ARTISTIC ACTION AND CONTEMPLATION:

RECAPTURING THE ELEMENTS OF MYSTERY
THAT MAKE EVERY ROUND OF GOLF
A VOYAGE OF DISCOVERY

SHANE RUNDALL

THESIS SUBMITTED TO THE FACULTY OF THE VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF LANDSCAPE ARCHITECTURE

IN THE

DEPARTMENT OF LANDSCAPE ARCHITECTURE

Public Defense Date: April 7, 2006
Blacksburg, Virginia

COMMITTEE APPROVAL

DEAN BORK, CHAIR

WENDY JACOBOSON, MEMBER

BRIAN KATEN, MEMBER

Keywords: Golf Course Architecture, Art, Aesthetics, Phenomenology, Perception, Experience, Blacksburg Country Club

COPYRIGHT 2006 SHANE RUNDALL

ARTISTIC ACTION AND CONTEMPLATION:

RECAPTURING THE ELEMENTS OF MYSTERY
THAT MAKE EVERY ROUND OF GOLF A VOYAGE OF DISCOVERY

By SHANE RUNDALL

ABSTRACT

Artists think differently. They challenge the practical and apply their ideas to the contemporary world creating many journeys and excitement along the way. Without them, the world would have remained flat and as unique as black and white. This thesis investigation is grounded in phenomenological theories of aesthetics proposed by Maurice Merleau-Ponty and John Dewey, the artistic approach of Jackson Pollock and Yves Klein, and my own perceptions of the process of creating art. The objective is to apply aesthetic concepts and principles derived from these sources to the practice of golf course architecture and expand the way we view and play in our golf course environment.

Golf, unlike any other sport, is carried out over an area of awarded luck and encouraged misfortune that also happens to be a living environment. Without question, no two courses are alike. Nor is any hole on any course ever the same. Nor is any hole, even if played the very next day, going to relinquish the same experience. Daily tee and hole locations make for an infinite number of configurations; as does wind, the temperature, the condition of the grass or the suddenly drooping branches of a once upright tree. However, not all courses reach their potential and capitalize on the environments possibilities and the perception of those experiencing it. Some course designers simply place holes in a pattern to reach desired numbers of par and yardage in order to fulfill a requirement. With the unrelenting expense of land and the continued awareness of negative development impacts, the art of golf course architecture could be viewed a bit differently. By incorporating the attitude of an artist such as Jackson Pollock, or the mentality of a psychologist such as Merleau-Ponty, and revealing the possibilities of the subconscious, the golf course architect's design can do more than give shape to space.

Blacksburg Country Club, located in Ellett Valley just outside of the town of Blacksburg, Virginia serves as a case study site for this design investigation. The intent of the thesis is to develop a design that addresses the technicalities of golf course architecture and the history of the profession while creating a piece of 'art in nature' that touches all the senses – the gateway to the soul. There just happens to be a game inside.



THIS WORK IS DEDICATED

TO MY SISTER

FOR WITHOUT HER, I WOULD NOT BE WHERE I AM TODAY
TO MY PARENTS

WHOSE STRENGTH AND ENCOURAGEMENT ALLOWED ME TO BELIEVE IN MYSELF TO ALISON

FOR STANDING BY MY SIDE FROM 700 MILES AWAY

IT IS ALL OF YOUR BELIEF AND LOVE THAT FUELS MY LIFE

WITH DEEPEST APPRECIATION

TO THE FACULTY OF THE LANDSCAPE ARCHITECTURE DEPARTMENT
IN PARTICULAR DEAN BORK FOR PUSHING ME TO BE MYSELF AND TAKE THE LEAP
TO BRIAN KATEN FOR ALLOWING ME TO VIEW THE WORLD AS A CANVAS
TO WENDY JACOBSON FOR SEEING MY VISION AND BRINGING ME BACK TO REALITY
TO TERESA PHIPPS FOR HAVING ALL OF THE ANSWERS

TO BLACKSBURG COUNTRY CLUB FOR ALLOWING ME TO ROAM THE LINKS AND MUCH MORE

TO MY STUDIO-MATES

BILL MAUZY, NANCY HODGES, KYLE DAVIDSON, AND GINA CANIANO
FOR CREATING A BOND THAT ALLOWED US TO LEARN FROM EACH OTHER BOTH
IN ACADEMICS AND IN LIFE

BILL BOWEN, NICK LOWE, JASON GALLOWAY, RAY BURGER, PATRICK JONES FOR LETTING THE BOYS BE BOYS

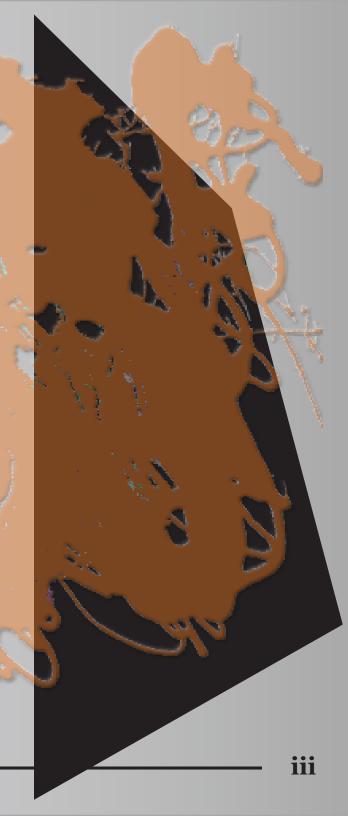


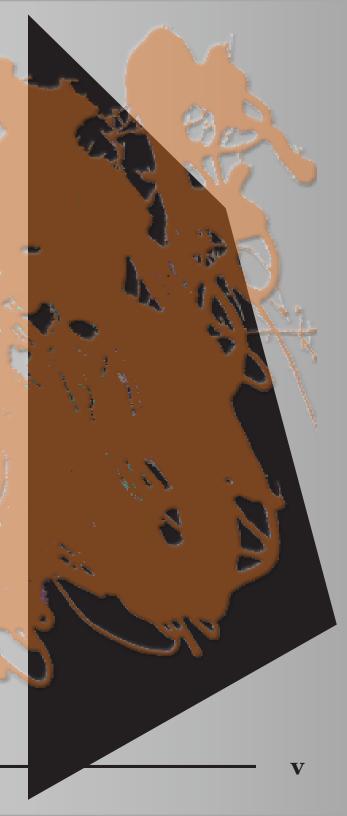
TABLE OF CONTENTS

Title Page	i
Abstract	ii
Dedication	iii
Table of Contents	iv
Figure Credits	V
Introduction - The Critic In Me	01
Art - The Process Of	02
Aesthetics - Approach	09
The Landscape - Or Environmental Art	15
Golf - As an Art Form	17
Evolution of Golf - A Brief History	20
The Parkland Savannas	21
The Architects	23
Methods - A Discussion With Prometheus	26
Conclusion - The Thoughts In My Head	28
he Project - An Interview with The Artist	29
Defense Pin Up	31
Reflection	63
Relevance	70
Bibliography	71
VITA	75
	THE R. LEWIS CO., LANSING, MICH.



FIGURE CREDITS

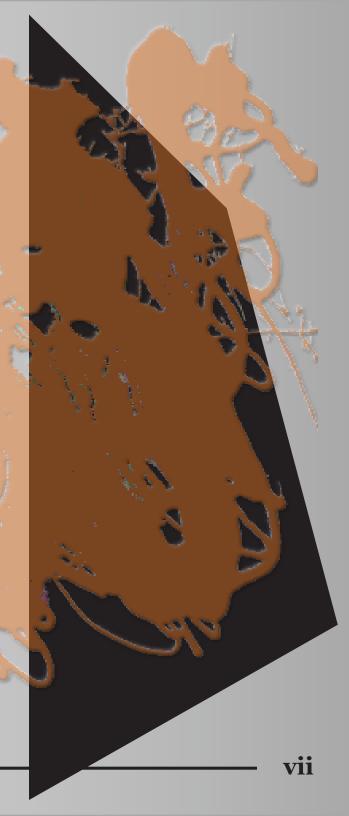
- Fig. 1.1 (p. 03 & 33): Jackson Pollock's *Mural* 1943. (source: Landau, E.G. (1989). *Jackson Pollock*)
- Fig. 1.2 (p. 05): Jackson Pollock's *Shimmering Substance* 1946. (source: Landau, E.G. (1989). *Jackson Pollock*)
- Fig. 1.3 (p. 06): Jackson Pollock in action. By photographer Hans Namuth 1950. (source: Landau, E.G. (1989). *Jackson Pollock*)
- Fig. 1.4 (p. 06): Jackson Pollock in action. By photographer Hans Namuth 1950. (source: Landau, E.G. (1989). *Jackson Pollock*)
- Fig. 1.5 (p. 06): Jackson Pollock in action. By photographer Hans Namuth 1950. (source: Landau, E.G. (1989). *Jackson Pollock*)
- Fig. 1.6 (p. 08): Yves Klein's *Pienture feu couleur sans titre* (FC1) 1961. (source: Restany, P. (1992). *Yves Klein: Fire at the Heart of the Void*)
- Fig. 1.7 (p. 11): Sketched diagram of phenomenological experience of art. (source: S. Rundall)
- Fig. 1.8 (p. 14): Sketchbook image of aesthetic experience explorations. (source: S. Rundall)
- Fig. 1.9 (p. 14): Sketchbook image of aesthetic experience explorations. (source: S. Rundall)
- Fig. 1.10 (p. 14): Sketchbook image of aesthetic experience explorations. (source: S. Rundall)
- Fig. 1.11 (p. 16): Solomon van Ruysdael's *Country Road*. (source: Berleant, A. (1997). *Living in the Landscape: Toward an Aesthetics of Environment*)
- Fig. 1.12 (p. 16): Detail of Solomon van Ruysdael's *Country Road*. (source: Berleant, A. (1997). *Living in the Landscape: Toward an Aesthetics of Environment*)
- Fig. 1.13 (p. 18): Canyata Golf Course. (source: Big Creek Golf Copyright 2001) Images received in CD form in 2001 from photographer with permission granted to use for educational purposes.
- Fig. 1.14 (p. 18): Canyata Golf Course. (source: Big Creek Golf Copyright 2001) Images received in CD form in 2001 from photographer with permission granted to use for educational purposes.
- Fig. 1.15 (p. 26): Bonfire photograph by Eric W. Bragg, Copyright 2004. (source: www.surrealcoconut.com)
- Fig. 1.16 (p. 26): Bonfire photograph by Eric W. Bragg, Copyright 2004. (source: www.surrealcoconut.com)
- Fig. 1.17 (p. 26): Bonfire photograph by Eric W. Bragg, Copyright 2004. (source: www.surrealcoconut.com)
- Fig. 1.18 (p. 27): Diagram of The Feeling describing sequence of affected senses with the flame. (source: S. Rundall)
- Fig. 2.1 (p. 31): Photograph of defense pin-up. (source: S. Rundall)
- Fig. 2.2 (p. 32): Untitled fire painting. (source: S. Rundall)



