



John Low, Woking and Modern Golf Architecture

Robert Crosby

reviews the contribution to the heritage of Golf, by John Low, starting in Part I, with his pivotal role in founding the strategic school of golf architecture

JUST DOWN FROM CAMBRIDGE in the summer of 1902, a young Tom Simpson was at Woking Golf Club for a society match. It was a stormy day and the matches had been delayed. Waiting out the weather, Simpson overheard club members complaining about recent changes made by John Low and Stuart Paton to the fourth hole. A year earlier they had made other controversial changes to the course, including adding a bunker that 'ate' into the seventeenth green and which the members had labelled, perhaps a little derisively, the 'Johnny Low' bunker.

In one of the most remarkable passages in the literature of golf architecture, Simpson vividly recalled the day and the impact that Low's and Paton's work had on him:

I ... may perhaps be forgiven for recalling the occasion when I realized, for the first time, what were the real possibilities which lay in golf architecture. It was raining hard one morning, I remember, at Woking, and members in the club-house were relieving their feelings by condemning, in no uncertain terms, a new bunker which had been placed in the middle of the fairway at the fourth hole--at that time about 180 yards from the tee, in a direct line to the hole. Every one was agreed that such an innovation was a criminal outrage, and an insult as well, to the intelligence of the members. In the afternoon I went out, fully prepared to find myself in complete agreement with the views which had been so eloquently expressed. So far, however, from agreeing, I realized for the first time, as soon as I saw this much-maligned hazard, that the true line to the hole should not always be the centre of the fairway, and that the placing of a bunker had a far more serious and useful purpose than merely the punishing of a bad shot. This led me to see the importance of golf architecture as an art as well as a science. I made up my mind on the spot to make a close study of the subject and to examine the great Scottish courses purely from this point of view.¹

What Simpson saw at Woking was a new kind of golf architecture, by which he meant something quite specific. It wasn't about Woking's superb turf or how naturally the course fitted into its heathland setting. It was the logic behind the placement of a new bunker on the fourth hole. Simpson had never seen anything like it on an inland course. It opened a

window for him on to a universe of architectural ideas that he had not dreamt existed until that rainy afternoon in Surrey. And as Simpson noted, it changed his life. Soon afterward he resigned from his London law firm and took up as a golf architect, setting out on a distinguished career that was to span more than 50 years.

Woking was Bernard Darwin's London golf club and he too was struck by the fooleraw there. In essays and books written over four different decades Darwin told and retold (each time slightly differently) the story of what had happened. He too overheard conversations in the Woking clubhouse:

A. "You can't persuade me that it is right to have a bunker bang on the line to the hole, exactly where a good drive should be."

B. "If there is a bunker there, then that cannot be the line to the hole. Your drive was not a very good one but a very bad one."

A. "It was not a bad one. It was a perfect shot - hit in the middle of the club."

B. "You should use your head as well as the club head."

After this the conversation becomes unfit for publication.²

Darwin understood better than most what was going on. Low and Paton were Darwin's fellow club members and among his closest friends. Darwin had introduced Low to the Club several years earlier. He often spent weekends at Paton's home just behind Woking's eighteenth tee. They were all members of the Oxford Cambridge Golfing Society. Given their friendship and Darwin's lifelong interest in golf architecture, it's hard to imagine that Darwin wasn't in on things from the beginning. Like Simpson, Darwin saw the changes at Woking as a break with prevailing ideas about golf course design. Indeed, Darwin understood the events there as nothing less than the dawn of what he called 'modern golf architecture'.

Today we would call it the dawn of 'strategic golf architecture', a theory of golf design that has dominated the discipline for more than a century, ever since - well, ever since Low's and Paton's changes at Woking. As with

other disciplines, golf architecture has had its revolutionary moments. We tend to forget that many modern ideas about golf design have not always been with us. Some of the most important of them had a controversial birth at Woking about 1902, which is why the eyewitness recollections of Simpson and Darwin are so special.

