THE PSYCHOLOGY OF DESIGN

"... But reduce the dimensions of the target and give it a slightly unusual or unexpected shape, and the chances are that the ball will not be laid within twice the distance from the pin that it would otherwise have found, although the shot, so far as the position of the pin is concerned, is precisely the same in either case. The shot follows the eye and the line of thought... An impending sense of misfortune will almost certainly be reflected in the action of the club."

—WETHERED and SIMPSON, The Architectural Side of Golf, 1929.

"When you get those dudes thinking, they're in trouble."
—Pete Dye, 1985.

eal talent. Anyone can learn to hit the ball with reasonable proficiency; the key to success is to do it with consistency. Since the golf swing happens so fast, our control of it is largely subconscious. It should come as no surprise that golf architecture also has a distinct psychological element.

The most common phobia among golfers is a fear of water hazards, even if the location should not cause them to think twice. A carry of 100 yards is readily accomplished by most golfers, but how much more often do we top our drive when there is a pond just in front of the tee? Our failure isn't really that we prematurely looked up, it is the fear of making fools of ourselves and self-doubt that makes our swing go haywire.

The clever golf architect understands the psychology of the game, and exploits it in his design in a variety of ways. The architect who wished only to give the average golfer his best mathematical chance against the professional would build no hazards at all, since they weigh more heavily on the psyche of the weaker player. That would take all the fun out of the game, as Dr. Mackenzie recognized in *Golf Architecture*:

"One of the objects in placing hazards is to give the players as much pleasurable excitement as possible. . . .

"It is an important thing in golf to make holes look much more difficult than they really are. People get more pleasure in doing a hole which looks almost impossible, and yet is not so difficult as it appears.

"In this connection it may be pointed out that rough grass is of little interest as a hazard. It is frequently much more difficult than a fearsome-looking bunker or belt of whins or rushes, but it causes considerable annoyance in lost balls, and no one ever gets the same thrills in driving over a stretch of rough as over a fearsome-looking bunker, which in reality may not be so severe."

It was not lost on Mackenzie that by building such hazards, the average golfer's confidence would grow as he progressed through the round, even more so if he should occasionally land in a bunker and find that it was not as difficult as he had imagined. Instead of using psychology to defeat the good player, Mackenzie's courses inspire the average golfer.

Mackenzie was probably the first golf architect with the perspective of providing fun for the average golfer, as opposed to meting out strict justice to shots played. He knew there must not be impossible carries to frustrate the golfer, but that there had to be enough formidable hazards to excite the golfer. He knew there had to be some potential birdie holes—par-3 holes and short par-4's—to encourage the weaker player, and that the beauty of the golf course could inspire and console the golfer off his game.

To extend the principle, Mackenzie's courses are always sure to include at least a couple of short par-4 holes—relatively easy from the standpoint of par value. Their psychological effect on two classes of golfers, however, is far different. The short par-4 gives the average player a realistic chance at a par or a birdie, and may boost his confidence for the more difficult holes ahead. But the Tour professional expects to make birdies on easy holes, and puts pressure on himself in the process. If he misses his birdie on a short par-4, he may lose his concentration; if a series of tougher holes follows, his frustration may lead to bogeys.

The absence of hazards on a hole can also have unexpected effects in competition, because of the different ways in which different golfers perceive a hazard. The poorer player sees the hazard, imagines all the trouble lying in wait, and has difficulty freeing his mind to make a normal swing. The accomplished player focuses in on his target, and as long as it is reasonably sized for the length of the shot to be played, surrounding it with bunkers only serves to help him concentrate on his target more clearly. When there is no guardian hazard, the situation is reversed: The poorer player is relieved and may hit his shot right up to the hole, but the accomplished player may have more difficulty visualizing the shot he wants to play because there are no landmarks to assist him.

