses opened in 2004 and both have been ranked in the “Top 100 Golf Courses in the World” by Golf Digest and Golf Magazine (Doak, 2016).

Since 2004, Doak has completed thirteen new golf course projects, including: Tumble Creek at Suncadia; Stone Eagle Golf Club (2005); Ballyneal Golf Club (2006); Sebonak Golf Club (2006); The Renaissance Club (2007); Rock Creek Cattle Company (2008); Aetna Spring Golf Club (2008); Bahia de les Suenos (2009); Common Ground Golf Club (2009); Old MacDonald Golf Links (2010); the Blue Course at Streamsong
(2012); the Loop at Forest Dunes (2015); and, Tara Iti Golf Club (2015). He has also acted as consulting architect as several of the world’s most important classic layouts, including Royal Melbourne in Australia. However, perhaps his most significant contribution to the game of golf opened in 2012 in Detroit, Michigan. Created for Marygrove College, Tom Doak and his team at Renaissance Golf donated their time to complete a short-course with four par 3s, a spacious bent grass practice green, and a double-sided practice range that can accommodate as many as 26 golfers. While the project will never appear on any Top 100 list, this was never the goal. In a city still reeling from the effects of the recession and the ruin of the auto industry, the little course allows for growth in a struggling game and programs such as Midnight Golf, a mentoring program that combines life lessons with golf lessons to help inner-city high-school students find their way to college (Doak, 2016).

In addition to producing highly ranked courses, Tom Doak has continued to publish literature on the subject of golf course architecture. In 1992, he released The Anatomy of a Golf Course. This book, for the first time ever, simplified classic golf course architecture philosophies for the general public. In 2001, he released The Life and Work of Dr. Alister MacKenzie, a detailed volume which summarized one of Doak’s greatest influences. Currently, Doak is collaborating with three coauthors, Ran Morrissett, Masa Nishijima, and Darius Oliver, to update and expand The Confidential Guide to Golf Courses. This time there will be five volumes, the first two of which have already been released, and courses will be reviewed by geographical area. The five volumes will analyze courses from: 1) Great Britain and Ireland; 2) The Americas (winter
destinations); 3) The Americas (summer destinations); 4) Europe, Middle East and Africa; and, 5) Asia, Australia and New Zealand (Doak, 2016).
Gilbert “Gil” Hanse

Born: 1963 on Panama City Beach, Florida, USA

Portfolio Highlights:
- mentored by Hawtree and then Doak
- member of the ASGCA
- selected to build the Olympic Golf Course in Rio de Janeiro, Brazil for the return of golf at the 2016 Summer Olympic Games
- current designs are heavily influenced by Australian golf (wide, fun and natural courses)

As a child, Gil Hanse grew up on Long Island in New York, where his grandfather was a member at Southward Ho, an A.W. Tillinghast design. It was there that Hanse “became fascinated with the beauty and the nuance of golf landscapes” (Logan, 2012). Gil graduated with a BA degree in 1985 from the University of Denver. In 1989, Gil Hanse graduated from Cornell University with a Masters of Landscape Architecture. Hanse, like Tom Doak before him, won the prestigious Frederick Dreer Award from Cornell’s Horticulture Section of the School of Integrative Plant Science allowing him to spend a year in Great Britain studying golf courses (Cornell, 2016). While in England, Hanse joined the firm of Hawtree & Son. In 1990, he was hired by Tom Doak as a design associate in the firm Renaissance Golf Course Design. He would later become a design partner with the firm. In 1993, Hanse left Doak’s mentorship to start his own design practice. He founded Hanse Golf Course Design Inc. and joined the
“minimalist” movement, co-founded by Tom Doak and the firm of Coore & Crenshaw. However, Hanse has been quoted as saying he prefers not to be pigeonholed into one design style, and sites the influence of A.W. Tillinghast as his reason for adapting his style to suit and accentuate a project’s natural environment (Logan, 2012) (ASGCA, 2016).

In 1995, Gil joined forces with architect Jim Wagner. Together, the pair have produced a stellar resume, including new course layouts at Castle Stuart Golf Links in Inverness, Scotland; the Boston Golf Club in Hingham, Massachusetts; Applebrook Golf Club in Malvern, Pennsylvania; Rustic Canyon Golf Club in Moorpark, California; and, French Creek Golf Club in Elverson, Pennsylvania. Further, they have worked to restore or renovate the North Course at the Los Angeles Country Club in Los Angeles, California; the Tokyo Golf Club in Tokyo, Japan; TPC Boston in Norton, Massachusetts; The Country Club in Brookline, Massachusetts; Sleepy Hollow Country Club in Briarcliff Manor, New York; and, the Blue course at Trump National Doral in Doral, Florida. In 2012, this success lead to the commission of a lifetime. Hanse was selected to create the golf course for the Olympic Games in Rio de Janeiro, Brazil. Hanse even committed to moving his family south to create the course, a necessity seeing that Hanse likes to operate the equipment himself in the construction of golf course features. After the announcement by the International Olympic Committee (IOC) came more commissions. Hanse is currently working to complete the third course, to be known as the Black Course, at Streamsong Resort in Florida. He is also slated to complete a municipal course at Bandon Resort in Oregon, once environmental permitting and approvals are confirmed (Logan, 2012) (ASGCA, 2016).
As the son of a Scottish greenkeeper, David McLay Kidd grew up in the golf business. As a young boy in Glasgow, David first experienced golf at Glasgow Golf Club, where his father, Jimmy Kidd, worked as superintendent. In 1981, his father was hired at Gleneagles Resort. Within a few short years, Gleneagles became the venue for the Scottish Open for eight straight years. This exposure to great golf created a passion within David to find a future in the golf industry (McLay Kidd, 2016).

David attended Writtle College, on the outskirts of London, where he studied Horticulture and Landscape Design. While still in school, David interned with Southern Golf Construction, Europe’s largest golf construction company. Upon graduation, he was offered a position with a small design and construction management company in England. The firm’s modest projects gave David a level of responsibility not possible with a larger firm, and allowed him to develop his own ideas on both design and
construction. Still in his early twenties, Guinness, the parent company of his father’s employer and owner of The Gleneagles Hotel, decided to develop Gleneagles style resorts around the world. David was offered a position, and for almost 10 years he travelled the world assessing sites for golf. His position also allowed him to work with the marketing analysts, master planners, architects, engineers, ecological consultants, development lawyers, and many other consultants involved in the development process. In his final years he became the principle designer of golf courses for the company (McLay Kidd, 2016).

At the age of 26, McLay Kidd first set foot on a large swath of ocean-front land in Oregon, and he would make a pitch to owner Mike Keiser, to build what many now consider to be the first true links course in the United States. Two years later, he moved to Coos Bay to design and build Bandon Dunes, a masterpiece that would propel him to instant stardom in the world of golf course architecture (McLay Kidd, 2016).