The following will try to sort out what it was that Darwin and Simpson meant when they said that the architecture at Woking was 'new'.³ That will require putting the events at Woking in their historical context. The changes made there were not casual. They reflected ideas that Low had developed earlier in articles in the *Pall Mall Gazette*, the *Athletic News* and other journals of the day. Some of those essays were included in Low's book *Concerning Golf* which appeared in 1903. Low advocated what amounted to a root and branch reconsideration of the most widely accepted architectural ideas of his time. More than a century on, Low's writings sound surprisingly modern. Perhaps that is because he set golf architecture on a trajectory that it still follows today.

Inland courses and the Normal View

Like most great ideas, strategic golf architecture was born as an answer to a question. The question was one that seemed

to be on everyone's mind at the turn of the twentieth century. What to do about the hundreds of new courses in Britain and the United States built in response to the Great Boom in the game's popularity in the last decades of the nineteenth century? These 'scientifically' designed courses were widely seen as dull, unattractive affairs. Compounding matters was the introduction of the rubber core Haskell ball. Everyone was hitting the ball farther and straighter, but the golf courses had not kept up. Their was a near-universal belief that better inland courses were needed. But that was the rub. How do you go about building better inland golf courses?

There was an outpouring of commentary at the time trying to answer that question, an outpouring that was, in essence, a first theory of golf architecture. Looming over that commentary was the shadow of the great links courses. Inland golf courses started life as the ugly step children of St Andrews, Hoylake and other seaside courses, universally understood to be the best golfing venues in the world. But it was unclear how (or even if), they might they serve as models for building courses in other locales. How people found ways to translate the virtues of links courses into the very different setting of inland golf is not just the story of the early evolution of inland courses but also the story of the early evolution of



John Low



Stuart Paton

modern golf architecture writ large, an evolution sparked by John Low and Stuart Paton at Woking.

There were obvious problems with using links courses as models. Links and inland courses differ not just by location, appearance and playing characteristic, but also and most importantly by how they came to be. Links courses were thought to be happy accidents of nature, the byproducts of receding shorelines, native grasses and grazing animals. Inland courses, by contrast, were the products of careful human planning and for that reason often referred to as 'scientifically designed'. Given such differences, links and inland courses were each assumed to be *sui generis*, each inhabiting separate architectural universes. As such, the ineffable, 'divine' origins of links courses signified to Victorian designers that importing their virtues into man-made layouts was a non-starter. A high wall was presumed to separate the two kinds of courses.

Horace Hutchinson was the first to make a crack in that wall. Unhappy with the artificial look of inland courses, as early as 1889 Hutchinson urged that they be built to fit more naturally into their native terrains. The natural look of links courses was Hutchinson's model. But heathland and parkland settings came with serious agronomic and engineering challenges including re-shaping terrains, draining clay soils and removing dense vegetation. Willie Park, Jr was among the first to find solutions to those problems. Sunningdale Old and Huntercombe, both built by Park in rugged heathland locales, demonstrated that it was possible to build naturalistic courses in such settings. Others soon followed Park's lead. Considerations of naturalism have remained a core tenet in golf architecture ever since.

But if links courses were useful models for improving the look of inland courses, what they had to say about the placement of hazards and other features was less clear. Given assumptions about the serendipitous origins of links

courses, there was a sense that they had little to contribute to such questions. Designers and commentators of the era turned instead to familiar, intuitive concepts for their basic design principles. It was presumed, for example, that since the main job of hazards was to capture fozzles, they should be arranged to facilitate that goal. Designers often refined that simple prescription by trying to match the type and location of bunkers with the type and trajectory of the fozzie they were intended to catch. Topped shots, thought to be the worst sort of miss, were singled out for the worst punishments, usually in the form of cop bunkers positioned in front of tees and greens. Less egregious misses were treated more leniently, usually by way of shallow bunkers set well away from centerlines and greens. The pains taken to ensure such correspondences were rooted in deeper concerns about 'fairness'. The punishment inflicted by a hazard should be proportional (the severity of the penalty should match the severity of the miss) and predictable (hidden hazards, for instance, were condemned).

