Chris Stanton explains the differences between the two styles of golf design and gives some advice on the placing and use of hazards

The Dukes of Nazara

It is the infinite variety in the golfing challenge and visual qualities of golf courses (and their individual golf holes), which sets golf apart from all other ball games, which are played on largely standardised "pitches".

A major appeal of playing golf comes from attempting to overcome the various obstacles encountered on each successive hole during a round of golf. It is the presence of these "hazards" which intensify the golfing challenge, defining more closely the varying levels of golfing skill, while ensuring the game is much more than one of merely yardage. Without hazards the game (irrespective of the level of a golfer's ability) would be much less farmatic, much less inspiring and ultimately becoming quite boring to play

Given the almost limitless varia-

Given the almost limitless variation in the location and combinations of such hazards it may be surprising to some, the manner of their distribution can be categorised as, one of two alternative basic design philosophies, "penal" and "strategic". Not only does this apply to the placement of hazards, defined under the Rules of Golf (bunkers and water) but to all kinds of hazardous elements which can influence play or affect scoring, such as, trees, scrub, topographical features, even rough.



The Essence of Penal and Strategic Design Principles

While an individual hazard, may be penal in its effect upon a golfer's score, it is, however, the way in which it is located in relation to the route between tee and green and the way in which it influences the playing of a hole or individual shot, which determines whether it is penal or strategic in concept.

A penal hazard generally seeks to penalise a poorly played shot by providing a difficult lie for the next shot (ideally in proportion to the degree of error of the previous shot), whereas a strategic hazard seeks to influence the original shot before it is played (although if poorly played or judged, may penalise the next shot).

When a hazard intrudes onto, (or very close to) a direct line between tee and green but can be carried or otherwise avoided, (usually by a longer route) such a hazard has a strategic impact upon play. Alternatively where a hazard is located simply to catch an off-line or otherwise poorly played shot its impact on play is essentially penal.



Penal Golf Holes A golf hole designed

on penal design principles provides one ideal line between tee and green, (the fairway) while seeking to penalise a poor shot in increasing severity, in proportion to the degree of error in straying, from the from the ideal line Although this is a laudable objective, in practice the difference between two very similar shots, one

finishing in a hazard the other just missing, is often both marginal and arbitrary, yet the impact upon a score, is significant.

03

Strategic Golf Holes

A golf hole which is strategically designed does not have a specific 'ideal' line between tee and green but a range of alternative lines of varying difficulty.

Typically the most direct line between tee and green is the most difficult, involving either longer carries over hazards or playing as close to these as possible. Other alternative lines are progressively longer and proportionally less hazardous and can often require an extra shot to reach the green.

The golfer is encouraged to take risks, to cut-off as much distance as possible, with the reward of a shorter or easier next shot, but if over optimistic about his abilities or otherwise unsuccessful is punished.

The golfer is forced to think, to take realistic stock of the various options, depending upon the tee position, the prevailing weather conditions and the state of the golfer's game and nerve at that moment.

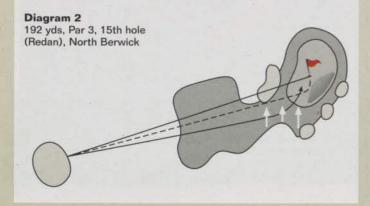
The golfer then has to make a decision on how to play the hole, on which line to choose from the tee, how much to risk cutting-off and balancing the risks and the rewards. Is the gamble is worth it. The choices are not simply black and white but a range of varying greys, which may be different from day to day and from golfer to golfer.

The value of a strategic hazard, therefore, is not so much how many shots it catches, but the way it influences the golfer as he considers the tasks ahead and the effect it has on a golfer's mind, during the execution

of the shot.

Arguably the ultimate expression of strategic golf course design is Augusta National. It is a testament to the virtues of these principles and the skilful way the course was designed, for a course which can be played satisfactorily day-in, day-out by ordinary club golfers, is capable of being set up to challenge the world's best during Masters week, simply by the use of back tees (although by no means a monster by today's standards) and the use of a number of difficult pin placements.

The course has no rough, only a few trees directly in play, water on





A fine example of strategically placed hazards

five holes and only 44 (originally just 29) bunkers. The key to Augusta's defences is for anyone looking to attack these awkward pin placements (not just to score well, but to avoid almost certain threeputting, on heavily contoured greens) a second shot needs to be played from close to a strategically located fairway hazard, at drive length. This simple strategy is truly effective, as usually only a few usually break par.



Improving Strategy on an **Existing Golf** Course

Every hole should have a discernible strategy, ideally one which is readily apparent from the tee, although on some holes it may be desirable to deliberately confuse the strategy in some way, to keep golfers on their metal, and provide increased variety.