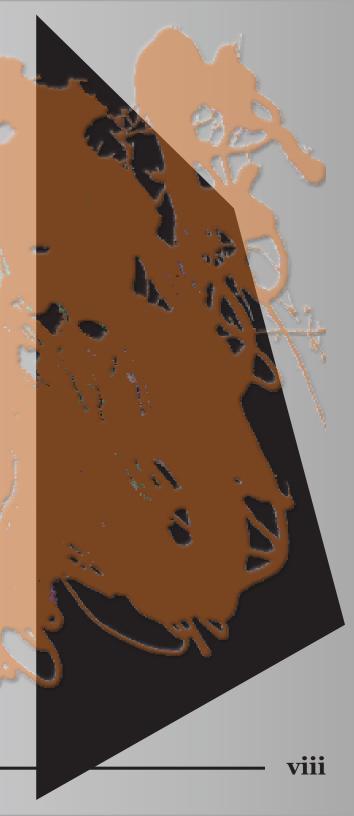
- Fig. 2.3 (p. 33): Photograph of Frank Gehry's Stata Center at MIT, Cambridge, Ma. (source: S. Rundall)
- Fig. 2.4 (p. 33): Photograph of Frank Gehry's Dancing Building, Prague, Czech Republic. (source: Gilbert-Rolfe, J. with Gehry, F. (2001). *Frank Gehry: The City and Music*)
- Fig. 2.5 (p. 34): Princess Diana Memorial Fountain, London. (source: Amidon, J. (2005). *Moving Horizons: The Landscape Architecture of Kathryn Gustafson and Partners*)
- Fig. 2.6 (p. 34): Princess Diana Memorial Fountain, London. (source: Amidon, J. (2005). *Moving Horizons: The Landscape Architecture of Kathryn Gustafson and Partners*)
- Fig. 2.7 (p. 34): Princess Diana Memorial Fountain, London. (source: Amidon, J. (2005). *Moving Horizons: The Landscape Architecture of Kathryn Gustafson and Partners*)
- Fig. 2.8 (p. 34): Shell Headquarters, Rueil-Malmaison. (source: Amidon, J. (2005). *Moving Horizons: The Landscape Architecture of Kathryn Gustafson and Partners*)
- Fig. 2.9 (p. 34): Shell Headquarters, Rueil-Malmaison. (source: Amidon, J. (2005). *Moving Horizons: The Landscape Architecture of Kathryn Gustafson and Partners*)
- Fig. 2.10 (p. 35): Concept diagram. (source: S. Rundall)
- Fig. 2.11 (p. 36): Graphic image of Fire Art created 2006. (source: S. Rundall)
- Fig. 2.12 (p. 37): Aerial photograph from helicopter of Blacksburg Country Club, Blacksburg, Va. (source: S. Rundall)
- Fig. 2.13 (p. 39): Strategies puzzle diagram. (source: S. Rundall)
- Fig. 2.14 (p. 40): Blacksburg Country Club existing conditions contour map of emotions. (source: S. Rundall)
- Fig. 2.15 (p. 41): Preliminary routing sketch of first 18-hole design. (source: S. Rundall)
- Fig. 2.16 (p. 41): Preliminary routing sketch of initial project thoughts. (source: S. Rundall)
- Fig. 2.17 (p. 41): Preliminary routing sketch of 9-hole spatial orientation on property. (source: S. Rundall)
- Fig. 2.18 (p. 41): Preliminary routing sketch of 18-hole forced layout. (source: S. Rundall)
- Fig. 2.19 (p. 41): Preliminary routing sketch of 7,000 yards plus. (source: S. Rundall)
- Fig. 2.20 (p. 41): Preliminary routing sketch of 7,500 yards plus. (source: S. Rundall)
- Fig. 2.21 (p. 41): Preliminary routing sketch of 9-hole option. (source: S. Rundall)
- Fig. 2.22 (p. 41): Preliminary routing sketch of refined hole placement. (source: S. Rundall)
- Fig. 2.23 (p. 42): Blacksburg Country Club proposed conditions contour map of emotions. (source: S. Rundall)
- Fig. 2.24 (p. 43): Final master enhancement plan, Blacksburg Country Club. (source: S. Rundall)
- Fig. 2.25 (p. 44): Hole 1 and 10 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker) (source: S. Rundall)



- Fig. 2.26 (p. 44): Hole 2 and 11 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)
- Fig. 2.27 (p. 45): Hole 3 and 12 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)
- Fig. 2.28 (p. 45): Hole 4 and 13 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)
- Fig. 2.29 (p. 46): Hole 5 and 14 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)
- Fig. 2.30 (p. 46): Hole 6 and 15 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)
- Fig. 2.31 (p. 47): Hole 7 and 16 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)
- Fig. 2.32 (p. 47): Hole 8 and 17 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)
- Fig. 2.33 (p. 48): Hole 9 and 18 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)
- Fig. 2.34 (p. 49): Aerial photograph from helicopter of Blacksburg Country Club, Blacksburg, Va, of hole number 8 green. (source: S. Rundall)
- Fig. 2.35 (p. 50): Strategies puzzle diagram redefined. (source: S. Rundall)
- Fig. 2.36 (p. 51): Sketch of hole-4 ripple design. (source: S. Rundall)
- Fig. 2.37 (p. 51): Sketch of hole-4 video game design. (source: S. Rundall)
- Fig. 2.38 (p. 51): Sketch of hole-3 strangling design. (source: S. Rundall)
- Fig. 2.39 (p. 51): Hole-9 motion/flow studies. (source: S. Rundall)
- Fig. 2.40 (p. 51): Sketch of hole-4 Piet Mondrian design. (source: S. Rundall)
- Fig. 2.41 (p. 51): Sketch of "1st One Hundred Rounds" painting by Shane Rundall 2006. (source: S. Rundall)
- Fig. 2.42 (p. 51): Sketch of hole-3 water ricochet design. (source: S. Rundall)
- Fig. 2.43 (p. 51): Process drawings of hole-9 motion/flow design. (source: S. Rundall)
- Fig. 2.44 (p. 52): Conceptual image of hole 3 and 12. (source: S. Rundall)
- Fig. 2.45 (p. 53): Plaster model of hole 3 and 12, view from tee boxes. (source: S. Rundall)
- Fig. 2.46 (p. 53): Plaster model of hole 3 and 12, view from right fairway. (source: S. Rundall)
- Fig. 2.47 (p. 53): Plaster model of hole 3 and 12, view from above. (source: S. Rundall)
- Fig. 2.48 (p. 53): Plaster model of hole 3 and 12, view from left fairway. (source: S. Rundall)



