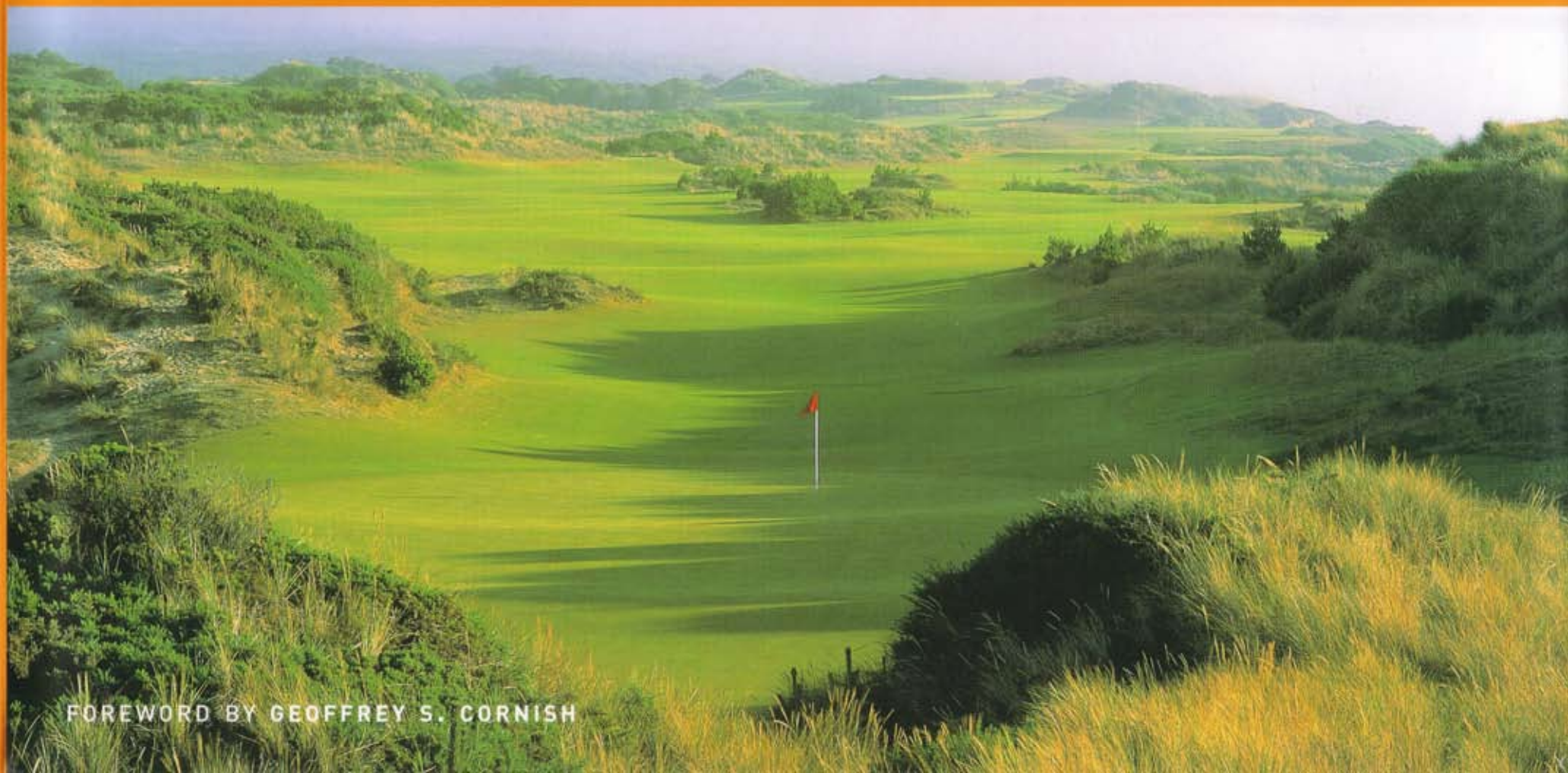


# Golf Architecture

A WORLDWIDE PERSPECTIVE

VOLUME ONE

COMPILED AND EDITED BY **PAUL DALEY**



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Golf Architecture

PAUL DALEY



FOREWORD BY GEOFFREY S. CORNISH

# Reality check: the art, the science and the permits

Jeremy Pern

Eighteenth hole, Golf Club du Chateau de Vuissens, Friburg, Switzerland. (Photo by Jeremy Pern.)

OPPOSITE: Eighth hole, Golf and Freizeitpark (Diamond Course), Tullnerfeld (near Vienna), Austria. (Photo by Jeremy Pern.)