At the turn of the twentieth century there was little debate about such things. When it came to rationales for the location of hazards, Park, HJ Whigham, JH Taylor and Garden Smith in Britain and Walter Travis and Devereux Emmet in the United States and virtually everyone else in the world of golf held something like such views.⁴ With a mixture of disdain and humour Fred Hawtree called this loose consensus the 'normal view'⁵, a term that will be adopted here. At the heart of the Normal View were two related premises – first, that hazards should never be located so that better shots received harsher treatment than worse shots and, second, that only by properly punishing bad shots would good shots obtain their just rewards.

The 'levelling hole', as it was called at the time, illustrates how the Normal View applied such ideas. Whether due to the lack or the misplacement of hazards, levelling holes



Cop bunkers pictured at Eltham in Hutchinson's British Golf Links

were thought deficient because they 'levelled' the results of good and bad play. Failure to deal with the topped shot was often cited as a cause of the trouble.⁶ Absent a proper arrangement of hazards, a topped shot might trundle along dry, unirrigated fairways, negating the advantages earned by a well-hit ball. The Normal View's cure was to build cop bunkers in front of tees and across green approaches, thus preventing such misses from obtaining unmerited rewards. In short, levelling holes were anathema because they allowed for 'unfair' playing outcomes.

Low's and Paton's changes at Woking Golf Club

That was the architectural world in which Tom Dunn had designed Woking in 1893 and in which John Low and Stuart Paton began making changes to the course in 1901. As noted, the most famous of those changes were to the fourth hole, a medium length par four. Low and Paton removed a geometric cross bunker guarding the green approach and installed a new centerline bunker in the middle of the fairway where a good drive would normally finish. Modelled on the Principal's Nose bunker on the Sixteenth at the Old Course, the new bunker forced the player to either thread his drive between the bunker and out of bounds on the right or play safely wide to the left. New bunkers were also cut into the left front of the green, making an approach from the right the preferred angle. Finally the green was sloped to fall off from front to back, making it more difficult to hold aerial approach shots, something required by anyone trying to reach the green from the left. Simpson's drawing of the revised Fourth illustrates the strategic issues created by the new bunkers.

Other changes made at Woking at about the same time also caused a stir. Ironically, those changes would now be considered so commonplace that it is hard to believe that they were ever the subject of debate. In 1901 John Low directed the removal of a Dunn cross bunker on the seventeenth hole. In its place he built what Darwin described as 'pits', one dug into the left side of the fairway adjacent to the landing area of good drive and another even deeper 'pit' was dug 'into' the right side of the green. Low's description of the reception of his new bunkers is delightfully arch:

The other day the Green Committee of a club in which I am interested had the boldness to cut a bunker in the side of one of their putting greens. When the daring deed was discovered, the members assembled around the offending orifice and gazed into it as into a tomb. 'What is this for?' said one, 'It looks like a bunker in the middle of a putting green!' . . . 'It's not so bad just now,' murmured a rather erratic performer 'but suppose the hole was quite close to the side of that pit, what could one do?' Soon each and all stood silently staring at the yellow sand: a sadder or more hopeless set of men I have seldom seen. The bunker was on the 17th green . . . [I]t seems to me a very reasonable thing to put a bunker in the side of a large putting green. If you cut bunkers where no one ever goes, or which can be carried by a child, they cost just as much to make, and no one ever uses them. If you make a bunker beside a hole