The accomplished player's consistency from 100 yards in suggests a radically different approach to designing the short par-4. With a wedge in hand, most hazards are window dressing for the Tour player. His target is a circle ten or fifteen feet around the hole, and no hazard could be closer than that. So why surround the green with hazards? To give the poorer

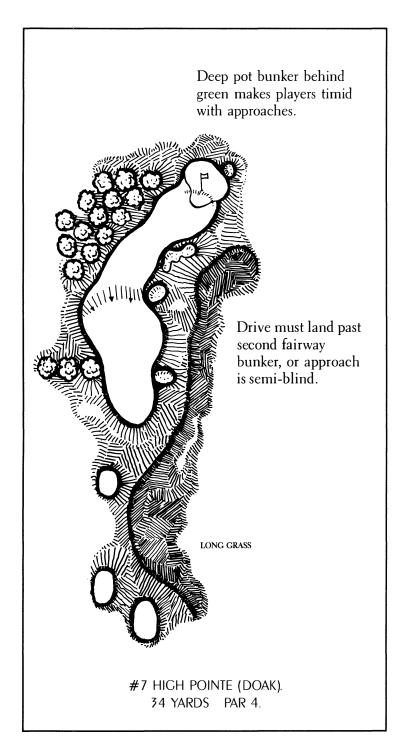
golfer a breather by leaving him a fairly easy, open approach, and hope that the professional gets frustrated if he misses his birdie, since he would probably make his par 95 times out of 100, no matter what hazards are put around the target.

The 7th hole at High Pointe, my first solo design, nicely illustrates this point. The drive can be difficult for the better player who wants to avoid a semi-blind approach by hitting past the bowl in the fairway; but the green is completely open to the running approach, giving the weak player a chance to recover from even the poorest drive. The deep pot bunker hidden behind the green is a bonus: The weaker player often forgets it is even there, but the better player fears the hazard he cannot see, and often fails to get his approach back to the hole.

The same principle applies not only to long approaches, but to short chips and pitches around the greens. When the grass grows high around the greens the player has no choice but to pitch his ball back onto the putting surface, and the better pitcher fares better. Mow the apron down to fairway height, as at St. Andrews, Augusta, or Royal Dornoch, and even modest contours now add tremendous interest to the play. The master of the short game may putt up a steep bank onto the green, or chip a ball into the bank and let it expire after its first bounce carries it up onto the green, instead of pitching onto the green with the fear that a short shot will roll back to him. But the player who is not naturally talented in these shots may talk himself into playing a low-percentage shot to try to get close to the hole, risking a higher score than if he had simply played a straightforward pitch safely past the hole.

One of the most frustrating things about the Old Course at St. Andrews is that the player who knows the course best may think too much about how he might best get close to the hole, and miss the green entirely. The great courses entice the golfer to outwit himself.

Another excellent use of psychology is the green site which appears heavily defended on one side and open on the other, such as the first green at Pinehurst No. 2. With a deep bunker



Deep bunker on left, but tilt of green makes recovery easier. Offset fairway to right lures a timid approach, but leaves player a difficult chip.



Tees aligned with treeline on left.

#1 PINEHURST—NO. 2 COURSE (ROSS). 414 YARDS PAR 4 to the left of the green and short grass to the right, good players with less than stout hearts may be tempted to hedge to the right and draw the ball in to the target, secure in the knowledge that a straight shot will escape unscathed. They will make fewer birdies in the process. Meanwhile, weaker players could also play to the "bail-out" area when faced with a long approach, leaving them the chance to get up and down for a half. If the architect is extremely clever, as Donald Ross certainly was, he will contour the green so that the chip from the right of the green is more difficult than it appears from the fairway. Meanwhile, the bunker shot the player was trying to avoid might have been relatively simple.

I suspect that building green sites surrounded by hazards on our modern tournament courses has inadvertently helped golfers with less intestinal fortitude by giving them no choice but to aim at the flagstick. Given the chance to hedge their shots to a safe area, these golfers might shoot higher scores by being less daring, and more instinctively aggressive golfers would fare better.

Just as the weaker player welcomes the occasional easy hole, the best players welcome an especially difficult hole or two within the 18, to test them to the limit and distinguish them from the merely good player. Such holes also have an attraction for the weaker golfer who plays for enjoyment: They offer him the opportunity to play a single shot that will redeem an otherwise forgettable round. A par on such a hole as the 16th at Cypress Point can be the highlight of a lifetime of golf.