Shortly after Bandon Dunes opened in 1999, McLay Kidd founded DMK Golf Design, which expanded relatively quickly into an all-inclusive, full-service golf course design and construction firm. The firm’s portfolio spans the globe, from the Pacific Northwest to Fiji, from South Africa to Scotland, from Nepal to Nicaragua. However, until recently, David had been criticized for allowing his Scottish golf principles to be altered by American influences (Cade, 2011) (McLay Kidd, 2016).
Appendix B. – Profiles of Influential Golf Writers

B.1 - Horatio Gordon “Horace” Hutchinson

Literary Works:

- *Hints on the Game of Golf* (1886)

- *How to Layout Links and How to Preserve Them* (1889, 12 pages in Vol. 3 of *The Golfing Annual*)

- *Golf*, in the Badminton Library series (1890)

- *Famous Golf Links* (1891)

- *British Golf Links: A Short Account of the Leading Golf Links of the United Kingdom* (1897)

- *Golfing* (1898)

- *The Golfing Pilgrimage on Many Links* (1898)

- *The Book of Golf and Golfers* (1899)

- *Golf: A Complete History of the Game, Together with Directions for Selection of Implements, the Rules, and a Glossary of Golf Terms* (1908)

- *The New Book of Golf* (1912)

- *Fifty Years of Golf* (1919)

- *Portraits of the Eighties* (1920)

- Sporting Fiction (28 volumes), including:

  - *Bert Edward, The Golf Caddie* (1903)

  - *After Dinner Golf* (1896)

- Several writings on Hunting, Fishing and Cricket

- two decades as editor for the *On the Green* column in *Country Life* magazine, starting in 1897
Horace Hutchinson, born Horatio Gordon Hutchinson, was the son of General William Nelson Hutchinson. After being born in London in 1859, his family would relocate to Devon the following year when his father was appointed the commanding officer of Government House. Here, as a young boy, Horace was introduced to the game of golf by his uncle, Colonel Hutchinson, a founding member at the nearby Royal North Devon (Westward Ho!) golf club. At the age of sixteen, he won the club medal and, by rule, was made club captain. He attended Charterhouse School in Surrey for a period, but was forced to leave due to health issues which would affect him for the rest of his life (MacWood, 2001).

Between 1878 and 1881, Horace attended the Corpus Christi College at Oxford where he studied law. During his vacations he often went on golfing pilgrimages to Scotland (St. Andrews) and also returned home to play golf in Devon. During these trips the Hutchinson’s house boy, who also worked at the club, would caddy for Horace. This boy’s name was John Henry Taylor, the future five time Open champion. While at Oxford, Horace played cricket and earned the number one position on the golf team. In the first University Golf Match, held in 1878 at Wimbledon Common, Horace led the Oxford team to a 24-hole victory over their rivals from Cambridge. Upon graduation, Horace went to London and began to read for the bar. However, his recurring health issues (severe headaches) forced him to rethink his future. He would spend the next several months traveling through Europe (MacWood, 2001).

In 1886, Horace won his first Amateur Championship and, in the same year, published his first book. *Hints on the Game of Golf* was intended to provide swing instruction to the game’s emerging participants in England. In 1887, Horace became the
first person to repeat as British Amateur Champion, making him a prominent figure in the
golfing world. Though, Hutchinson was not just a writer and a golfer. In 1888, he was
requested to layout his first golf course. The course would become known as Royal
Eastbourne, and would be notorious for its wild greens (MacWood, 2001).

In 1890, Hutchinson made his best appearance at the Open Championship,
finishing sixth at Prestwick Golf Club. Capitalizing on his successes, Horace published
arguably his most famous and widely circulated work, Golf, in 1890. The book was
released as part of a series called The Badminton Library of Sports and Pastimes. The
Badminton Library series was a sporting and publishing project conceived and founded
by Henry Somerset of London. Between 1885 and 1902, the books developed into a
series which aimed to comprehensively cover all major sports and pastimes. Horace, as a
known golfer and writer, was a logical choice to author the volume on golf. While the
publishers had originally intended golf to be a subsection of a book dedicated to Scottish
sports, Horace convinced them to dedicate a volume entirely to golf (MacWood, 2001).

Later in 1890, feeling fulfilled with golf, Hutchinson moved to the London area
and began a serious study in anatomy and sculpture. Here he would be mentored by the
famous sculpture and painter G.F. Watts. Watts had recently married artist and socialist
Mary Seton Fraser Tytler in Epsom, Surrey in 1886. Though he learned much during that
year under the tutelage of Watts, an onset of sickness in the winter of 1890 forced
Hutchinson to retreat to warmer weather in Biarritz, France. However, Watts was an
influential artist whose views influenced those of Hutchinson and many others.
Hutchinson would later describe his “Watts-worship” in his 1920 publication Portraits of
the Eighties. Watts’ Italian influences and mastery of multiple artistic disciplines,
including sculpture and painting, would serve as a model to many of the Pre-Raphaelite and Arts & Crafts artists who would follow. In fact, his younger wife, Mary Watts, would become a major founder of the Arts and Crafts movement from their home in Compton, Surrey. The Watts’ relationship with Hutchinson and proximity to the early heathland courses southwest of London suggest they likely had a larger influence over the evolution of golf architecture than most realize (MacWood, 2001).

While recovering in France, Hutchinson golfed at Biarritz golf course. Climbing up and down the contours must have been good for both his health and his mind, because he returned to England in the following spring once again in love with the game of golf. Further, his travel had inspired him to write about the famous courses of Britain and Europe. In 1891, Hutchinson published his third book, *Famous Golf Links* (MacWood, 2001).

Afterwards, Hutchinson would again return to golf design with layouts at Royal West Norfolk (1892), Isles of Scilly (1904), Le Touquet (1904) with both J.H. Taylor and Willie Fernie, and Harewood Downs (1906) with J.H. Taylor. In 1897, he would join the new periodical *Country Life* as its first golf editor. Here he produced the first widely circulated dialogues about golf courses, golf architects and design theories. He also invited numerous talents to contribute including Herbert Fowler, Harry Colt, Peter Lees, J.H. Taylor and James Braid. Later, Hutchinson’s writing would be complimented by both Bernard Darwin (*Evening Standard*) and A.J. Robertson (*Golf Illustrated*). In 1898, Hutchinson would help form the Oxford and Cambridge Golfing Society (OCGS). Horace served as the Society’s first president, and was joined by John Low as captain, Arthur Croome as secretary, and H.S. Colt as a committee member. Bernard Darwin
took part in the first match. As such, his influences were well established before England’s golf boom in the early 1900s (MacWood, 2001).

By the end of the 1900s, Hutchinson had begun to limit his design work and competitive play to focus on his writing. In 1897, he wrote *British Golf Links: A Short Account of the Leading Golf Links of the United Kingdom.* In 1898, he published two books, namely *Golfing* and *The Golfing Pilgrimage on Many Links.* In *The Golfing Pilgrimage*, Hutchinson relayed the importance of visiting golf’s great courses, most notably the home of golf at St. Andrews. In 1899, Horace published *The Book of Golf and Golfers.* In 1908, he published *Golf: A Complete History of the Game, Together with Directions for Selection of Implements, the Rules, and a Glossary of Golf Terms.* Also in 1908, Hutchinson was made the first English captain of the Royal and Ancient links at St. Andrews. In 1912, he published *The New Book of Golf.* Finally, in 1919, although written in 1913 before the war, he published his final golf book *Fifty Years of Golf.* Hutchinson suffered again from lingering illness later in his life and sadly committed suicide in Chelsea in 1932. However, he was noted by many pre-war and inter-war architects as a major influence (MacWood, 2001).
B.2 - John Laing Low

Literary Works:

- *F. G. Tait: A Record – Being His Life. Letters and Golfing Diary* (1900)
- *Concerning Golf* (1903)
- contributed to the publication *Some Essays on Golf-Course Architecture* (1920)
- penned many articles and opinion pieces on golf architecture, rules and competitions

John L. Low was a noted golfer and writer. Low learned the game of golf as a young boy under the tutelage of Old Tom Morris and Young Tom Morris at St. Andrews. From 1891 to 1894, Low attended Cambridge where he played on the golf team in frequent matches against the team from Oxford. In 1898, Low helped form the Oxford and Cambridge Golfing Society (OCGS). He served as the Society’s captain for almost twenty years. In 1903, Low served as the Captain of the Oxford-Cambridge Team which made a tour of America. In 1904, he played for the Scottish side in an international match against England. Low reached the semi-final of the British Amateur Championship in both 1897 and 1898. Further, in 1901 he finished runner-up to Harold Hilton during the British Amateur Championship at St. Andrews. For several years he served as chairman of the R&A Rules Committee, retiring in 1921 (Advocate, 1929).