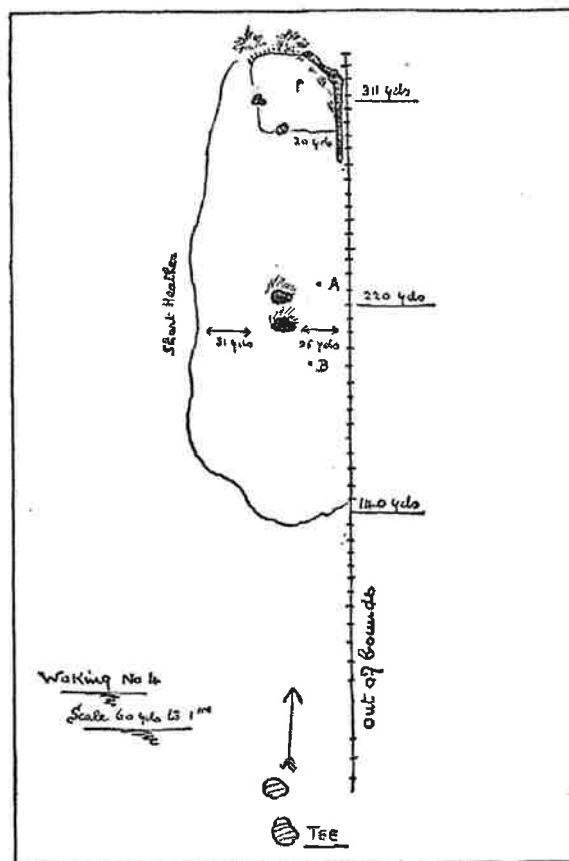
and the members of a club wish to 'hole out' – this being an important point in the game – they must go near the bunker and may sometimes have the fun of seeing an opponent working among the sand. Bunkers, if they be good bunkers and bunkers of strong character, refuse to be disregarded and insist on inserting themselves; they do not mind being avoided, but they decline to be ignored.⁷

Low would be pleased that his bunkers remain where he put them, one still 'eating' (Alister MacKenzie's term) into the seventeenth green, its brow hard against the putting surface. At about the same time similar bunkers were cut 'into' greens at the Second, Third, Fourth, Eleventh and possibly other holes.⁸

A new philosophy of golf course architecture

The changes at Woking embodied design principles that neither Simpson nor Darwin had seen before on inland courses. The first thing they noticed was that bunkers had been assigned a new role. As Low put it at the time:

On many courses the hazards are laid out to catch only the really bad shots; this kind of difficulty has little interest for the good player. A good player, if he be on his game, should hardly make a really bad shot during the round; he should not slice, for instance, his ball into a bunker a hundred and twenty yards from the tee. What tests good golf is the hazard which may or may not be risked; the bunker which takes charge of the long but not quite truly hit ball.⁹



Tom Simpson's plan of the Fourth at Woking

If the main function of bunkers had once been to penalise 'really bad shots', the new bunkers at Woking were positioned to penalize the 'not quite truly hit ball'. That simple shift in emphasis had tectonic implications for golf architecture. Dealing with bad shots was the *raison d'être* of golf design for the Normal View. Low believed, however, that the work of golf design should be focussed elsewhere. Hazards should not be placed where fozzles were most likely to go, but rather along what Low called the 'beeline' – the line of play of the better golfer playing aggressively. Affecting the play of better players, not the worst players and was the point of Low's and Paton's modifications at Woking. The centerline bunker on the Fourth and the 'Johnny Low' bunkers built into green platforms were all intended to narrow the preferred routes to the hole of better golfers.¹⁰

Low's insight went to fundamental matters. To one extent or another, all golf courses function as sorting devices that distinguish good from bad play. The issue raised by Low was where along the spectrum of good play to bad play should that sorting function make its cuts. Bunker schemes of the Normal View did their work at the bad play end of that spectrum. The main concern of such schemes was to assure that bad shots were predictably and equitably penalised. Low believed such designs committed the cardinal architectural sin – they made for dull golf, especially for better players. Low wanted the sorting function of hazards to do its work at the other end of the spectrum. Hazards should be oriented to the game played by stronger golfers, sorting their good play from their 'not quite good enough' play. Simpson described well what Low had in mind:

The object of design is to create difficulties ... to outwit the expert or at least to set his brains to work to find the best solutions. In a word, the object is to make him conceive the big idea and attempt the utmost that skill and nerve may suggest to execute it.¹¹