The human brain is probably the most complex structure that exists in the known universe, and what we have done with it over the past 100,000 years is what distinguishes us from other organisms. We have learned to think about the environment in which we live,

and to construct ideas about how it has evolved. Magic and religion provided the principal source of these ideas until Galileo and fellow scientists started to pull back the curtain on reality. Science has been described by E. O. Wilson as 'the organised systematic enterprise that gathers knowledge about the world and condenses the knowledge into testable laws and principles'.<sup>4</sup> But gathering that knowledge requires seeking things undiscovered and unseen. Like an artist, the scientist requires imagination and vision in addition to rigour and objectivity. 'The ideal scientist thinks like a poet and works like a bookkeeper'.<sup>5</sup>

Art has been described as the means by which people reach out to others in order to

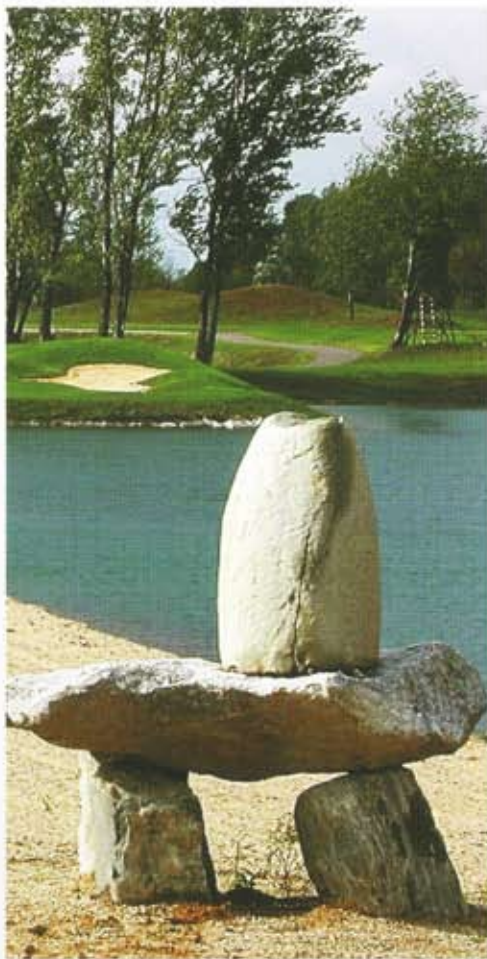
transmit feeling. Art exists in many forms, most of which fall into distinct groups that are relative to space and time. Sculpture, painting, and many of the visual arts exist only in space, while music exists only in time. Both art and science transmit information and both seek elegance to create order out of a confusion of detail. What makes great science also makes great art—an understanding of the possible, combined with a realisation of the probable. The matrix of creativity is what has gone before and what is yet to come. Art and science in their purest forms are the opposite sides of the same coin; one cannot exist without the other.

And what has all this to do with golf course architecture today? Not much, but it has



Sixteenth hole 'The Rocket', Golf and Freizeitpark (Diamond Course), Tullnerfeld. [Photo by Jeremy Pern.]

OPPOSITE: Seventh and sixteenth holes, Golf and Freizeitpark. [Photo by Alex Kramel.]



everything to do with golf course design. Design is a process not a product. Golf course architecture is concerned with creating an object in an environment conditioned by space, time, economics and law, whereas golf course design is concerned only with space. The art of golf course design and the practice of golf course architecture are now two very different things. Design modifications imposed by forces beyond the control of the architect are now so extensive in most European golf course developments that the role of the architect during the pre-construction phase resembles that of a shepherd herding his rowdy and unpredictable flock towards a hardly discernible and distant goal.

A significant proportion of the millions of golfers around the world have given serious thought to designing a golf course. Every golf club has several members on their committee whose dream is to be allowed unfettered access to the opportunity of creating a golf hole. But there are only several hundred men and too few women who make their living exclusively from golf course architecture around the world.

The single biggest event in golf course development in Europe since the game was conceived in its present form has been the movement to regulate planning and development of the environment. In most European countries until the mid-1980s building a golf course involved little more than a design coupled with a declaration of intent that a course was going to be built and a few months later work started. The finished product usually bore more than a passing resemblance to the initial design.

Today, things are different. The legislation in place in most European countries means that a golf project takes at least three, most likely five, and not unusually ten years to go from the initial idea to construction. This time frame does not just apply to large-scale housing or resort developments, but also to modest golf facilities.

The developer needs only three essentials to start the construction process—the land, planning permission and money. As a result of centuries of inheritance divisions, European land ownership is a complex issue. The land bank of a golf project invariably changes in

size and shape between initial ideas and the start of construction, with all the resulting modifications to the design of the course.

The planning process in different European countries is broadly similar. The initial phase involves a change of use permit, from say agriculture to leisure. This outline permission is usually based on outside criteria—regional or local planning issues rather than site-specific issues. The architect is involved at this stage with, among other things, land selection and evaluation, draft routing, traffic flows, sewage processing, water consumption, power requirements, project economics, cash flows and visual impacts. Once the change of use issues have been successfully dealt with, the design work begins.