However, Low’s legacy is not that of a golfer. He is remembered for his lasting effect on golf course architecture. Low served as Captain of several golf clubs
throughout his lifetime, including Cambridge and Blackheath. However, it would be his
time at Woking that would change not only the look of the course, but also all other
courses to follow. In 1903, while working with the club’s greenkeeper Stuart Patton on
improvements to the course (a process that would take some 40 years to complete), Low
published the illuminating work *Concerning Golf*. In it, Low describes 10 guidelines (not
actually numbered) to consider when designing a golf course. This work would impact
many later architects, including Alister MacKenzie and Charles Blair MacDonald.
Later, Charles Blair MacDonald would do the same with his own 9 principles outlined in
his book *Scotland’s Gift, Golf* in 1928. Further, Woking member Tom Simpson would
define his own 8 principles in his 1929 publication, written with H.N. Wethered, titled
*The Architectural Side of Golf*. Low’s writings were widely circulated and affected many
of the best designers of the Golden Age (Advocate, 1929).
Robert Hunter was born the middle child of five children to William and Caroline Hunter in Terra Haute, Indiana. His father was a successful carriage maker, so Hunter lived well in an upper middle class family. As a youth, Hunter attended both public schools and was tutored by private instructors. In 1896, he graduated from the University of Indiana with a B.A. degree (Hansan, 2014).

Robert Hunter soon became an advocate for the less fortunate. His political and social views were largely affected by the crushing poverty he witnessed during the deep economic depression that hit America in the mid-1890s, juxtaposed to the prosperity and privilege experienced by his own family. In 1896, after his graduation, he moved to Chicago and was appointed Organizing Secretary of the City’s Board of Charities. His new role brought him into contact with activist Jane Addams. Through her, Hunter
became involved with the Settlement Movement, a reformist social movement occurring in both England and the US between 1880 and 1920, with the goal of getting the rich and poor in society to live more closely together in an interdependent community. As such, Hunter became a resident of Hull House where he joined other social reformers such as Ellen Gates Starr, Edith Abbott, Grace Abbott, Mary McDowell, Florence Kelley, Julia Lathrop, Alice Hamilton and Sophonisba Breckinridge in community living (Hansan, 2014).

In 1899, Robert Hunter travelled to London and became a resident of the Toynbee Hall settlement. While in England, Hunter would meet socialist leader Keir Hardie and the anarchist, Peter Kropotkin, further developing his radical beliefs. He soon returned home to Chicago to serve as chairman of the City Home Association. Deeply affected by social norms, Hunter published *Tenement Conditions in Chicago* in 1901 (Hansan, 2014).

In 1902, Hunter moved to New York where he became leader of the University Settlement on Rivington Street, in New York City’s Lower East Side. Through this position, he chaired a New York Child Labor commission and directed their successful campaign to enact child labor laws in 1903. Hunter also became involved in an anti-tuberculosis campaign. Also during this time, Hunter would meet Caroline M. Phelps Stokes, the daughter of New York banker Anson Phelps Stokes, who he would marry in 1903. Later in 1903, Hunter resigned from University Settlement and devoted himself fully to research and political action (Hansan, 2014).

In 1904, Hunter published possibly his most important work *Poverty*, the first wide sweeping statistical survey of America’s poor. In 1905, Hunter, his new wife, brother-in-law (J.G. Phelps Stokes), and sister-in-law (Rose Pastor Stokes) all joined the
American Socialist Party. In the fall of that same year, Hunter was named to the executive committee of the newly established Intercollegiate Socialist Society in New York. His goal was to promote the discussion of socialist ideals in colleges and universities (Hansan, 2014).

Between 1906 and 1914, Hunter focussed on the success of the Socialist Movement through his own political advancements and writings. Robert Hunter ran for political office twice on the socialist ticket. His first attempt was for a seat in the New York State Assembly, this endeavour ended in defeat. His next attempt came when he ran as a candidate for United States Senator in the State of Connecticut. Sadly, this campaign also ended in a loss. However, his political failings did not prevent Hunter from continuing literary endeavours. Hunter had his work published in a wide-variety of newspapers and journals. His works included Socialist at Work (1908), Violence and the Labor Movement (1914), and Labor in Politics (1915). However, during and after WWI the socialist movement began to deteriorate. Hunter no longer felt that the party’s goals were aligned with his own. As such, Hunter, along with many other high-profile members, would resign from the party and its campaigns (Hansan, 2014).

No longer focused on his political aspirations, Hunter was free to look for new opportunities. In 1917, he would move to California to serve as a professor at the University of California at Berkeley. Here he lectured in politics and economics. Ironically, Hunter had also been an avid golfer since childhood, a sport which at the time was typically viewed as an elitist activity in the United States. Hunter won the Gold Vase Tournament at Pebble Beach Golf Links in 1922. However, it was before that on a family trip to Britain in 1912 that Hunter would meet Harry Colt, who in turn would
introduce him to Dr. Alister MacKenzie. On the same trip, Hunter would spend six months studying the great courses of the British Isles, likely influenced by the suggestions of Colt and MacKenzie. Later, while at Berkley, Hunter helped to establish the Berkeley Country Club, later renamed Mira Vista, and recruited Willie Watson to design the course. Hunter would remain with the club serving as Chairman of the Greens Committee for several years. However, it was this introduction to the design of golf courses that would become his focus for the next half decade (Cornish and Whitten, 1993).

Robert Hunter was instrumental in persuading Alister MacKenzie to visit California. Likely spurred by Hunter’s publication of *The Links* in 1926, MacKenzie partnered briefly with Hunter on several projects in the California area. These projects include Meadow Club (1927), Cypress Point Club (1928), Valley Club of Montecito (1928), and Green Hills Country Club (1930). Hunter also assisted with the improvement made by MacKenzie at Pebble Beach Golf Links in preparation for the 1929 United States Amateur Championship (Cornish and Whitten, 1993).

As stated previously, in 1926 Hunter published a masterpiece of architectural literature – *The Links*. While a departure from his previous social works, it served as the first complete study of design and construction. The book seems specifically written for those about to build a golf course and provides a most accurate definition of the game. It was the first book to use illustrations (black and white pictures) to emphasize good design ideas and principles. For an intellectual from a foreign discipline to spend such considerable time and effort to construct a book about golf architecture seems odd; however, what is more surprising was the quality of the work. The Links has since
represented one of the great literary works in the field and is currently still in publication as part of the Classics of Golf series. Many of today’s best architects credit this books as a major influence on their careers (Cornish and Whitten, 1993).
B.4 - Bernard Richard Meirion Darwin

Literary Works:

- Credited with inventing daily golf writing
- Wrote for The Times of London from 1907-1953
- Wrote for Country Life from 1907-1961
- Wrote more than 15 golf books, including:
  - *Three by Darwin* (1902)
  - *The Golf Courses of the British Isles* (1910)
  - *The Game’s Afoot! An Anthology of Sports Games; the Open Air* (1926)
  - *Green Memories* (1928)
  - *Out of the Rough* (1932)
  - *Playing the Like* (1934)
  - *Golf Between Two Wars* (1944)
  - *Golfing By-Paths* (1946)
  - *A History of Golf in Britain* (1952)
  - *James Braid* (1952)
  - *Golf* (1954)
  - *The World that Fred Made: An Autobiography* (1955)

Bernard Darwin was born to Francis Darwin and Amy Ruck in Downe, Kent, England in 1876. Four days after his birth, Bernard lost his mother due to complications from the delivery. As such, he was taken in and raised by his grandparents Charles and
Emma Darwin. His grandfather Charles Darwin was the famous British naturalist who founded the Theory of Evolution. Darwin was educated at Eton College, a private boarding school in Berkshire, near Windsor. Darwin then attended Trinity College at Cambridge University where he studied law. Between 1895 and 1897, Bernard was a Cambridge Blue in golf and captained the team in his final year of study (World Golf Hall of Fame, 2016).