By orienting bunker schemes along the beeline, Low had turned the way players perceive hazards upside down. Well-placed hazards, rather than being traps to be avoided, ought to entice the golfer. They should lure a golfer into taking risks if he wants to take the most advantageous route to the hole. They shouldn't function as 'lighthouses' warning players to stay away; they should tempt, drawing golfers to play closer to them. Good bunkers should be Sirens. As Low put it:

For golf at its best should be a contest of risks. The fine player, on his way round the links, be just slipping past the bunkers, gaining every yard he can, conquering by the confidence of his own 'far and sure' play. ... The true hazard should draw the play towards it, should invite the golfer to come as near as he dare to the fire without burning his fingers. The man who can afford to take risks is the man who should gain the advantage.¹²

Low was clear about the implications of such ideas. If the goal of locating hazards was to present a 'contest of risks', then the equitable concerns of the Normal View needed to be sidelined. That's what Low meant when he wrote, "There is hardly such a thing as an unfair bunker."¹³ He was attacking a theory of

golf architecture that took 'sporting equity' as an organising principle. A 'nearly good drive' on the fourth hole at Woking might well receive harsher treatment than a bumbling fozzle, an outcome the Normal View would condemn as patently unfair. But Low believed that the Normal View was pursuing the wrong goals. Rather than concerning themselves with ensuring equitable outcomes, architects should strive instead to present golfers with a 'contest of risks'. Or, to use a more modern locution, well-designed holes should offer golfers strategic choices.

But even more revolutionary than Low's ideas was the grounding he gave to them. He presented them as discoveries, the fruits of a close study of the best links holes. However murky the origins of links courses, Low made the unprecedented claim that there were *knowable* design principles at work in them. The philosophers in the room will appreciate that Low was making a novel epistemological claim. Links courses for Low weren't just haphazard mash-ups of grass, sand and wind, but sources of useful architectural knowledge. There was a logic to their bunkering schemes, routings and green locations that explained why they were so fascinating and 'indestructible'. All of which had important implications. If the design principles at work in links courses were *knowable*, then there was no reason to think that those same principles couldn't be applied to the design of any golf course anywhere. And with that crucial insight, the high wall once thought to separate links and inland courses suddenly didn't seem so high.

Making changes at Woking based on lessons learned from great links holes was what had most impressed Simpson and Darwin. As Darwin wrote:

Here was something of a new belief founded upon old holes. How those old holes attained the form in which we know them no-one can tell. Assuredly it was not owing to the genius of some heaven-sent designer whose name has unjustly been lost. It was rather through good fortune and a gradual process of evolution. The holes changed their forms many times according as whins grew or were hacked away, according as the wind silted up sand here or blew it away there, according as the instruments of the game changed so that men could hit further and essay short cuts and new roads. Yet they possessed some indestructible virtue, so that however they changed superficially, golfers united in praising them and loved to play them, gaining from the playing of them some pleasing emotion that other holes could not afford. To define that emotion and the cause of it was really to make a discovery, and to proclaim the discovery was to proclaim a new faith.

It was Mr. John Low who first put this faith into memorable words.¹⁴

Darwin went on to note about Low, Paton, Harry Colt and other early strategic architects that 'the primary virtue of the modern architect lies in the fact that he did analyse: that he went back to the classic models, and especially to St Andrews, and insisted on discovering why golfers had for years particularly enjoyed playing particular holes'.¹⁵ What was new about the new golf architecture was that it had

discerned a logic embedded in great links holes at a time when prevailing architectural views had assumed there was no such logic. It was no accident that almost everything Low wrote about golf architecture pivoted around an analysis of specific features at the Old Course, Hoylake or other links courses. Those features, not abstract concepts like 'fairness' or 'sporting equity', served as Low's architectural touchstones. And that, of all of the revolutionary things Low and Paton said and did, might have been the most revolutionary of all.