- Fig. 2.49 (p. 53): Plaster model of hole 3 and 12, view from green. (source: S. Rundall)
- Fig. 2.50 (p. 53): Plaster model of hole 3 and 12, view from west side. (source: S. Rundall)
- Fig. 2.51 (p. 53): Plaster model of hole 3 and 12, view from east side. (source: S. Rundall)
- Fig. 2.52 (p. 54): Conceptual image of hole 4 and 13. (source: S. Rundall)
- Fig. 2.53 (p. 55): Plaster model of hole 4 and 13, view from above. (source: S. Rundall)
- Fig. 2.54 (p. 55): Plaster model of hole 4 and 13, view from west side. (source: S. Rundall)
- Fig. 2.55 (p. 55): Plaster model of hole 4 and 13, view from east side. (source: S. Rundall)
- Fig. 2.56 (p. 55): Plaster model of hole 4 and 13, view from west side depth analysis. (source: S. Rundall)
- Fig. 2.57 (p. 56): Conceptual drawing of hole 9 and 18, view from middle of fairway towards green. (source: S. Rundall)
- Fig. 2.58 (p. 56): Conceptual drawing of hole 9 and 18, view from middle of fairway towards tee boxes. (source: S. Rundall)
- Fig. 2.59 (p. 57): Chicken mini golf. (source: Science Museum of Minnesota, www.smm.org Copyright 1997)
- Fig. 2.60 (p. 58): Conceptual image of hole 3 and 12 refined. (source: S. Rundall)
- Fig. 2.61 (p. 59): Conceptual grading plan of hole 4 and 13, refined green surrounds with sections from two angles. (source: S. Rundall)
- Fig. 2.62 (p. 59): Conceptual grading plan of hole 4 and 13, refined green surrounds rendered. (source: S. Rundall)
- Fig. 2.63 (p. 60): Conceptual drawing of hole 9 and 18 refined. (source: S. Rundall)
- Fig. 2.64 (p. 60): Conceptual drawing of hole 9 and 18 refined, view of tee box. (source: S. Rundall)
- Fig. 2.65 (p. 60): Conceptual drasing of hole 9 and 18 refined, view of mid-fairway. (source: S. Rundall)
- Fig. 2.66 (p. 61): Sketch of August Rodin's *Thinker*. (source: S. Rundall)
- Fig. 2.67 (p. 64): Photograph series of Nate Lahy swing golf club on existing hole-6, Blacksburg Country Club, Blacksburg, Va. (source: S. Rundall)
- Fig. 2.68 (p. 65): Photograph collage of existing area for proposed hole 9 and 18. (source: S. Rundall)
- Fig. 2.69 (p. 66): Photomontage of hole 9 and 18 refined with motion analysis, view from mid-fairway towards green. (source: S. Rundall)
- Fig. 2.70 (p. 67): Photomontage of hole 9 and 18 refined with motion analysis, view from mid-fairway towards green. (source: S. Rundall)
- Fig. 2.71 (p. 68): Photograph collage of existing area for proposed hole 9 and 18 green. (source: S. Rundall)
- Fig. 2.72 (p. 69): Photomontage of hole 9 and 18 refined with motion analysis, view of green surrounds. (source: S. Rundall)



"The only people for me are the mad ones, the ones who are mad to live, mad to talk, mad to be saved, desirous of everything at the same time, the ones who never yawn or say a commonplace thing, but burn, burn like fabulous roman candles exploding like spiders across the stars and in the middle you see the blue center light pop and everybody goes 'Awww'!"

- Jack Kerouac, On the Road, 1985

INTRODUCTION - THE CRITIC IN ME

Being creative has always been a strong part of my life. Not just being creative, but unique with creative qualities along the way. When I look at art, I see it through different eyes than most. My mind goes directly to the physicality of the work. The physicality of the artist's involvement with materials and their work intrigues me to the core. What were they thinking? What were their thoughts? What were their discoveries? Why did they do that, and not this? What were their intentions, if any at all? There are many different dimensions in which I see a piece of artwork. Some art is intended to look at, some art is intended to touch, some art is intended to feel, and some is intended to experience. When I create art, the boundaries need to be stretched. Without this element the excitement is sheltered within the design itself. I see art as a physical process; without a process, it is not art. I want it to reach out and touch the individual experiencing it, beyond their pupils, and within their conscious. To me, this is art.

For the purpose of this study, I have chosen to challenge the process of my artistic thoughts in golf course design and attempt to provoke some aesthetic emotion along the way. Aesthetics are commonly interpreted visually, not experientially or phenomenological. This lack of understanding of this definition is what creates a boundary many landscape architects have to eliminate in becoming artists. Art and landscape architecture, in my opinion go hand-in-hand. Golf course design is no exception. The game of golf is itself an art form, this is not being denied. However, the canvas on which it is played is too often sheltered. I feel that with artistic imagination and powerful gestures, the human experience on a golf course can be profound. Under the influences of artistic expression and contemplation, and inspirations from the phenomenological theories of aesthetics, doing more than giving shape to space, I plan to give possibilities of vision, movement and the scope of actual perception to the human realm of golf.



A R T - THE PROCESS OF

Abstract Expressionism has always fascinated me and is an artistic style that I have researched most. Basic to most Abstract Expressionist painting were the attention paid to surface qualities, i.e.: the use of huge canvases; the adoption of an approach to space in which all parts of the canvas played an equally vital role in the work; the harnessing of accidents that occurred during the process of painting; the glorification of the act of painting itself as a means of visual communication; and the attempt to transfer pure emotion directly onto the canvas.

Artist Clifford Ross, in an interview with A.M. Homes about his recent book Wave Music, presented a statement that really put it into perspective for me.

"Artists will shake the cage, pushing the limits of their medium until it bends or breaks to fit their own needs. Right now a lot of artists are experimenting with photography. What shape will it take next? Sometimes people think artists are just trying to be avant-garde for the sake of being avant-garde. But the tradition of pushing against limitations goes back to the cave drawings in Lascaux. Charcoal and colored dirt were their media, their "technology" if you will. The Lascaux artists were thinking: what else can I do with a piece of charcoal? What else can I do with red clay?" (Holmes, 2005)

I like to feel that this is an explanation of what I attempt to experience in my own artwork. I like to push the envelope, go outside the box, be bold, be bright, stand out and see what happens, then capitalize on the positive outcomes. The sequence of feelings that are stacked upon one another through this process is something that I call art. It is these feelings that link the object to my soul and produces an emotion not only within me, but someone else as well. This emotional response is a desired effect that I try to reach in all of my work. Not everyone will react the same, but a dialogue of emotions will result; in essence determining the success of the piece.

Jackson Pollock, painter (1912-1956)

Pollock was the only one of his kind. With the beginning of the Industrial Revolution in the second half of the 19th century, new art styles and movements appeared and disappeared at an increasingly fast pace - thus reflecting the growing rate of changes in our society. During the many Art Movements, impressionism, fauvism, expressionism, art nouveau, art deco, cubism, surrealism, abstract, and pop art, Pollock was educated under highly regarded Thomas Benton. He taught Pollock to be creative, yet stick to the painting styles of his predecessors. Rather than using one of the traditional styles of painting with oil base paint, brushes, and canvas on easel, Pollock is most known for breaking the traditions. He would lay out large canvases directly onto the floor and use typical household paints directly out of the can. He would occasionally use a brush, but most



often a stick to direct the paint onto the canvas. For one of their many art reviews, Possibilities, Harold Rosenburg and Robert Motherwell recorded a statement from the artist. Pollock went into unaccustomed detail, describing the techniques that he used:

"My painting does not come from the easel. I hardly ever stretch my canvas before painting. I prefer to tack the unstretched canvas to the hard wall or the floor. I need the resistance of a hard surface. On the floor I am more at ease. I feel nearer, more a part of the painting, since this way I can walk around it, work from the four sides and literally be in the painting. This is akin to the method of the Indian sand painters of the West." (Landau, 1989)

As one of the most scrutinized artists of all time, his paintings have been described as chaotic, absolute lack of harmony, complete lack of structural organization, and total absence of technique (Landau, 1983). Perhaps this is what intrigued so many to critique and attempt to understand his thought process. For me it hits home, maybe for different reasons than most, but the uniqueness of his paintings set him apart from many, and that is what reeled me in.

The first time I saw one of Pollock's paintings, I was obtaining my undergraduate degree, a BFA in Art from The University of Iowa. My very first visit to The University of Iowa Museum of Art, I saw it. I was in complete awe; it just happened

to be one of his most famous paintings, the Mural. At the time I had no idea who Jackson Pollock was, let alone the magnitude of what was in front of me. It was enormous, breathtaking, messy, yet perfect. It was the largest painting that I had looked at in great detail. Sure I had been to museums and seen paintings of this scale, but paid them no attention. The size was roughly eight feet tall by twenty feet long. Standing next to it, it engulfed me from all directions, yet standing far away, it had the same affect. I found myself wandering into the painting and it felt as if I became the artist. I withheld touching the canvas, but at that



Fig. 1.1: Jackson Pollock's *Mural* 1943. (source: Landau, E.G. (1989). *Jackson Pollock*)



exact moment I could feel the movement of Pollock's body throughout the creation of this masterpiece. At no other time had a two dimensional piece of art touched me this way. I was sold. From that moment on, my artwork changed.

The *Mural* was a commissioned project given to Pollock by highly regarded art collector and gallery owner Peggy Guggenheim. At the same time Miss Guggenheim agreed to give Pollock his first solo exhibition and to offer him a monthly contract, she also commissioned him to decorate the front foyer of the duplex apartment on East Sixty-First Street in Manhattan that she shared with writer Kenneth McPherson. Marcel Duchamp wisely suggested that Jackson's mural be painted on canvas rather than directly on the wall so it could be moved and shown elsewhere (Landau, 2005). Thankfully to Mr. Duchamp, I got to see the painting! Pollock had never received a commission before and had no real experience organizing a composition that large. Nearly a year after he began receiving the money from Miss Guggenheim, he still had made no progress except for illegally removing one of the walls in his apartment to accommodate the scale of the canvas. It is rumored that Pollock sat on a keg for months, paralyzed next to the canvas, thinking about the painting before he began. Then all in one night, it happened; it was complete.