Upon graduation, Darwin practiced law in London for several years. In 1902, he published his first book *Three by Darwin*. Wisely using his grandfather’s name in the title, Darwin was able to release his collection of golf fiction. Three stories were Darwin originals, never before seen in print, and the others were a collection of the earliest and most famous golfing stories. In 1906, he married the Irish born artist Elinor Monsell. The couple would soon have three children, one son and two daughters. However, Bernard was not satisfied with his chosen career. So, despite any formal training, Darwin leveraged his earlier fictional work and background in golf to secure positions with both *The Times* and *Country Life* as a golf journalist. Bernard Darwin became the first ever daily golf writer, instead of as an occasional feature writer, and wrote for *The Times* from 1907 to 1953 and for *Country Life* from 1907 to 1961 (World Golf Hall of Fame, 2016).

An intellectual man, Bernard Darwin became the voice of golf in Britain. His 1910 publication *The Golf Courses of the British Isles* was a landmark release and still remains relevant to many golfers. It also helped spur on the English golf craze of the pre-war period. In 1913, he travelled to the United States and was the official scorer for the historic playoff victory of Francis Ouimet over Harry Vardon and Ted Ray at the U.S. Open. In 1922, he again returned to the U.S. and covered the first ever Walker Cup for
The Times. He never reported on events he had not witnessed himself, in person. As such, he became well-travelled and well known in golfing circles. In 1953, he was present for Ben Hogan’s Open Championship victory, during his remarkable Grand Slam season. By the end, Darwin served as the figurehead for golf worldwide. During his life he: was a member of 9 golfing societies; was a member at 25 golf clubs; was a founding member of Aberdovey Golf Club in 1892; was a member of 20 associations and non-golf clubs; served as President of the Oxford and Cambridge Golfing Society for 19 years; hosted the first ever golf television broadcast in 1939; played on more than 278 golf courses throughout his lifetime and visited countless others; and, was Captain of the Royal and Ancient Golf Club of St. Andrews in 1934 (Dormey House Press, 2015) (World Golf Hall of Fame, 2016).

Darwin’s writings have a timeless quality and serve as a portal to the past, summarizing one of the most important eras in the evolution of golf course design. His vivid prose conveyed a deep respect for the game. His books *Golf Between Two Wars* (1944) and *A History of Golf in Britain* (1952) provide insight to the game, its players, equipment, courses, and architects from a different time. These books were deemed so valuable that 13 of them were re-published or re-edited through Herbert Warren Wind’s curated Classics of Golf Library. In 2005, Bernard Darwin was elected to the World Golf Hall of Fame in the Lifetime Achievement category (World Golf Hall of Fame, 2016).
B.5 - Max Howell Behr

Literary Works:

- Editor of *Golf Illustrated* magazine (1914-1918)
- penned numerous articles on golf course design and construction throughout his life
- his writings were hugely influential over Bobby Jones and Alister MacKenzie in the design and construction of Augusta National

Born in New York but raised in northern New Jersey, Max Behr inherited his love of golf from his father and grandfather, who were founding members of the first golf club in the United States, the St. Andrews Golf Club in Yonkers, New York, founded in 1888. Max became a scratch golfer who was a medalist at the President’s Cup. He was a member at Morris Country Club in New Jersey as a youth, and later joined both Somerset Hills and Baltusrol (Yale, 2009).

In 1902, Behr started at Yale University and quickly made his way onto the golf team. While on the team, Max learned about the finer details of golf and golf courses from his coach, Robert Pryde. In addition to being a coach, Pryde had also practiced as a course designer. Through Pryde, Behr learned what elements made some courses better than others. Pryde also revealed the relationship between design and nature, and what worked and what did not when it came to course design and construction (Yale, 2009).

When he graduated in 1905, Behr concentrated on becoming a professional golfer. In 1909, Behr won his first New Jersey State Amateur Championship over his
rival Jerome Travers. Travers had defeated Behr the two previous years, in 1907 and 1908, for the Amateur Championship title. Max would defend his championship in 1910, again defeating Travers. Also in 1910, Behr would become the medallist of the first tournament at the National Golf Links of America, surpassing both Jerome Travers and C.B. MacDonald. However, Max soon realized his skills on the course would not allow him to compete with the country’s best players, so eventually he put competitive golf behind him to concentrate on other opportunities (Yale, 2009).

In 1914, Behr launched what would become a lifelong career in golf writing, when he became the first editor of the fledgling periodical *Golf Illustrated* based in New York. Through his position as both writer and editor, Behr penned numerous articles relaying his philosophies on design to the greater public. Behr disliked the use of rough and preferred to have wide open areas where strategy was dictated by bunkering, a philosophy he would describe as the “line of charm” (Yale, 2009).

In 1918, Behr experienced tragedy through the death of his young wife. Needing a change of scenery, he soon moved out to California to start over. At the time, the 1920s golf boom was just starting to sweep Southern California and Behr’s reputation as a player and writer soon pulled him into the world of design. Between 1922 and 1927, Behr was responsible for the design of approximately a dozen courses in California. His new build projects included Hacienda CC (1922), Montecito CC (1922), Lakeside Golf Club of Hollywood (1924), Oakmont CC (1924), and Rancho Santa Fe Country Club (1927). Design commissions also included re-modeling work at Victoria Club (1923), Brentwood CC (1925), and the Lake and Ocean courses at Olympic Club (1926). While the Great Depression put an end to Behr’s design career, he continued to write about
course design, construction practices and the rules of golf. In the August 1927 edition of American Golfer, Behr published an article titled *Art in Golf Architecture*. It remains his most enduring statement and perfectly sums up the purpose of golf course architecture (Yale, 2009) (Cornish and Whitten, 1993).

Most experts agree that Behr’s best work was completed at Lakeside Golf Club. Both Alister MacKenzie and Bobby Jones were great admirers of Lakeside, and Max Behr. It is believed that Behr’s work at Lakeside was a major influence on Jones who played most of his golf at the course while filming the *How I Play Golf* series in 1931. However, as much of his work has been changed or modified today, it has become almost impossible to make a study of his actual design work. Fortunately for golf architecture, Max Behr was more influential as a golf writer than he ever was as a designer of golf courses (Yale, 2009).
B.6 - Pat Ainsworth Ward-Thomas

Literary Works:
- published numerous articles in *Country Life*
- *The Royal and Ancient* (1980)

Pat Ward-Thomas was once described by Herbert Warren Wind as, “one of the finest golf writers of all time” (Ward-Thomas, 1990). As a young boy growing up in north central England, Pat learned the game of golf from his father. He began to follow the top tournaments closely, but not with the same devotion that he would impart on his second love, cricket. He penned some articles on cricket just before the outset of the Second World War. Shortly before the start of WWII, Pat enlisted in the Royal Airforce and was made a bomber pilot (Ward-Thomas, 1990).

In November of 1940, while returning from a heavy raid on Berlin, Pat’s plane was hit by anti-aircraft fire causing the loss of one engine. While over Holland, both engines were lost and the crew was forced to parachute to safety. Unfortunately, the men were captured by German soldiers and taken to the prison of war camp at Stalag III. Here, Pat was one of the leaders in creating a crude, nine-hole golf course which the men
played with balls they fashioned themselves from cushions and shoes. The men also wrote to the Red Cross and to the Royal and Ancient Golf Club of St. Andrews to request some equipment. The men received clubs and balls. Soon the activity was very popular and helped the POW’s keep their sanity during the long months that passed before the Russian advance from the east led to their eventual escape to safety. Pat Ward-Thomas won the inaugural tournament played on the nine-hole course, the Sagan Golf Club (Ward-Thomas, 1990).