The design of difficult holes provides the architect an opportunity to break away from the strictures of designing "fair" holes around par values, and gives the average player a competitive chance. On a long two-shot hole with a large green, the average player who cannot get home in two has a fairly boring third shot to play, with little chance of getting his four; the good player who misses the green with his second has a good chance of getting up and down for his par. Make the green less receptive, such as on the Road hole at St. Andrews,

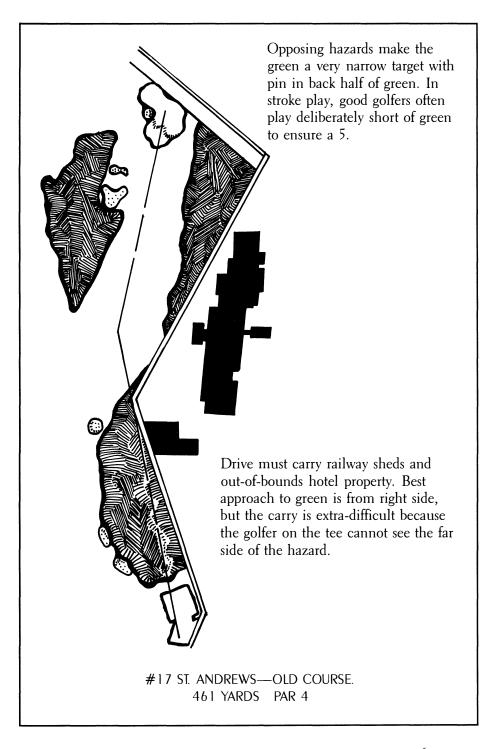
and the good player must struggle to save par and keep an edge over the weaker player who gets home in three. At the same time, only a truly great approach shot working right to left will get close to the hole for a birdie try, presenting the opportunity for the best players in the world to display their full range of talents.

The order in which the architect arranges his holes may also be devised for psychological impact. One example is the "killer hole" golfers especially fear, such as the island 17th of the TPC at Sawgrass. In tournament play, the knowledge that this hole must be faced, and that there is no way to play the hole safely, may cause a leader to take risks early in the round to pad his lead. Even if he is successful, the more he worries about the hole during his round, the more effect the pressure will have on him when he confronts the hole.

We have seen how a difficult hole can be tougher when followed by an easy hole. The so-called tournament finish, where the holes get progressively more difficult, is an extension of the same theory. The long par-4 finishing hole flanked by water has become almost a cliché of modern design, forcing the player to resist the temptation to choke right up to the finish.

My preference is for a course that builds to an extremely difficult 17th hole, but offers something of a respite at the 18th. This is a pattern often found on British links, perhaps because when golfers played almost exclusively in matches, architects were afraid that a heroic 18th hole might never be used. I prefer a course that gives the tournament golfer a chance to finish with a heroic winning birdie, instead of either hanging on with a four or losing the tournament to a man in the clubhouse with a final bogey. The finishing hole at Royal Lytham & St. Annes, with an extremely tough tee shot between bunkers, but short enough to give hope for a birdie if the drive is good, is to my mind the ideal tournament finish, especially when coupled with the difficult, long 17th hole.

Another psychological trap of golf architecture is the blind



shot, though out of vogue in recent years because of safety concerns. While safety must be considered, I think the rare blind shot adds interest to the course, because it adds variety and because so many players are uncomfortable with it. Any Scotsman will tell you that a hole is blind only once, after which you will know where to play; and when you swing the club you're looking at your ball anyway, not the target.

No doubt my fondness for the occasional blind shot was developed by my association with Pete Dye, by acclamation the master of psychological design among modern golf architects. In recent years Pete has made a point of building short par-4 holes featuring blind or semiblind half-wedge approach shots, simply because these were the shots the Tour pros complained about the most as being unfair on the TPC at Sawgrass and at PGA West.

Dye has taken the tournament players' interest in design and used it against them: Employing design tactics which irritate them, he distracts them from their real purpose, to play the course in the fewest strokes. The other half of his logic is that an average player isn't worried about such esoteric questions of fair design, and consequently isn't distracted, giving him a competitive chance.

Golf architects understand this mental trap all too well; it disturbs their own golf games. When they see a hole they think is poorly designed, they become distracted, and play it poorly as a result. While it is hoped that those who read this book will be enlightened in the mysteries of design, they are forewarned to reserve their criticisms of the course until the 19th hole, lest they fall into the same trap.