This painting demonstrates with great clarity the beginnings of a transition in the artist's mind. Bolstered perhaps by his experience with the project, he began to move more definitely away from dependence on therapeutic sources, combined with the innovations of modern European art, to a rapidly increasing self reliance (Landau, 2005). There is an equal stress on all parts of the canvas, with loosely delineated forms rendered in black outline evenly distributed from edge to edge. Although nonrepresentational, these lines definitely suggest motions of the human body, and the viewer's reaction to each is elicited through identification of arabesque movement. (Vanderoe and Karmel, 1999) In the horizontally oriented format of Mural, one is lead to visualize not only the lateral progression of the 'figures' across the canvas, but also the movements of the artist in the process of creating them. Pollock may have been enabled to bring the tortured prelude to this work to a close remembering, then radically updating, Benton's physicality when faced with the task of filling a huge space. Pollock seems to have attacked this composition with a frenzy of inspiration. Like the Indian shamans he admired, he meditated first, and then moved rapidly into action (Landau, 2005). Despite having given himself over to the moment, Pollock apparently had the presence of mind to remember his teacher's ideas concerning the decorative potential of linear rhythm. Benton's lesson that dynamic visual movement could be created by rotating curves around verticals was obviously permanently in Pollock's brain; his use of Bentonian principles in Mural was propelled, however, by a wildness and vigor purely his own (Polcari, AM 1979).

Another painting of Pollock's that I would like to mention is *Shimmering Substance* 1946. For this piece too shows the traits that Pollock uses in his creation of emotion onto a canvas. The configuration of this canvas comprises almost identical pale, short arcing strokes which smother a barely visible darker under-layer of pigment. As is also apparent in some of his other



paintings, small opaque shapes peer out from behind the semicircular jabbings generated by repeated rotations of Pollock's wrist. When you take a step back from the painting there appears to be a large golden circle at the center; this circle seems to move in front of the other strokes and to hover in ambiguous space. Oddly reminiscent of some of the very late works of the French Impressionist Claude Monet (works to which Pollock would have had at the time absolutely no access), Shimmering Substance evokes in its curving rhythms, its texture, and gleaming coloration the illusion of midday in summer, when extreme heat can cause an almost supernatural luminescence and retinal diffusion (Landau, 2005). The sense of mystery that informed Pollock's relationship to nature is readily apparent in *Shimmering Substance* (Rose, PR 1980). In 1969 Lee Krasner, Pollock's widow, perhaps pinpointed its origin in a strange reminiscence of her husband she told to B.H Friedman: "The only time I heard Jackson use the word landscape in connection with his own work was one morning before going to the studio, when he said, 'I saw a landscape the likes of which no human being could have seen." (Friedman, 1969)

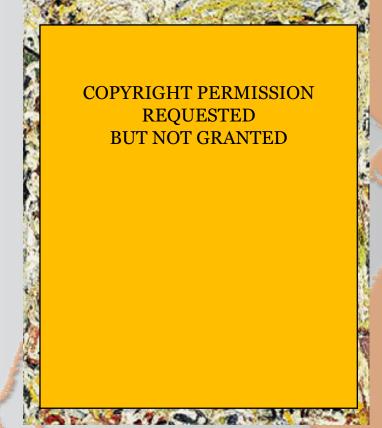


Fig. 1.2: Jackson Pollock's *Shimmering Substance* 1946. (source: Landau, E.G. (1989). *Jackson Pollock*)

"When I am in my painting, I'm not aware of what I'm doing. It is only after a sort of 'get acquainted' period that I see what I have been about. I have no fears about making changes, destroying the image, etc., because the painting has a life of its own. I try to let it come through. It is only when I lose contact with the painting that the result is a mess. Otherwise there is pure harmony, an easy give and take, and the painting comes out well." (Landau, 2005, Varnedoe and Karmel, 1999)

A conclusion of the 1989 book titled Jackson Pollock, written by Ellen G. Landau, stated that "In a stunning reprise of the role earlier played by Picasso, during the past three decades most ambitious artists have been united in their perception that in order to make their own mark, Jackson Pollock is the major figure whose achievements they must either extend or defy." She goes on to discuss that since his death Pollock has been admired, by not only painters, but sculptors, dancers, poets, and musi-



cians, for characteristics that all through his life he tried to overcome. They view him as both an "embodiment and a vindication" of their attempt to freely express their own energies and actions without negative repercussion.

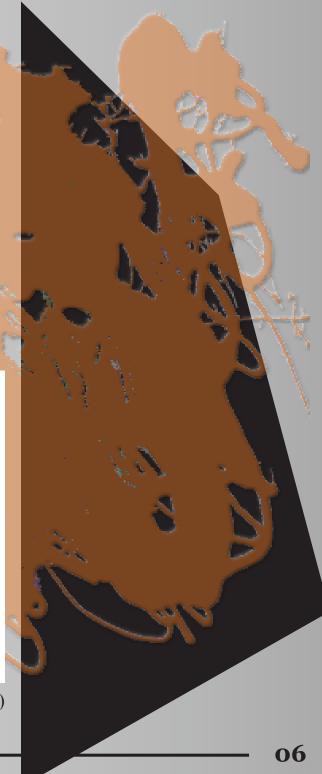
Peter Schjeldahl, in one of his reviews of Pollock termed him an "American Prometheus who stole the school of Paris's fire," appropriately summarizing the assessment of a number of previous critics and art historians, as well as Pollock's own aspirations. That from the very beginning of his career his favorite painting was Orozco's Prometheus adds to the mythic truth of the ultimate fulfillment of Pollock's destiny.

Jackson Pollock defines what I as an artist believe to be the purpose of design. He didn't create pictorial images for the viewer to encounter; he created an experience for the viewer to feel an emotion within themselves. His paintings were more than something to hang on a wall, they were created to enter your soul and awaken your inner self into the present.

¹ Peter Schjeldahl, in his review, "'Les Drippings' in Paris: The Jackson Pollock Retrospective," The Village Voice, February 10-16, 1982, pp. 94-95, termed Pollock an "American Prometheus who stole the school of Paris's fire."



Figs. 1.3-1.5: Jackson Pollock in action. By photographer Hans Namuth 1950. (source: Landau, E.G. (1989). Jackson Pollock)



Yves Klein, painter/sculptor/performer (1928 - 1962)

Klein had a fascination with using fire as a medium that could be considered extraordinary. Yves Klein was not a complex or deep thinker and never strove to be one. His objective was quite simple, his message embodied in the utter plainness of his works and the simplicity of their fabrication. Klein's activities were meant to encourage and celebrate the powers of the human imagination. His 1961 exhibition, at the Museum Haus Lange in Krefeld, Germany, sparked his interest in tracing the presence of fire which lead him to produce his series of fire paintings and prints. The Krefeld exhibition entitled Yves Klein: Monochrome und Feuer (Monochrome and Fire) had a wide range of his work; perhaps the most notable of all was the installation of his Fire Sculpture and Wall of Fire on the museums lawn. Fire Sculpture consisted of two large columns of flame that shot up from the ground into the air measuring about three meters. With Wall of Fire, fifty Bunsen burners in a grid-like pattern were set upon their side so that their rosette-like flames created a vertical wall of fire (Stich, 1994). At the exhibitions opening, Klein arranged for the fire display to be lit while guests gathered around. Burning side by side, the display illuminated the night. This left those who witnessed the fire spectacle with "Prometheus and Empedocles complexes: attraction, repulsion, bedazzlement, and apprehension." The fire creates attraction, where bedazzlement is an effect of its warm brilliancy, whereas repulsion and apprehension are brought on by its potential to harm and destroy (Restany, 1992). This analogous discussion of Prometheus comes to the forefront again as with that of Pollock, tying them both as being a provider of an invaluable source. The creative and destructive energy that fire makes combined with the warmth and comfort it produces makes Klein's fascination with the medium understandable. Once the Krefeld exhibition was complete, Klein took imprints of Fire Sculpture and Wall of Fire by holding compressed board to the flames for a short moment. Depending on the intensity of the flame, the fire left a smoke infused ambience, a scorch figuration, a black density, a charred residue, and a crackling veneer with scarring splotches (Stich, 1994). This began his most famous studies of fire paintings that he is most known for.