Pat remained with the RAF until 1950. However, during this period he also moonlighted as freelance writer, covering golf, rugby and soccer. His goal was to land a fulltime position as a sports journalist. After writing a piece covering the 1949 Ryder Cup match at Ganton, Pat was hired as a golf correspondent by The Guardian in 1950. Here he stayed covering all things golf until 1977. In 1969, Pat published a collection of his writings on golf in The Lay of the Land (Ward-Thomas, 1990).

However, between 1951 and 1980 only one British golfer managed to win the Open Championship. As such, Pat often looked for new opportunities with his writing to spur on the sport he loved so much. In 1976, Pat co-authored perhaps his most enduring work, with friends Herbert Warren Wind, Charles Price and Peter Thomson, titled The World Atlas of Golf. The original 280 page book, later reworked in 1989 as The New World Atlas of Golf, was the first book to take a global view of the game, its history, and the architects of course design. The book includes rendered aerial plans of the world’s best courses, provides insights to the construction process, and reveals interesting historical facts about the courses. The World Atlas of Golf covers the courses that are seminal in the history of the sport as well as those that simply demonstrate architectural
brilliance. This effort was such an impact that it has been carried forward by other writers and contributors; most notably, author and new editor Mark Rawlinson who became associated with the series in 1990, shortly after Pat Ward-Thomas’ death in 1982 (Ward-Thomas, 1990).
B.7 - Herbert Warren Wind

Literary Works:

- writer of numerous articles for magazines, including *The New Yorker* and *Sports Illustrated*
- co-founded and curated the Classics of Golf Library in 1983
- wrote or edited 14 books, including:
  - *The Story of American Golf* (1948)
  - *The World of P.G. Wodehouse* (1972)
  - *Following Through* (1985)

“Herb” Wind was born in Brockton, Massachusetts in 1916. He learned golf from an early age and played during the summers at Thorny Lea Golf Club in Brockton. Between 1934 and 1937, Herb attended Yale University where he made the varsity teams in basketball and track and field. He also covered sports for the *Yale Daily* and penned articles about jazz for the *Yale Record*. Between 1937 and 1939, after graduating from Yale, Wind moved to England and enrolled at Cambridge University. Here, while earning a master’s degree in English Literature, Wind became friends with the noted
British golf writer Bernard Darwin. Through this relationship, Wind started his career in
golf writing (Yale, 2009).

After two years of service with the Air Force in China during WWII, Wind returned home to the United States. In 1947, he joined *The New Yorker* magazine writing
personality profiles. At the same time, he worked on what was to become his first
publication, and the seminal book on the history of golf in America, *The Story of American Golf*. After working on it for more than a year, it was finally published in 1948. Wind worked as a staff writer, mostly covering golf, with The New Yorker until 1954. From 1954 to 1959, Wind served as the first golf editor of *Sports Illustrated*. In 1958, Wind termed the three-hole stretch of holes 11, 12 and 13 at Augusta National, Amen Corner. In the 1960s, he helped to launch the famous television series, *Shell’s Wonderful World of Golf*. He created all the scripts for the first two years of the show. In 1976, Wind co-authored *The World Atlas of Golf* with Pat Ward-Thomas. In 1983, Wind made his most significant contribution to the legacy of golf when he co-founded and curated the Classics of Golf Library, a sixty-nine book series containing most of the greatest golf literature ever produced (Yale, 2009).

In 1992, the PGA presented Wind with its lifetime achievement award. In 1995, the USGA honoured him with its annual Bob Jones Award for distinguished
sportsmanship in golf. In 2003, Wind donated his personal papers to Yale. Wind passed away in 2005 in Bedford, Massachusetts at age 88. In 2008, Herbert Warren Wind was elected to the World Golf Hall of Fame in the Lifetime Achievement category (Yale, 2009).
As a child, Ron Whitten decided to write his own book on golf course design because he could not find many books on the subject. While still in high school he began to study the history of golf course design. Whitten now jokes that he entered law school in an effort to pay for his golf obsession. From 1985 to 1989, and after successfully completing law school, Ron worked as a prosecutor in his hometown of Topeka, Kansas. During this time he also served as a contributing editor on architecture at Golf Digest. In 1987, Ron initiated the first “Armchair Architect” contest, an idea based on Country Life Magazine’s 1914 competition for the best “two-shot hole.” In 1990, Ron left law to serve as the full-time architecture editor at Golf Digest. Since then, Ron has managed all of the magazine’s features related to golf architecture, including the biennial survey of “America’s 100 Greatest Golf Courses,” the annual “Best New Courses” survey, all
Ron Whitten is also well published with four books dedicated to the history of golf course architecture. His first, published in 1981, stemmed from his research on golf course architecture completed in high school and college. After law school, Ron seriously began to gather his research and was put into contract with golf course architect Geoffrey S. Cornish, who had also been researching the discipline’s history since 1950 and was also planning to write a book. The two met, compared notes, and decided their research complimented the others well. So, in 1981, the ground-breaking volume The Golf Course was released. Ron had written the text, Cornish the index, and each shared an equal portion of the biographies. In 1993, an updated volume was released, titled The Architects of Golf (Golf Club Atlas, 2000) (Erin Hills, 2015).

In addition to his written work on golf course architecture, Ron Whitten worked with designers Michael Hurdzan and Dana Fry to complete Erin Hills, a golf course located in Erin, Wisconsin. The golf course opened for play in 2006 and represents Whitten’s first venture into the field of golf course design. While it is unclear when or if Whitten may return to design, his longstanding position at the helm of Golf Digest’s architectural projects is ongoing (Golf Club Atlas, 2000) (Erin Hills, 2015).
B.9 - Bradley S. Klein

Portfolio Highlights:

- Architecture Editor of Golfweek magazine
  (1988-present)


- Rough Meditations: From Tour Caddie to Golf Course Critic, An Insider’s Look at the Game (1997)

- Discovering Donald Ross (2001)


- Wide Open Fairways: A Journey Across the Landscapes of Modern Golf (2013)

- published two club histories:
  o Desert Forest Golf Club: The First Forty Years (2004)

Bradley S. Klein has been a Senior Writer and Architecture Editor with Golfweek magazine since 1988. Since 1996, he had served as the National Director of Golfweek’s
best courses and has run its national golf course rating system. Klein is a former PGA
Tour caddie and 2007 inductee into the International Caddie Hall of Fame. In 1997, he
wrote his first golf book, based on his experiences as a caddie, titled *Rough Meditations:
From Tour Caddie to Golf Course Critic, An Insider’s Look at the Game*. However, this
was not his first attempt at writing (Golf Business News, 2014) (Wogahn, 2011).

Klein earned a Ph.D. in political science from the University of Massachusetts
between 1976 and 1984. Starting in 1992, he served as an Assistant Professor at Trinity
College in Hartford, Connecticut for two years. During this time, he lectured in political
theory and international relations. In 1994, Klein authored *Strategic Studies and World
Order: The Global Politics of Deterrence*. This would be his last non-golf publication
(Golf Business News, 2014).