There is a tendency to assume that architectural ideas evolve gradually; that year by year and course by course, architectural ideas have slowly coalesced into their familiar modern forms. But the hubbub at Woking belies such notions. Woking marks a breakpoint in thinking about a number of foundational concepts. If others had talked about such ideas before Low, he was the first to articulate them as part of a larger design theory. If such ideas had lain hidden in links courses for millennia, Low was the first to tease them from their hiding places. If they made appearances on inland courses before Woking, Woking was the first time they appeared as the result of a clearly stated design philosophy.

The second part of this essay will look at Low's place in the history of golf. Low was a powerful figure, not just in architectural circles but in the game generally. The reactions that Low's ideas stirred up will also be discussed. He profoundly influenced the direction of golf architecture, but that change in direction did not go without resistance. JH Taylor, Harold Hilton and others had misgivings about this 'new' architecture. But perhaps the most important consequence of Low's design ideas was they helped to confer on the profession of golf architecture a status that was inconceivable before 1900 and that, too, will be discussed. All in the hope that we will arrive at a better, more historically informed understanding of the elusive concept of strategic golf architecture.

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Endnotes

1. **Simpson**, Tom. *Golf Architecture*, from *The Game of Golf*, The Lonsdale Library. 1931. Seely Service. 163-164
2. **Darwin**, Bernard. *The Golf Courses of the British Isles*. 1910. Duckworth. 17-22.
3. See **MacKenzie**, Alistair. *The Spirit of St Andrews*. 1995. Sleeping Bear. 18 and passim. MacKenzie saw the significance of the events at Woking similarly. He thought the old versus new architecture controversy had also erupted at Alwoodley Golf Club a couple of years later over his proposed design for that course. He refers to Low numerous times in *The Spirit* as a pathfinder for a new age of golf architecture. Sir Guy Campbell also concurred about Woking's pivotal role, noting that 'I never cease admiring the genius which created these holes [at Woking], especially when one remembers that they were made long before the southern golfer had been educated up to this kind of thing.'
4. Many of these commentators had changed their views by 1910 or so. Walter Travis, for example, wrote often in the *American Golfer* and elsewhere about the evolution of his architectural views over the course of the decade.
5. **Hawtree**, Fred. *Aspects of Golf Course Architecture 1889 - 1924*. 1998. Grant. 70. Hawtree was one of the first historians of the era. He notes in *Aspects* that golf architecture circa 1900 was often a throwaway topic. There seemed to be an assumption at the time that the main issues were more or less settled and of limited interest. As Hawtree observed, discussions of architecture tended to be 'tucked away in later chapters of books, as if authors ran out of things to say about championships, close matches or near misses'. Matters related to golf design were seen as a mundane topics and inserted 'as if to pad their books with a few thousand extra words . . . to present the normal view [of golf course architecture].'
6. A hole's length could also be problematical. At the time there were thought to be 'Procrustean Axioms' (Hutchinson's term) about proper hole lengths. Good two or three shot holes should always require two or three full shots, respectively. Holes that fell short of such axiomatic lengths were often called 'levellers'. The problem being that even if you missed a shot it was still possible to reach the green with a good recovery, thus levelling good and bad play.
7. **Low**, John L. *Concerning Golf*. 1903. Hodder and Stoughton. 172-173.
8. **Connelly**, James. *A Temple of Golf*. Private. 1992. Paton and Simpson made changes to the seventh through the tenth holes at Woking in the late 1930s. John Morrison made additional changes in the 1950s. The Woking club history notes that there were possibly other, unrecorded changes made to those and other holes at different times.
9. **Low**. op cit. 168.
10. By contrast, the 'beeline' for the Normal View was largely an afterthought. It was whatever fairway remained after bunkers had been positioned to deal with 'really bad shots'. Which was why Low thought such design ideas resulted in the worst of all golfing worlds - dull courses for better players and punishing courses for weaker golfers.
11. **Wethered**, HN and T **Simpson**. *The Architectural Side of Golf*. 1929. Longmans, Green. 35
12. **Low**. op cit. 171
13. **Low**. op cit. 169.
14. **Darwin**, Bernard. *Architectooralooral*, from *Playing the Like*. 1934. Chapman & Hall.
15. *Ibid*.