He continued his fire painting at the Testing Centre of Gaz de France. In keeping with flamboyant and exuberant character with the element of chance, Klein got permission to use the facilities and fulfill his dream to achieve collaboration between art and science (Stich, 1994). The importance of this collaboration was that it allowed him to solidify what he was striving for: "...to record the presence of absence, the mark of life." (Restany, 1992) Working at the Testing Centre allowed him the liberty to experiment with the fire medium and different canvas materials. With the use of a flame thrower, water and Swedish compressed board, engineered to burn at a slower rate than normal cardboard, Klein had the ability to regulate the burning process to his desires. Through his experimenting, he developed three approaches to the burning process that enabled him to control the effect the fire had on the compressed board. The first approach produced markings that appeared like clouds; "...the flames trace took on cottony and informal contours." (Restany, 1992) His Second approach created a muted version of Pollock's dripping technique. The surface showed a shadow like resemblance of the water in splashes and spurts. His third approach allowed the spill traces of water to be imprinted onto the compressed board; this too similar to that of Pollock. He too was attempting to





Fig. 1.6: Yves Klein's *Pienture feu couleur sans titre* (FC1) 1961. (source: Restany, P. (1992). *Yves Klein: Fire at the Heart of the Void*)

produce an emotion that other painters had neglected. To 'record the presence of absence' with an object to be observed, not only depicts an artful image, but allows an experience beyond the visual.

Klein began to experiment with the combination of paint and his new medium of fire. The fire-color paintings that he created were done by either painting the compressed board first then exposing it to the flame, or he would paint the board after the burning process, emphasizing certain fire markings. He also used nude models to imprint the human figure, but used water instead

of paint. He would spray the model with water, who would then press her body against the compressed board, after which he would immediately burn the imprint of water left behind. This process created some of his most critical of his work, as he was attempting to directly connect to the nuclear age in which he was living. The image he was producing was an attempt to resemble the victims 'shadow' directly resulting from the nuclear blast of Hiroshima that affected him early in his career. Taking the past and floating it into the mind of the observer with the use of fire, was an astonishing feat that challenged the art worlds' pallets.

Klein's work intrigues the viewer into grasping the process of his creation, and then challenges them to think about the moment they are experiencing. His fire paintings seem to be an exploration of what lies behind, beneath and beyond the surface of material; the spiritual. The meaning of his work lies in the process or the event, rather than in the art itself. Through it, he revealed his immense fascination of spirituality at his disposal. He uses fire, one of the four major elements of life, to demonstrate the 'presence of absence.' He uncovers what is unseen by the eyes, untouched by the hand, yet felt by the human soul. Klein made observable, the flicker of time that life expresses itself in. Ultimately, Klein's life is a grand expression of the sheer beauty of human existence and the mind that is capable of fueling that existence when given full reign. What I enjoy most about Klein, is that his art forces us to fold our attention back upon ourselves. With that, comes an invaluable lesson to me as a landscape architect; the space between observer and environment is none, for they are all equal in every position.



AESTHETICS - APPROACH

In order to successfully translate my approach of supplementing these forms of art (both mental and physical) into the landscape, there are a few things that need to be clarified.

French landscape architect Bernard Lassus stated in Between Landscape Architecture and Land Art, by Udo Weilacher, "Art and landscape architecture are the same thing for me. There is no difference. The problem that many landscape architects have is that they lack any training in aesthetics. They don't know what an invention is; in order to understand the nature of invention, you need training in aesthetics." (Weilacher, 1999)

There are three models of aesthetic experience: the contemplative model, the active model, and the participatory model. The contemplative model identifies the art object as separate and distinct from whatever surrounds it, isolated from the rest of life. The active model states that there is a relationship between the art object and the space in which it is located, but a sure difference between how it is seen objectively and how it is perceived. And the participatory model is a combination of the previous two, expanding onto the active model. This states that the object is continuous with the environment in which it is set; there is no separation between them (Berleant, 2005).

Aesthetics, as a discipline, holds a bond with its origin in the eighteenth century, when it was named the 'science of sensory knowledge'. There have been numerous additions to this sensory base over time, but it is important to reaffirm the central place that sense perception holds in aesthetic experience, for the senses are essential and indeed central to the study of art and natural beauty (Berleant, 2002). The problematic concern with most landscape architects is that aesthetic perception is usually described in visual terms; we are given not an aesthetic experience but an aesthetic appearance.

The active model of aesthetic experience stresses recognition that the objective world of classical science is not the experiential world of human perceiver. The phenomenological aesthetics of Maurice Merleau-Ponty explained that there is a sharp difference between space as it is presumably held to be objectively and the perception of that space. Perception starts with the body as here is the primary reference point from which all spatial coordinates must be derived. Thus the perceived object is grasped in the relation to the space of the perceiver (Merleau-Ponty, 1962). Space is not, as it was for Descartes, a 'network of relations between objects' that can be seen from the outside by an impartial viewer. "It is rather, a space reckoned starting from me as the zero point or degree zero of spatiality. I do not see it according to its exterior envelope; I live in it from inside; I am immersed in it. After all, the world is all around me, not in front of me." (Merleau-Ponty, 1964)

In one of Lassus's contemporary works, Walk in the Bend of the Aradin, he made a documented walk along the Aradin



River, taking photographs and recording text to supplement his experience of shifts and progress along the riverbed.

"At certain moments, diverse choices are posed. Here I prefer a more linear progress, chopped by vertical ruptures, there are more horizontal, though extremely sinuous, course. Compared to those of a walk through town, these movements have length and depth at the same time. Each step combines the two dimensions in varying proportions and can even be interchanged...From the obscure depths of the water of the basin steadily emerge, from all sides, rock, sand, and gravel, and then the flow and its fine surface, sliding across these accumulations, recopying their forms."(Lassus, 1998)

This is an excellent example in understanding the relevance of the experience of motion in the space of a landscape. The observer of the landscape (Lassus) is taking the role of the artist. He is creating an aesthetic experience within himself. Within aesthetic experience, tensions, and oppositions are synthesized. Tensions, resistances, and obstacles to movement are converted into material for fresh episodes, with the result that the whole unfolds as if growing in a purposeful direction. Material in one section seems to open onto that of the next: "Every successive part flows freely, without seam...and dead centers. ...there are pauses..., but they punctuate and define the quality of movement." What is begun is carried forward until reaching a culmination (Dewey, 1934).

When referring to the great philosopher John Dewey's thought process towards aesthetics, Joseph Kupfer writes, "...there is empirical reason to think that art is continuous with everyday life, because ordinary life is replete with aesthetic qualities." (Kupfer, 2003) Whether we are walking in a stream, repairing an automobile, playing a game of golf, or carrying on a conversation with a class-mate, our everyday activities can themselves be aesthetically rewarding. Works of art differ from everyday life only in that our interactions with them consistently show more of the defining features of aesthetic experience. Until one thinks of life as an aesthetic experience, this will continue to be so.

A wonderful example of aesthetic experience within the human landscape, J.B. Jackson has described Grand Central Station Terminal in New York City exquisitely. He states "...a conspicuous example of a rich and almost completely satisfactory sensory experience...one passes through a marvelous sequence; emerging in a dense, slow-moving crowd from the dark, cool, low-ceilinged platform, he suddenly enters the immense concourse...almost every sense is stimulated and flattered; even posture and gait are momentarily improved." (Jackson, 1996)

Kupfer when discussing the aesthetic experience in art distinguishes three objects: the work of art; the performance of the



work of art; and the aesthetic object. These objects are, respectively: physical, phenomenal, and phenomenological. The work of art exists independent of any particular performance of it. The center of attention of this experience is the aesthetic object. Created within experience, the aesthetic object is distinct from but dependant upon the work of art and some performance of it (Kupfer, 2003).

Dewey remarks, "Art celebrates with peculiar intensity the moments in which the past reinforces the present and in which the future is a quickening of what now is." (Dewey, 1934)

The differing opinions of what a work of art is itself a considerable debate and I will offer my own simple account for explanatory purposes. A work of art is typically a physical object such as a painting or sculpture, a document or design of an architectural element, earthworks, a photograph or image, or text that the artist leaves us. It is his or her creation, the result of working material and transforming it into a publicly available object, whatever scale that may be. This account is sometimes referred to as the plastic arts. The physical completeness of this 'plastic work' can mislead us into thinking that the physical object is identical to the aesthetic object; that it is the subject of appreciation. Nevertheless, even the plastic arts must be performed. It is just that their performance tend to be more subtle and less noticeable than the performance such as temporal arts as music and dance. But we perform paintings, sculptures, and buildings by deciding where to place them as well as how to perceive them. The viewer then becomes the performer. How well or poorly the particular building functions in human experience as an aesthetic object is often shaped by this sort of performative decision (Kupfer, 2003).

Physical Phenemenal Phenemenal Experience

as growing, entiting, its is been.

The state of the

Fig. 1.7: Sketched diagram of phenomenological experience of art. (source: S. Rundall)

Branka

The work of art is the physical (or mental) object that the artist gives to the world. It ranges from the paint on canvas, a government building, a score in music, to written text. The physical object is 'performed' by a second tier of artists such as musicians and museum curators, or by members of an audience such as perceivers of paintings or readers of novels (Kupfer, 2003, Dewey, 1934). When the work of art is performed, the audience is able to perceive a phenomenal object, one that possesses sensible properties, some or all of which the work of art itself does not possess. The phenomenal object enters into an aesthetic experience through the audience's receptive and active participation. The aesthetic object thereby created is a phenomenological object (Kupfer, 2003).