In 1999, Klein retired from university research and teaching to concentrate on
golf full-time. However, he would bring his academic approach to the study of golf in
2001 with the publication of his second golf book *Discovering Donald Ross*. This was
not a typical golf biography as Klein, “thought it was time to explore a golf course
architect as a craftsman and as a professional and to treat them much like one might treat
a musician, writer or artist for what influenced them and how their entire body of work
evolved” (Wogahn, 2011). His works have turned Klein into an authority on golf
architecture. He has even blurred the line between writer and designer, such as his work
as a design consultant with Old Macdonald, the fourth course at Bandon Dunes Resort in

Bradley Klein has written and lectured widely on sports media, golf design,
course operations, and maintenance. Klein won the Golf Writers Association of
America’s award for the best column of 2006. In 2015, he was selected by the American Society of Golf Course Architects (ASGCA) as the recipient of the Donald Ross Award. The award is presented annually to an individual who has made a positive contribution to golf and golf course architecture. Klein’s articles and books keep golf architecture in the public eye, and start conversations about how design contributes so much to the essence of the game (Golf Business News, 2014) (ASGCA, 2015).
B.10 - Paul Daley

Literary Works:


- *Golf architecture: A Worldwide Perspective*
  - *Volume 3* (compiled & edited, 2005)
  - *Volume 4* (compiled & edited, 2008)
  - *Volume 5* (compiled & edited, 2009)
  - *Volume 6* (compiled & edited, 2013)


Paul Daley was raised in Australia, near the sandbelt region of Melbourne. After dividing his time over eighteen years between his job in the pharmaceutical industry and his attempts to play golf at a competitive level, Paul decided to focus his attentions on his favourite non-playing aspect of golf, writing. In 2000, Daley self-published his first book *Links Golf: The Inside Story*, after being passed on by several publishers who deemed the golf market too niche. Paul formed Full Swing Golf Publishing, and generated an initial
release of 5000 copies. The books sold well, resulting in further interest from Pelican Publishing and an additional North American release (GolfTI, 2003).

The following year, in 2001, Daley released his second book *The Sandbelt: Melbourne's Golfing Heaven*. His work provides insight into the unique history and design characteristics of a geographic hotspot for quality golf architecture. However, it would be in 2002, with the release of Volume 1 of the series *Golf Architecture: A Worldwide Perspective*, that Daley would introduce his ground-breaking concept of an essay series. Likely inspired by Colt and Alison’s *Some Essay’s on Golf Course Architecture* (1920), and Geoff Shackelford’s *Masters of the Links* (1997), Daley invited contributions from many renowned golf course architects and edited their essays into a single literary volume. This would be the first of what is now a six volume series. Volume seven is expected to be released in 2017 (GolfTI, 2003).
B.11 - Geoff Shackelford

Literary Works:


- *The Art of Golf Design* (co-authored, 2001)


- *Lines of Charm: Brilliant And Irreverent Quotes, Notes, And Anecdotes from Golf’s Golden Age Architects* (2005)

Geoff Shackelford attended Pepperdine University in Malibu, where he played on the golf team. He graduated in 1994 with a B.A. in Communications. Quickly moving to
writing about the sport he loved, Geoff published The Riviera Country Club: A Definitive History in 1995. In 1997, he focused on the architect of the same course when he published The Captain: George C. Thomas Jr. and His Golf Architecture. Likely drawn to golf architecture during his research of George C. Thomas, Shackelford compiled and edited Masters of the Links: Essays on the Art of Golf and Course Design, which he released that same year. Masters of the Links presents the best classic and modern interpretations of golf architecture from its top artists (Shackelford, 2016).

In 1999, Shackelford published one of his greatest works. The Golden Age of Golf Design proved to be landmark book, summarizing the greatest era in golf course design, its influential designers, and their projects. In 2000, Shackelford was commissioned as a co-designer with Gil Hanse on the design of Rustin Canyon Golf Course in Moorpark, California. The project was ranked as 76th in Golfweek’s Top 100 Modern Courses for 2006. Riding this success, and likely with a new appreciation for the design and construction process, Shackelford authored Grounds for Golf: The History and Fundamentals of Golf Course Design in 2003. With this instant classic Geoff eloquently summarized golf architecture into a beginners guide to the discipline. Finally, in 2004 after understanding the larger issues facing the game of golf, Geoff penned The Future of Golf: How Golf Lost Its Way and How to Get It Back (Shackelford, 2016).

In 2004 and 2005, The Golfer named Shackelford one of "modern golf's ten most influential writers" (Shackelford, 2016). In addition to his numerous publications, Geoff is a Contributing Writer to Golf World magazine, a Contributing Editor to Golf Digest, and a weekly contributor to the Golf Channel's Morning Drive television show. Geoff has travelled throughout the world to study many the top golf courses. He has taught
restoration at Harvard University's Graduate School of Design with noted architect Brian Silva. He continues to write and consult on design projects, including the Horse Course at the Prairie Club (2009) and the restoration of the North Course at Los Angeles Country Club (2010). Both projects were completed in collaboration with architects Gil Hanse and Jim Wagner (Shackelford, 2016).
Appendix C. – Profiles of Influential Golf Owners/Members

C.1 - George Arthur Crump

Projects:

- Pine Valley (1913-1918)

Contributors to the design of Pine Valley:

- George Crump (owner, builder, financier)
- H.S. Colt (initial routing)
- C.H. Alison (consultant)
- Walter Travis (consultant)
- A.W. Tillinghast (friend, Hell’s Half Acre)
- Hugh Wilson (primary architect after Crump’s death in 1918)
- William Fownes (advisory committee)
- Simon Carr (advisory committee)
- Alan Wilson (soil and turfgrass consultant)
- William Flynn (final four holes)
- George C. Thomas Jr. (founding member)
- Perry Maxwell (green renovation in 1933)

Arthur Crump was born in Philadelphia, Pennsylvania in 1871. He was the son of the British vice-consul to America. As a youth, he was active in many activities including golfing, fishing and hunting with his father. Crump was an early member at several courses in the Philadelphia area, including Philadelphia Country Club. Arthur
inherited the profitable Colonnades Hotel in Philadelphia, which he later sold in 1910 to build his dream golf course. It is not known where Crump first saw the future site of Pine Valley Golf Club while on a train to Atlantic City, or whether it was a frequent hunting sport for him and his father. Regardless of how he found it, Crump purchased 184 acres near the Sumner, New Jersey railroad stop in 1913. Crump would spend $100,000 of his own money, and live on the site until his death in 1918, to ensure the project was completed to match his vision (Shackelford, 1999).

However, more importantly than how he got the land was what he did with it once he had it. Pine Valley is a success because of Crump’s wherewithal to consult others. He did not stubbornly design the course by himself, nor did he need to beg a committee or membership for approvals and more time. Instead, Crump sought the opinions of the era’s finest architects, creating a melting pot for design greatness. Even after Crump’s untimely death in 1918, and with four holes left unfinished (holes 12 to 15), his social design process ensured that there were enough designers available with an understanding of his vision to be able to complete the golf course. As such, Pine Valley endures as a testament to Crump’s visions, and more so to the process used to create arguably the greatest course in the world (Shackelford, 1999).
C.2 - Hugh Irvine Wilson

Projects:

- Merion, East Course (1911-1912)
  - created reconstruction plans (1924)
- Merion, West Course (1912-1913)
- Pine Valley (assisted with completion of final four holes, 1918)

Hugh Wilson came from money and grew up in a posh Philadelphia suburb. In 1902, he graduated from Princeton and secured a job in insurance. Passionate for the game of golf, Hugh became a member of the local Merion Cricket Club. In 1910, the Club decided to create a new golf course to replace its existing layout which the new Haskell golf ball had rendered insufficient (too short). As such, the Club purchased land in the suburb of Ardmore. Wilson was appointed chairman of the committee in charge of creating the new course. He was likely selected to head the committee because he was the only member willing to spend seven month abroad studying the most important golf course of the British Isles. Wilson was also intelligent enough to meet with C.B. MacDonald and review his new masterpiece on Long Island before departing for Europe. The knowledge he gained from this meeting, and his time oversees, combined with his own ideas resulted in a masterpiece of design on only 125 acres (Shackelford, 1999).