The architect draws up the detailed plans, and in concert with a host of consultants, starts becoming involved in planning negotiations and impact studies. There are consultants for everything: ecology; flora; fauna; traffic; forestry; agriculture; water supply; treatment and quality control; fisheries; archaeology; local history; and so forth. The consultants are often paid by the client in

addition to working for the administration or local planning department. They may also be paid by both, yet work for neither. There are battles fought between consultants themselves and fiercer often than those between the developers and the authorities. The agricultural lobby is invariably opposed to the ecologists, who may be at loggerheads with the forestry people, who usually have difficulties with the landscape specialists, while the water authorities dither in a frenzy of uncertainty.

In a hasty effort to align themselves with European directives, many legislative bodies have rushed through a host of politically correct environmental regulations. This useful regulatory information is essentially misunderstood, differentially applied, or selectively ignored by the planning bureaucracy. There are few, if any, procedural precedents for the planners, resulting in much to-ing and fro-ing in pursuit of the planning permit.

When the permit eventually arrives, the initial business plans drawn up by the client will have suffered the passage of time. The slings and arrows of a global recession, a rise in fuel prices, interest rate hikes, a new golf



course next door, a reduction in the number of housing plots, the cancellation of the motorway exit project, and a new runway at the local airport involving a minor, but irritating modification to the flight path, may all impose design changes to deal with the economics of reality and the reality of economics.

If one ignores the awesome clerical grind of permit acquisition and examines the nuts and bolts of course design, the single most important element is the course routing. Good routing relies on observation, instinct and a genuine understanding of landscape, coupled with an intelligent imagination and an ability to visualise the construction sequences at this conceptual stage. Visions of the impossible are no good to anyone.

Like the conductor of an orchestra, it is the architect's role to optimise the potential of the resources available. Not everything can be drawn on a plan, and much can be improvised on site to the benefit of golf course quality, providing the budget, permits and timetable are respected accordingly.

To golfers, the aesthetics of design and the playing characteristics of a golf course are sub-

jective, whereas construction details remain more of an objective science. Water will always flow downhill just as grass always needs food, water and air. The science of golf course architecture resides in finding solutions to technical problems related to geology, agronomy, botany, civil engineering and the physics of the game itself. Once struck, a ball will behave in predictable ways depending on its velocity through the air, wind speed and direction, topography, and the characteristics of the surface along which the ball travels after landing. Admittedly these factors are all dynamic and interrelated, making accurate predictions difficult, but they can be assessed objectively. What happens immediately before the ball is struck is an altogether different equation involving motor-neurone skills, brain synapses, physical fitness, anatomy, ironmongery, sociology, human behaviour and psychology.

Although consensus exists as to what is more or less beautiful, it is in the unexpected nuances and subtleties of 'arrangement' that the beauty and the playing characteristics of a course can be most successfully understood and enhanced. Therein lies the art. The prin-

ciples of golf course design are common and shared. The conservative nature of a highly codified participant sport, dependent upon a large, expensive organic playing field has seen to that. So where does the distinction lie in golf course design? And what of the future of the art and science of golf course architecture? The answer to these questions is found in the simple truth that where we all share principles, we each have distinct and different responses to the creation and revelation of detail. A golf course is a highly specific and functionally defined artefact. Artefact design, like biological design, evolves through incremental change over time. The best courses, those most fitted for their purpose, are preserved with affection by their users and multiplied through imitation by their admirers. Bad design is not sustainable, as it is rapidly replaced through redesign or renovation.

Dr Alister Mackenzie, in his book *Golf Architecture* (1920) defined the terms of golf course design and the role of the golf course architect. He claimed that a golf course architect, if not actually an artist, should possess both an artistic temperament and an educa-

tion in science. His book is full of pithy observations concerning golf, golfers, and golf course design and construction. His comments are as valid today as they were when his book was first published, but with one notable omission. He made no mention of the environment and planning permits. These are the challenges of the contemporary golf course architect.

Many golf course architects today seek to emulate the work done by the likes of Mackenzie, whose qualities are to be admired and respected, not fawned over as emblems of a rosy past. Our predecessors enjoyed the art of design as few of us in Europe can today. Now we have to heed the constraints of political correctness that ensures conformity in the misguided name of science, thereby shackling the art of our wonderful profession.



Eleventh green, Golf and Freizeitpark (Diamond Course), Tullnerfeld. [Photo by Alex Kramel.]



BELOW: Opening hole, Golf Club du Chateau de Vuissens, Friburg, Switzerland. [Photo by Jeremy Pern.]