When a phenomenal object such as a series of shapes on a canvas, is perceived as a man walking on water within the overall composition of the painting, an aesthetic object has emerged. The phenomenal object is transformed or has become the material for a phenomenological object; an object of attention or interest that is invested with meaning. The meaning is neither exclusively subjective nor objective, but both (Kupfer, 2003, Dewey 1934, Merleau-Ponty, 1962).

Just as particular works of art can be performed differently on different occasions, even by the same performers, so too can our aesthetic experience of a performed work vary. Personal artistic experiences can also shape how we interact with performances of works of art. Moving through an Arnold Palmer golf course may enable us to appreciate shifts in perception and playability that golf courses designed by other architects may not. What is distinctive about our interaction with performances of artworks is the freedom that we enjoy when so engaged. Aesthetic freedom, moreover, is not simply permitted; it is demanded. Our active participation is needed to create an aesthetic object; otherwise we merely perceive the work of art or its performance-the phenomenal object (Merleau-Ponty, 1964). Because the parts of the aesthetic object do not stand in any single determinate relationship, we are called upon to freely arrange the parts or aspects of the phenomenal object and articulate a phenomenological object that is complete in itself (Kupfer, 2003).

So, all of this discussion is fine when you are just making a piece of art. Or as I have been asked before by a professor, "...what is it that you are doing besides creating a neat landscape?" Picture on my desk a pile of carefully proportioned colored glass that completely draws you in, but is merely an interesting, pleasing design. The making of useful objects, on the other hand, is governed by the need to fulfill a purpose. The practical end enters into the concept by which the object is defined and for which it exists. Depending on whether it succeeds or fails to fit the function at hand, a household blender is correct or incorrect, and there are techniques specifying ways to attain a correct result. But, there is more than technique that is needed to bring about an aesthetic object. When creating a successful landscape, the design has to be conceptually planned in a pleasing way and yet functional at the same time, attaining a specified yet varied performance.



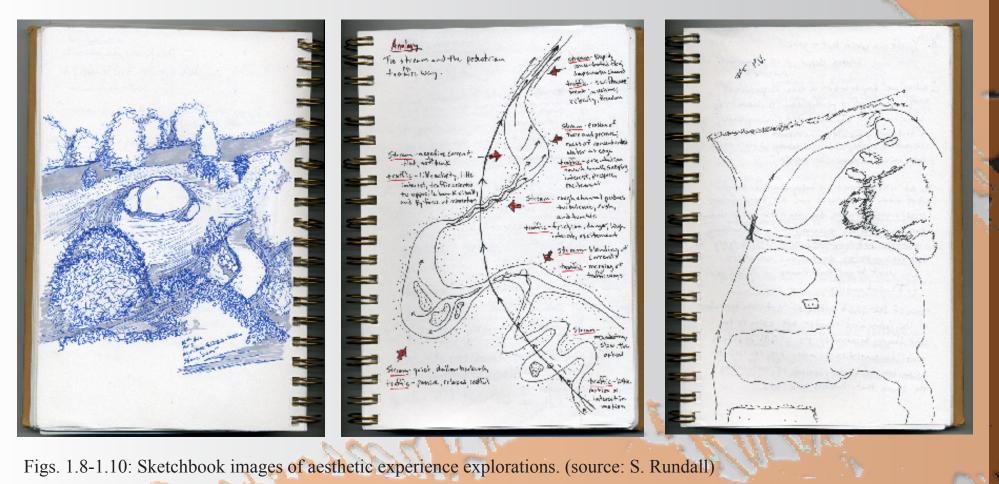
An individual is actively responsible for aesthetic experience in their lives in three different ways: first, when in the course of everyday activities, such as a conversation at work, the various aesthetic moments of experience happily converge with specific intensity. We mark off and remember that particular meeting or business lunch because it is so rich in aesthetic features. Secondly, non-artists are called upon to perform all manner of art-works. By walking around and through buildings, we perform works of architecture. Through choice of location and lighting we perform paintings, photographs, and sculpture in our home or workplace. Last, everyday life also presents opportunities for the non-artist to make works of art. Folk art is endemic to human culture everywhere. Ordinary people make up stories and poems, improvise their own dances and songs, and express their artistic talent in craftsmanship and decoration of personal places. Whether throwing pots, weaving rugs, or building their homes, people we would not usually classify as artists create artworks (Kupfer, 2003).

The same is true for the game of golf. All golfers are responsible for their aesthetic experience while on the golf course. The conversation that they have with their fellow players or their caddy takes on its own intensity and form. Each and every style of swing or rhythm of play can be considered an art form. Lastly, folklore is definitely a part of the game of golf, with the stories of how well one shot that day or when the "...do you remember when's?" start flying around like mosquitoes. And I have to mention that the way we all dress on the course, the carts we drive, or the club covers we carry can certainly turn heads as well. These are just the simple things that are easily pointed out, but the aesthetic experience goes even deeper than this. First and foremost, as golf course architect, Forrest Richardson repeatedly states in many of his writings, "Aesthetics last forever; good or bad." Aesthetics are not just about the components of the golf site, but also about how they relate to the surroundings. They begin at the minute detail and go as far away as the views across valleys, mountain ranges, and oceans (Richardson, 2002). And, one of the most important things to remember when it comes to golf course design is that aesthetics are highly subjective. What is pleasing to one person may not be to another; the best projects are those created by an artist and not a committee that must try to please everyone.

When we reestablish union with the environment in the face of new conflicts and unanticipated opposition, our experience is aesthetic (Kupfer, 2003). Changing the obstacles that we are presented with into our own material of satisfaction brings about a juxtaposition of past, future and the present into a modified moment or conclusion. Adapting to new circumstances, for example, requires a balance between what we do and what we undergo. Being faced with an awkward lie on the golf course requires you to search your memory of past obstacles faced, and what the outcome may or may not have been. Or having a consistently bad scoring round; sometimes you are faced with a decision of how to react, again affecting your experience. Our perception of a situation's details must be informed by imagined possibilities for action, but actions have to be monitored for, and then adapted to, their perceived effects (Kupfer, 2003).



The structure of aesthetic experience is not an unchallengeable thing or a Kantian belief of certainty. But it captures and concentrates the response human beings repeatedly find effective in their interactions with their work and one another. The relationship between the structure of aesthetic experience and successful living explains why Dewey believes that aesthetic experience is central to all human assessment. "To aesthetic experience, then, the philosopher must go to understand what experience is." (Dewey, 1934) It becomes more than an observation of, or participation with, but rather something lived throughout.



THE LANDSCAPE - OR ENVIRONMENTAL ART

In "Eye and Mind," Merleau-Ponty directs these ideas to the perceptual experience of painting. Things are an elongation of the body, "they are encrusted into its flesh." Thus a blending takes place between the seeing and the seen. "I do not fix it in its place...it is more accurate to say that I see according to it, or with it, than I see it." (Merleau-Ponty, 1964) Both our understanding and our perception of space, then, have changed and become fused. From being thought of as an absolute independent medium know in itself alone, space has been transformed into a condition that includes the perceiver as a constituent (Berleant, 1997). One of the better written descriptions of the continuity of pictorial and environmental experience was written by Henry James in The Ambassadors.

"He had taken the train...to a station...to give the whole day...to that French ruralism...through the little oblong window of a picture frame. He could thrill a little at the chance of seeing something somewhere that would remind him of a certain small Lambinet that had charmed him, long years before, at a Boston dealer's on Tremont Street....The train pulled up just at the right spot...The oblong gilt frame disposed its enclosing lines; the poplars and willows, the reeds and river...fell into a composition, full of felicity, within them; the sky was silver and turquoise and varnish; the village on the left was white and the church on the right was grey; it was all there, in short...it was what he wanted: it was Tremont Street, it was France, it was Lambinet. Moreover, he was freely walking about in it. He did this last, for an hour, to his heart's content, making for the shady woody horizon and boring so deep into his impression and his idleness that he might fairly have got through them again and reached the maroon colored wall of the dealer." (James, 1960)

This description is more an involvement in landscape as painting rather than in painting as landscape. However, we enter the landscape to find ourselves in a painting in quite the same way as we discover the landscape in a painting. What is being discussed is not so much and act of imagination but as perception. A serpentine road or river does more than organize the landscape and provide visual interest and variety. It does even more than serve to draw the eye into the painting. As a path, it becomes the occasion for the perceptual movement of the living body into the landscape. The road beckons a viewer the same way that a spoken word commands our attention and a question compels an answer (Berleant, 2005). Artistic license was not the justification of Cézanne's claim that a picture contains within itself even the smell of the landscape; it was his conviction that through the effective use of pictorial qualities a painting creates the total sensory field of experience.

Taking the complete field of senses and adopting the notion of participatory perception with landscape painting, by regarding the space of the painting as identical with that of the viewer, we place ourselves on the same horizontal plane as that of



the foreground or the painting. In Salomon van Ruysdael's Country Road; what is an unexceptional rural scene from a distance, opens up to accept the viewer as we move closer to the painting. As if traveling down the road depicted, we notice the small herd of cows in the foreground moving toward us, the horsemen farther on moving down the road in the opposite direction, and the hay wagon still farther off, outlined the sky on the crest of the rise in the road. We have become another figure in that pastoral place and time (Berleant, 1997).