Although bunkers are clearly the most common and arguably most effective elements for creating a positive strategy for a golf hole, consideration should be given to the use of all other existing and potential site features, particularly if these are effective substitutes and as a way of reducing maintenance costs.

Topography is probably the most under-rated element in promoting golfing challenge and interest. Subtle undulations around a green can add considerably to the complexities of the short game, demanding both imagination and a range of

A hollow immediately in front of a green can often have a greater impact on scoring than a bunker in the same situation. A bunker, with its strong visual presence, assists both in judgment of distance and promotes taking enough club, whereas an innocuous looking hollow may leave a golfer undecided whether to positively carry, or to try and run the ball in. Uncertainty breeds mistakes.

The Valley of Sin immediately in

front of the 18th green on the Old Course St Andrews, is a good example, particularly as Out of Bounds lurk behind the green, thereby inhibiting taking more than enough club. In similar situations (and on built up greens), visible bunkers at the back of a green can provide a similar strategy.

Where heavy watering of greens and approaches is standard practice, the short-game options are much reduced, however, hopefully this is becoming less prevalent. Bunkers right across the green approach, provide only one option, the aerial route, thereby eliminating both choice and employment of short-

game skills.

Separate Target Areas within a Green with variable degrees of accessibility (usually by a combination of separate levels, more complex plan shape and related bunkering), especially when co-ordinated with the overall strategy of the hole, can be exploited to set-up the hole differently for particular events. A hazard impinging on the approach from one side of the fairway and a hazard at drive-length from the opposite side provides a simple but effective strat-

Diagonal Orientation of Hazards and Target Areas create positive strategic design within a golf hole. Such principles are exemplified by the 192 yard Par 3, 15th Hole at North Berwick, (see Diagram 1), the most frequently copied hole in golf. With both its green and dominant front bunker being diagonally orientated to the line of play and the land form at the front right side of the approach, feeding the ball towards the putting surface, it is possible to play the tee-shot in a number of ways, giving the hole considerable golfing complexity and interest.

Shaping of Fairways to Promote Strategy is much more common now than it use to be, especially on courses used for televised events, but still often overlooked at many clubs. A good example is on the approach to the 17th at Wentworth,

by narrowing and swinging the fairway, here, further to the right and letting the grass grow thicker on the knoll, the "window" for being able to run the ball in has been considerably reduced, while only a ball carrying the knoll (requiring a much more positive and risky shot) will find the green.



Other Practical Design Issues

The value of a hazard is in the way it influences the playing of a hole or an individual shot and the psychological effect upon a golfers mind immediately before and during the stroke. A provocatively located bunker clearly has much greater impact when visible. Ending up in a blind hazards is an extreme irritation to golfers.

On sloping sites a bunker if located on the high side of a green, especially if also just short and slightly impinging onto the line, will control the approach to a green. There is little need to locate bunkers on the low side of a green (unless to stop a shot running into worse trouble) as the shot as the shot has already missed the target and the golfer faced with a difficult next-shot. On many existing courses, limitations of space prevents the use of multiple bunkers and the provision of a wide range of lines. Also, such an approach could lead to an adjacent fairway becoming an attractive alternative route for the approach-shot for some. Care needs to be taken not to exacerbate safety problems espe-cially at the boundaries of the course.



Golfing Skill

This comes in many forms. Long hitting is clearly a skill and

brings obvious rewards, however, their are many other golfing skills, which should be equally valued. These include, having the ability to judge distances exactly and select the right club accordingly; to be able

to strike each club in a consistent manner (line and length); having the ability is to be able to shape shots at will, to suit the strategy of the hole and prevailing wind condi-tions; being able to impart sufficient backspin, as is being able to judge run. An accomplished short-game can more than make up for deficiencies, elsewhere.

Because golfing skill comes in many forms, an objective of a golf course architect is to provide a wide variety of different examinations within the course of a round of golf. Some holes will clearly favour long hitters, while on some holes distance is not a significant factor, but accuracy and being able to hit a predictable line and distance, is.

Golf is a selfish game and there are many who believe hazards should be placed to catch others, but not themselves, (especially by long-hitters), thereby emphasising their par-

ticular prowess.

All golfers welcome a measure of challenge, providing it is within their abilities. Accomplished golfers, relish a searching examination of their golfing skills, but the novice, the inaccurate, or the weak hitter, need to find a ways of playing the hole without having weakness exposed and punished on almost every shot, thereby allowing an enjoyable game (even if their scores are modest).

Strategically designed holes allow golfers of every level of ability to choose the most appropriate route between tee and green to suit their particular game. As a golfer's game improves or declines, it allows for adjustments to ambitions (and lines) to be made accordingly, ensuring the potential for maximum enjoyment from the game. Flexibility is the essence of strategic design, conversely a penally designed hole is essentially inflexi-

Chris Stanton is a graduate of the British Institute of **Golf Course Architects**