Merion’s innovative bunkering, efficient routing, and original character create an enduring test of golf. The collaboration and painstaking field work completed by Hugh Wilson, construction supervisor William Flynn, and long-time course superintendent Joe
Valentine, are likely the primary reasons for the course’s continuing success. The East Course opened in 1912). The design was so well received that Wilson was asked to design and construct the West Course the following year. In addition to his design successes, Wilson was renowned for his experimentation with turfgrasses. He even published various articles in the USGA’s Green Section on turfgrass and maintenance issues (Shackelford, 1999).
C.3 - Henry Fownes (and William Fownes)

Projects:
- Oakmont (1903-1904)

Henry Fownes was born in Pittsburgh in 1856. In 1896, he sold his company, Carrie Furnace Company, to Carnegie Steel Corporation for a sizeable amount. Fownes retired a wealthy man and was content to serve on several boards and play a lot of golf. However, soon Fownes developed a larger goal, he wanted to design and build his own golf course. After organizing enough members to fund the project, Fownes purchase some 200 acres and began making plans for his new course, Oakmont. In 1903, with 150 men and some two dozen mule teams, Fownes would spend the next year meticulously crafting the land into his desired vision (Glenn, 2015).

Fownes design was intended to frustrate the world’s best players. While this penal design had no water hazards, the greens were deliberately large, sloped, fast, and undulating. In the early years the course had fewer than 100 bunkers but the sand was furrowed using a special rake to ruin one’s score. However, Fownes did rely on the site’s natural landforms to present the challenge. The site was also treeless, allowing long views across the entire property. While Oakmont owes its design mostly to Henry Fownes, its place in the history of architecture can also largely a result of the work by Henry’s son William. Over time, William Fownes took many of the strategic design ideas being utilized at other Golden Age layouts and worked them into the existing
design at Oakmont. The result is a course that both tests the best golfers, but also require some strategic play and thought (Glenn, 2015).
C.4 - Dick Youngscap

Projects:
- Firethorn Golf Club (1986)

Dick Youngscap is a building architect, turned developer, from Lincoln, Nebraska. In 1986, Dick completed the Firethorn Golf Club in Lincoln with architect Pete Dye. The course was well received and Dick sought to continue his developer ways with a second course. However, the land he acquired was somewhat special. Dick purchased 11,000 acres within the Sand Hills region of Nebraska in 1990. His intent was to create a different type of course. Dick asked rising stars Bill Coore and Ben Crenshaw to visit the site. The duo had just finished courses at Kapalua (Plantation) and Barton Creek Resort in 1991. Coore and Crenshaw had quickly developed a reputation for producing classic, playable and natural courses. Instead of hiring Pete Dye or Jack Nicklaus, who had both been considered for the work, Dick decided to offer the commission to Bill and Ben, under the belief that they would be the least intrusive to the natural beauty of the site (Dear, 2011).

The pair was presented with 8,100 acres of the rolling, sandy terrain on which to find 18-holes for golf. Finding great holes on such a site was not the problem. Coore and Crenshaw found over 130 different world class holes overlapping across the property. The difficult task was to conceive the final layout in such a way as to take advantage of as many of the best features on the site as possible. The final layout was such a work of genius that the construction only disturbed three thousand cubic yards of dirt, or as
architect Tom Doak once described the effort, “moving the dirt in spoonfuls” (Dear, 2011).

The construction process was intentionally slow and took three summers to complete. Under the watchful eye of Dick Youngscap, only $1.1 million was spent to complete the course, of which nearly 75% went toward the irrigation system. Dick watched over the project like a hawk and counted every penny for his investors. The result shocked the world, as most golf course projects at the time were being built for five to ten million dollars. Further, the intimacy of the design with the surrounding landscape was like nothing that had been completed in modern times. Sand Hills opened in 1995 with an event attended by the 140 investors and the golfing press. The work was applauded, but no one expected what was to come. Sand Hills would soon become recognized as the cornerstone of a new age in golf course design, dubbed the “minimalist” movement. Sand Hills was recently ranked No. 12 in *Golf Magazine’s* Top 100 Courses in the World for 2015 and was ranked as No. 1 on *Golf Week’s* Best Modern Courses, 2015 (Dear, 2011).
C.5 - Mike L. Keiser

Projects:

- The Dunes Club (Michigan, USA – 1995)

- Bandon Dunes Golf Resort (Oregon, USA)
  - Bandon Dunes (1999)
  - Pacific Dunes (2001)
  - Bandon Trails (2005)
  - Old MacDonald (2010)
  - Bandon Preserve (13-hole, par-3, 2012)
  - Bandon Municipal (pending approvals)

- Barnbougle Dunes Golf Resort (Tasmania, with Richard Sattler)
  - Barnbougle Dunes (2004)
  - Barnbougle Lost Farm (2010)

- Cabot Links Resort (Nova Scotia, Canada, with Ben Cowan-Dewar)
  - Cabot Links (2012)
  - Cabot Cliffs (2015)

- Sand Valley Golf Resort (Wisconsin, USA)
  - the first course is to be completed by 2017

Mike Keiser is an entrepreneur in the greatest sense of the word. In 1971, Keiser co-founded an eco-greeting card business from inside his two-bedroom Chicago
apartment with friend Phil Freidman. Recycled Paper Greetings (RPG) was formed with
the intent of demonstrating the environmental benefits of using recycled paper in the
greeting card industry. Popularity for their products quickly grew. So much so, that by
1978 the company was so successful that the partners were profiled by *People* magazine.
In 2005, the company was valued at $250 million when a private equity company
purchased the business (Dear, 2011).

Being a shrewd business person and already planning ahead, Keiser had begun to
explore his next career in golf while still building his greeting card company. In 1995,
Keiser opened the Dunes Club in New Buffalo, Michigan. Using architects Dick and
Tim Nugent of Chicago, and a healthy dose of his own architectural ideas, Keiser
produced possibly the top 9-hole course in the country on 68-acres of densely wooded
sand dunes adjacent to Lake Michigan. However, it would be his next investment that
would start his transformation from an average capitalist into an industry mogul and icon
(Dear, 2011).

In 1999, Bandon Dunes opened for play. The layout was conceived by Scottish
born architect David McLay Kidd and was routed over the rugged, sandy coast of
Bandon, Oregon. Keiser had purchased more than enough land for one course with a
vision to create a multi-course, destination resort. Keiser hired Kidd, a young and
untested designer, because of their shared views on links golf and natural-based design.
Kidd, at the time, was uninfluenced by the manicured American version of the game, as
his golfing ideals had been derived with his father, the legendary head greenkeeper at
Gleneagles in Scotland. Keiser understood the quality of his coastal site and wanted an
architect that would put the effort into highlighting what was already there. With the
recent success of Sand Hills in Nebraska, Keiser could have hired Bill Coore and Ben Crenshaw to do the work, but feared it would be seen as their second course. As such, he opted to select a new comer for the commission. The work gained worldwide acclaim (Dear, 2011).

Capitalizing on this success, Keiser began plans for his second course on the Bandon property. Pacific Dunes was opened for play in 2001. This Tom Doak design has been recognised by many as one of the finest golf projects of modern times. Again, Keiser chose a young and passionate designer who shared his design ideals, and who he knew would devote their utmost to the work at hand. Pacific Dunes quickly eclipsed Bandon Dunes as the resorts top layout, and was recently ranked No. 21 in *Golf Magazine*’s Top 100 Golf Courses in the World for 2015 (Dear, 2011).