At the same time as we move actively in space, our surroundings exercise a creative influence in shaping our gestures and actions. By recognizing that specific features in the space affect the way we behave, it becomes necessary to extend the active model of experience to include such influences (Berleant, 2005). The features and forces that guide our spatial sense and mobility make an essential contribution to the definition of our lived space. No longer a spectator, no longer even a mediator, we join in the movement of things very much as a performer does in theater or dance, activating the conditions with which we are placed.

Aesthetic experience is marked

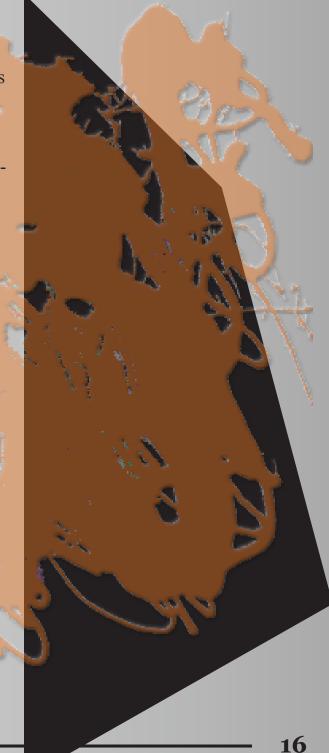


Fig. 1.11: Solomon van Ruysdael's *Country Road*. (source: Berleant, A. (1997). *Living in the Landscape: Toward an Aesthetics of Environment*)



Fig. 1.12: Detail of Solomon van Ruysdael's *Country Road*. (source: Berleant, A. (1997). *Living in the Landscape: Toward an Aesthetics of Environment*)

by the integration of elements, yet the constituents do not blur together. They retain their distinctive identities. Themes in a musical composition, scenes in a play, and portions of a painting possess an individuality that nonetheless has the character it does, because of the relationship of this part to other parts within the whole, we see our environment differently (Dewey, 1934).

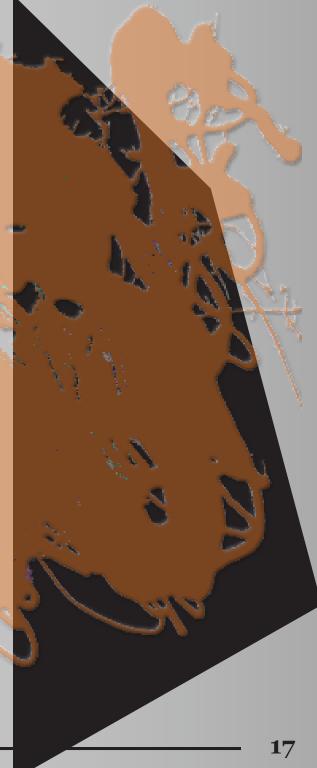


GOLF - AS AN ART FORM

What is a golf course? Put simply, a golf course is just a series of paths, some physical and some mental. How they are traveled is up to the golfer. Anything meeting these requirements can be called a golf course whether it is a miniature one made of cement, wood, plastic, and carpet or a highly manicured one with trees, undulations in turf, and water on a piece of land, whether one acre or five-hundred.

"Golf Course design, in simple terms, is the arrangement of these starting and ending points. If, in the process of arranging these points, the landscape is not modified or changed, then the golf course is merely 'laid out'. If the terrain is modified or changed, then the course is 'built'. If the building of a course follows a preconceived plan, then the course is 'designed'. The set of principles, rules, laws, style, experience, education, and imagination that guides perceptions relative to the design of the golf course is golf course architecture. In other words, golf course architecture is the theory and planning required to modify terrain and soil to accommodate the game of golf." (Hurdzan, 1996)

The game of golf can be traced back nearly 600 years to a time when it was played mostly on land exactly as it was found. There were no requirements on the length of holes. The early game was played with two clubs and a ball made of boxwood. Some holes would be over a mile long, and some holes would actually cross each other. And, to this day you may still be able to fine some of the target holes used more than once during a round of play. As the sport grew more and more popular, the danger of crossing holes became apparent and some guidelines and rules resulted. In 1745 the first 'Original Rules of Golf' were adopted in Scotland. There is an old tale stating that some gentleman would open a bottle of whisky at the beginning of their game, and the number of drinks it took to finish the bottle resulted in the number of holes in a round of golf, eighteen. In the early days once a hole was finished, the next hole had to begin within one clubs length from the previous putting hole. The surface of the putting hole was often made up of sand because of the wear and tear the area took from concentrated traffic (Cotton, 1975). To begin the next hole, the ball was placed on a hand made mound of sand to elevate the ball for optimum contact and distance. Again with safety in mind and the amount of players around the ending points, the designation of a natural turf covered area became the permanent installation of the target holes. This became the 'green'. The area immediately adjacent to the green became the teeing ground for the next hole. There were constructed wooden boxes filled with sand placed at the beginning of each hole in order to keep with the tradition of mounding sand to tee the ball up. This became known as the 'tee box'. This too became dangerous and caused slow play as the players approaching the target hole could not hit to the green until the previous group teed off on the next hole. Unanticipated, this began the earliest profession of course maintenance as



someone needed to direct the surface water off of the green area, which usually ended up on the next teeing ground (Wind, 1956). There were minor attempts to control the direction of flow of the surface drainage by placing piles of soil in between the green and next tee. This only worked for so long before playability became a factor again and these piles of dirt effectively became 'green features' at each hole. The maintenance person ultimately changed the location of the next tee box in a safe yet manageable distance from the previous green. No one knows who the first person to designate these areas for permanent tee locations, but inevitably was the first person to design a golf hole.

But what is it about a golf course that makes it comparable to the plastic arts? The attractiveness of golf courses is not solely dependant upon that of the areas in which they are located. They have there own innate beauty as well. The fairways appear as verdant ribbons, dotted with glistening sand traps. Each is punctuated by a putting surface of velvety grass, geometrically patterned by refined mowers. All is clothed in brilliant hues of green (Raitz, 1995). And complementing the beauty of the playing surfaces are the setting in which they are laid out. Some courses are surrounded by essentially unaltered natural environments, providing scenes of strikingly beautiful contrasts.

Golf is theater, perhaps never more accurately described than by author Arnold Huatain in his 1908 book "The Mystery of Golf". He sums up golf by saying, "...at every hole is enacted every time a small but intensely three-act drama. Eighteen

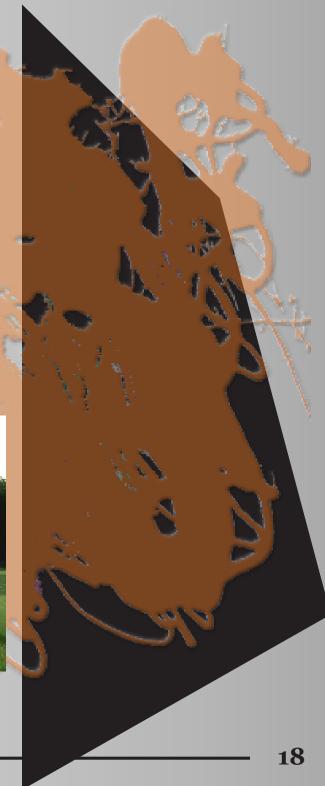
dramas, some tragical, some farcical, in every round... no wonder the ardent golfer does not tire of his links, any more than the ardent musician tires of his notes. What theater-goes enjoy such plays? And what staged plays have such a human interest in them? And, best of all, they are acted in open air, amid delightful scenery, with the assurance of healthy exercise and pleasant companionship." (Haultain, 1908)

As in the fine arts, there are certain techniques and principles, but how the architect applies these is quite individualistic, resulting in unique compo-



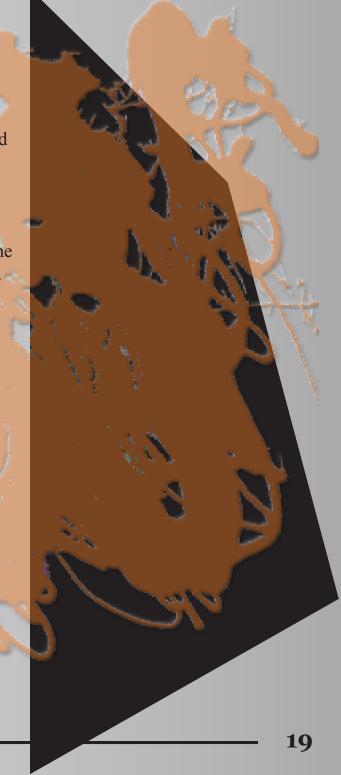


Figs. 1.13-1.14: Canyata Golf Course. (source: Big Creek Golf Copyright 2001)



sitions but often recognizable architectural styles. Aficionados of the arts have their favorite compositions and artists; golfers have their favorite courses and architects. But the perfect opera has never been written, and the perfect picture will never be painted, and so, the perfect golf course has never been, and never will be, created. Excellence, however, does exist, and as in the fine arts, golf has its masterpieces.