With a world class one-two punch behind him, Keiser once again took advantage of the momentum and expanded his golfing empire. By 2005, Keiser had opened two more courses. Firstly, a third course was opened at the Bandon Resort, this time the team of Coore and Crenshaw was finally brought in to create a layout, named Bandon Trails. In Tasmania, Keiser purchased more property and utilized Tom Doak, again, to create the famous Barnbougle Dunes. As one of the only developers to commit to the construction of golf courses during the recent financial crisis, Keiser emerged with two more courses – Old MacDonald at Bandon (2010) and Barnbougle Lost Farm in Tasmania (2010) (Dear, 2011).

Similar to his efforts spent pioneering the use of recycled paper in the greeting card industry, in 2010 Keiser started to reveal his true colours as a philanthropist in the golf industry. That year, Keiser resolved that the best way to support his passion for
conservation, and his desire to bring economically viable opportunities to Oregon’s South Coast, was to establish the Wild Rivers Coast Alliance. However, the true intent of the organization was not revealed until the opening of the 13-hole par-3 golf course, aptly named Bandon Preserve, at the Bandon Resort in 2012. Keiser has since devoted all the net proceeds from the Bandon Preserve course to fund the grant projects of the alliance (Dear, 2011) (WRCA, 2010).

Similarly, in 2012 Keiser opened the highly touted Cabot Links in Inverness, Nova Scotia, Canada. This project transformed a former coal mining site and town into an economic and tourism success story. Keiser has since continued his successful model, building at least two courses at all his resort destinations. His courses are golf cart free, ensuring that local boys and girls have added exposure to the game through caddy programs. Keiser’s vision of golf has transformed the industry and has allowed the “minimalist” movement to overcome individual “signature” styles (Dear, 2011).
Appendix D. – Questionnaires

Dear [Name],

My name is Keith Cutten and I am a Masters of Landscape Architecture student at the University of Guelph in Ontario, Canada. The purpose of this letter is to request your participation as a respondent to the attached questionnaire. Your input will aid in the successful completion of my thesis work and will allow me to take the next step in my already developing career in golf course design. As a future colleague, I would ask that you please take approximately half an hour from your schedule and assist me with some detailed feedback.

As a participant, you will be invited to answer questions about the influences and experiences which have shaped your design philosophies; the professional journey which has led to your current portfolio of work; and, the design process you use to create new golf course projects. Questions will require both listed and short answer responses. First, please confirm your consent below by selecting a box. By selecting ‘Yes’ you will have agreed to participation in this study. If you select ‘no’, your anonymous responses will not be part of the data set used.

Completing this survey will take between 25-35 minutes. Although it would be greatly appreciated if you would answer all material as frankly as possible, you should not feel obliged to answer any material that you find objectionable or that makes you feel uncomfortable. You may withdraw at any time without consequence. Your identity will not be recorded and therefore your anonymity will be protected. To help us ensure confidentiality, please do not put your name on any response.

The results of this research may be published in professional journals or presented at scientific conferences, but any such presentations will report only aggregated findings, which in some instances may be illustrated by short, anonymous quotes carefully selected so as not to breach individual confidentiality. Should you be interested in receiving a copy of the study findings, please check the box below. Any questions about study participation may be directed to Keith Cutten at kcutten@uoguelph.ca.

If you would like a printed copy of this questionnaire mailed to you please contact Keith Cutten at +1 (226) 750-3855. If you decide to print and handwrite your responses, please mail the completed pages to:

Keith Cutten
64 Brant Road South
Cambridge, ON, Canada
N1S 2W6

Again, thank you for your interest in participating in this research study.

[Signature]
Best Regards,
Keith Cutten, H.BES., MCIP, RPP

☐ Please place a mark in the box to the left should you wish to receive a copy of the study findings.

CONSENT: I hereby consent to be a participant in this study... ☐ YES or ☐ NO
SECTION ONE – INFLUENCES

1a) Please list the people who have shaped you and your golf course design career.

1b) Please list the types of media which have impacted you and your golf course design career (examples could include... books, television, magazines, websites, etc.)
1c) Please describe the places which have inspired you and your golf course design career.

1d) Please describe the experiences which have influenced you and your golf course design career.
SECTION TWO – PROFESSIONAL JOURNEY

2a) List your education, either schooling and/or life experience, which have defined your accumulated knowledge on the subject of golf course design.

2b) List any travel which has shaped your views on the subject of golf course design.
2c) Describe any mentorship which defined your journey to becoming a golf course architect.

2d) Describe the significant projects which shaped your views and career in golf course design.
SECTION THREE – DESIGN PROCESS

3) Please describe your design process for a new golf course project. Divide this process into steps and explain how each would contribute to its successful completion. Please use diagrams as appropriate.
Dear [Name],

My name is Keith Cuten and I am a Masters of Landscape Architecture student at the University of Guelph in Ontario, Canada. The purpose of this letter is to request your participation as a respondent to the attached questionnaire. Your input will aid in the successful completion of my thesis work and will allow me to take the next step in my already developing career in golf course design. As a future colleague, I would ask that you please take approximately half an hour from your schedule and assist me with some detailed feedback.

As a participant, you will be invited to answer questions about the influences and experiences which have shaped your design philosophies; the professional journey which has led to your current portfolio of work; and, the design process you use to renovate or restore existing golf courses. Questions will require both listed and short answer responses. First, please confirm your consent below by selecting a box. By selecting ‘yes’ you will have agreed to participation in this study. If you select ‘no’, your anonymous responses will not be part of the data set used.

Completing this survey will take between 25-35 minutes. Although it would be greatly appreciated if you would answer all material as frankly as possible, you should not feel obliged to answer any material that you find objectionable or that makes you feel uncomfortable. You may withdraw at any time without consequence. Your identity will not be recorded and therefore your anonymity will be protected. To help us ensure confidentiality, please do not put your name on any response.

The results of this research may be published in professional journals or presented at scientific conferences, but any such presentations will report only aggregated findings, which in some instances may be illustrated by short, anonymous quotes carefully selected so as not to breach individual confidentiality. Should you be interested in receiving a copy of the study findings, please check the box below. Any questions about study participation may be directed to Keith Cuten at kcutten@uoguelph.ca.

If you would like a printed copy of this questionnaire mailed to you please contact Keith Cuten at +1 (226) 750-3855. If you decide to print and handwrite your responses, please mail the completed pages to:

Keith Cuten
64 Brant Road South
Cambridge, ON, Canada
N1S 2W6

Again, thank you for your interest in participating in this research study.

Best Regards,
Keith Cuten, H.BES., MCIP, RPP

☐ Please place a mark in the box to the left should you wish to receive a copy of the study findings.

CONSENT: I hereby consent to be a participant in this study... ☐ YES or ☐ NO
SECTION ONE – INFLUENCES

1a) Please list the people who have shaped you and your golf course design career.


1b) Please list the types of media which have impacted you and your golf course design career (examples could include... books, television, magazines, websites, etc.)


1c) Please describe the places which have inspired you and your golf course design career.


1d) Please describe the experiences which have influenced you and your golf course design career.


SECTION TWO – PROFESSIONAL JOURNEY

2a) List your education, either schooling and/or life experience, which have defined your accumulated knowledge on the subject of golf course design.

2b) List any travel which has shaped your views on the subject of golf course design.
2c) Describe any mentorship which defined your journey to becoming a golf course architect.

2d) Describe the significant projects which shaped your views and career in golf course design.
 SECTION THREE – DESIGN PROCESS

3) Please describe your design process when renovating or restoring existing golf courses. Divide this process into steps and explain how each would contribute to its successful completion. Please use diagrams as appropriate.