The most well known masterpiece in all of golf is The Old Course of St. Andrews. The Old Course has long been judged as the best course that the game has to offer and has been acknowledged as the "incubator of the game" (Hurdzan, 1996). The course is known for its particular physical features including 112 bunkers, some of which are especially famous like 'Hell-Bunker' on the long 14th, 'Strath Bunker' on the short 11th and the 'Road Bunker' at what is probably the most famous golf hole in the world, the 17th or Road Hole (so called because a road - which is in play - runs hard against the back edge of the green). Another peculiar feature of the Old Course is the double greens where the outward and inward holes are cut on the same putting surface. These greens are large, not surprisingly, and golfers can be faced with putts of almost 100 yards (Doak, 1992). The Old Course's truly remarkable feature is that in today's modern golfing world, a course which has evolved over six centuries, remains a true test of championship golf. The Old Course has been researched by many players and professionals over time and has turned its design philosophy into a timeless endeavor by many golf course architects.



EVOLUTION OF GOLF - A BRIEF HISTORY

The earliest of golf courses were found on what is known as 'linksland' (Cornish, 1981). A linksland golf course is considered an exposed, windswept course characterized by gently rolling mounds, similar to sand dunes, with tall grasses and very few trees. Golf, in its early days, was played on commons or sandy deposits left along the seacoast by the receding ocean. True linkslands are commonly defined as golf courses formed by nature on or near river estuaries, the place where a river meets the sea. The game of golf was first played in Scotland along the estuaries of the rivers Eden, Tay, and Forth (Cotton, 1975). The terrain of these linksland landscapes dictated the route a player would follow, as humans had very little to do with the manipulation or maintenance of these early courses. There were no trees or ponds on these ancient links, but there were numerous natural hazards. For example, areas of grass would be grazed bare by livestock, nests and holes of small game would collapse into pits, and topsoil erosion along with sand wastelands contributed to the character of the Scotland landscape. At an earlier point in time, Mother Nature's harsh, windswept, and animal grazed terrain, was golf's only architect (Cotton, 1975).

There is some debate about exactly when the game of golf entered into America. It is generally accepted however, that the game migrated to other parts of the world including the United States, sometime in the late 1800's. The need for designing new courses on different landscapes rapidly arose. The introduction of golf course architecture into the United States can be partially attributed to Charles MacDonald (Graves, 1998). Designing in the early 1900's, MacDonald insisted that courses be on land that resembled those on the Scottish linksland. However, this design philosophy spared no expense in experimenting and 'manufacturing' landscapes where nature was deficient (Wind, 1956).

Why does the game of golf produce such interest and fascination in the people who attempt to play it? Part of the answer to this question can be found by considering the origins of the game from a psychological point of view.



THE PARKLAND SAVANNAS

Humans evolved on the savannas of Africa, and modern humans inherited an apparently universal attraction to savannalike environments with scattered trees, expanses of grass, lakes and beautiful vistas (Sailer, 2005, Richardson, 2002). For most of human history, food was acquired by hunting and gathering. Daily life consisted of hunting for food, and success ensured both survival and status within a group. When not searching for food, the hunters and gatherers spent time refining their tools and practicing the skills that underlie successful subsistence. The games of ancestral humans, like the games of contemporary hunters and gatherers, probably involved demonstrations of skills that were central to hunting. These skills remain the most common elements in modern sports (Richardson, 2002).

Golf is a stick-and-ball game. The objective is to strike a ball so that it travels from point A to point B. The game is one of a set of games that require great skill of a player to accurately send a ball to a stationary target. Most of which require the player to guide the ball with hand of foot. Golf requires the use of a variety of tools. All projectile-target games make use of the ability of humans to accurately throw a missile. Evolution designed humans to be able to throw various types of objects. Throwing is a uniquely human skill – other primates cannot throw with any accuracy at all – and is central to our ability to hunt and kill prey (Cornish, 1981, Richardson, 2002). As evolution favored humans with the perceptual and cognitive skills that enable successful hunting, it also produced the ability to golf. In a sense, a round of golf may be regarded as the metaphorical equivalent of the hunt (Wilson, 1980).

Both hunting and golf involve a heightened awareness of terrain and the ability to imagine the outcome of a series of actions. Both fully engage the imagination and the senses. Both require a kind of relaxed concentration for optimal performance. The origins of the game provide clues about how to route a golf course. Because hunting was a universal activity of ancestral humans and because humans have always competed at the skills involved in hunting, the modern golfer has inherited a set of universal perceptual, cognitive, and emotional reactions (Richardson, 2002). By regarding a round of golf as a type of hunting game, it is possible to understand a golfer's aesthetic reactions, emotions, experience of space, perception of hazards, and performance on the course. The golf course itself has significant influence in this matter; it is an expanse of living, breathing nature that dares and beckons while at the same time lying motionless and remaining speechless (Richardson, 2002).

Golf, with its very "simple" objective to knock a small ball from one point eventually into a hole only slightly larger that 4"in diameter, is only simple in the broadest concept. In reality, golf is a mixture of influences which cater to every conceivable sense (Graves, 1998). There is the touch and feel surrounding the physical relationship between the golfer, club and ball. There is perspective in sight, between where one is, and where one needs to end up. There are sounds of birds, rippling water,



or blowing leaves. There is the unmistaken aroma of freshly cut grass, blossoms in spring and the chilling non-smell of a wintry wind.

Then there is what golf course architect Forrest Richardson refers to as the sixth sense of golf. "The strategy and requirement to see in one's mind what lies ahead. Envisioning a map of the route to be taken and – somehow – translating that strategy and vision into physical agility and the coordination of hundreds of muscles and millions of individual human cells." To some, golf approaches that of the metaphysical (Richardson, 2002). How else is it possible to explain the mind-over-matter shots and miraculous recoveries from deep within thick neighboring woods? Or, conversely, the mental break-down that occurs when a seemingly short and easy shot must be played across a 'puddle of water' onto a huge welcoming carpet of grass that you might just be able to throw the ball onto. Golf is full of both mental and physical challenges. The game forces a relationship between the environment, other players, competitive nature and, especially, one's inner self.

The mystery of each golf hole is one of the primary reasons we play. Mystery is a recurrent element of preferred land-scapes (Kaplan, 1989). It involves entering a scene to gain information. It is the promise that proceeding along the routed will reveal new or additional information. For example, paths that proceed straight for a while and then turn and disappear from view tend to be preferred over paths that can be clearly seen (Richardson, 2002). The game of golf marries the better of two extremes; on one hand, we have the playing board, with its rules, procedures, and format, but on the other, we have the feeling of being able to take our own path – to go wherever we like – and no official or rule prohibits this. Golf is the ultimate of individual games, for we can go about it as we well please. The bad decisions are ours to bear, the good ones to hold dear.

"The art of golf course design is powerful. It elicits emotions. It surprises. It challenges. One moment it is about theater, and the next it is about the stage itself. It is storytelling at its highest form. Its greatest gift is allowing new stories to be written by a never-ending line of waiting actors. This is the magic of golf."

- Forrest Richardson, Routing the Golf Course, 2002



THE ARCHITECTS

A golf course architect is one who has the knowledge or education of the technical planning process to modify a site for the safest and most enjoyable golf features the land has to offer (Hurdzan, 1996). The golf course architect has become a desirable role by many young players throughout its existence, including myself. There are far too many golf course architects to mention for this particular discussion, so I have chosen two of which I consider my mentors and/or pertain to my thesis topic, the great Alister MacKenzie and the renowned Desmond Muirhead. It is from these men that I will be basing my design strategies and technical ability on.

Alister MacKenzie (1870 – 1934)

From masterpieces like Cypress Point and Augusta National, to lesser-known but equally brilliant designs like Pasatiempo and Crystal Downs, MacKenzie was arguably the most charismatic, original and creative golf course architect of the time (Shackelford, 1999). He grew up in Yorkshire, England spending a great deal of his time in the Scottish Highlands. He later received degrees in medicine, natural science, and chemistry from Cambridge in 1897. He then became a field surgeon in the Boer War and was credited with saving many lives with his implementation of his learned camouflage theories throughout the war. Once the war ended he created his own medical practice while at the same time serving as the Green Committee Chairman at Alwoodey Golf Club (Doak, 1992). It was here where he met H.S. Colt, an established course architect that they realized they shared many philosophic similarities in design. The two partnered on the re-designing of Alwoodey Golf Club and gained many praises and awards. In the 1920s MacKenzie established his own practice and began to travel the world establishing himself as a renowned golf course architect.

He was known as a master of strategic and playable designs. His routings never followed a set formula and relied heavily on the natural features of the site to dictate the order of the holes. He is most notably known for his eccentric, irregular bunker designs shaped like 'passing clouds'. The majority of his designs had frugal but ingenious placement of hazards to add interest for the below average players as well as the low handicappers. His greens were bold with undulating contours that always rewarded those golfers approaching from the well thought out appropriate angels (Shackelford, 1999).

"...golf is a game and not a mathematical business, and that it is of vital importance to avoid anything that tends to make the game simple and stereotyped. On the contrary, every endeavor should be made to increase its strategy, variety, mystery, charm and elusiveness so that we shall never get bored with it, but continue to pursue it with increasing zest, as many of the old stalwarts of St. Andrews do, for the remainder of our lives." (Shackelford, 2000)



MacKenzie wanted the players experiencing his courses to always be thinking. Never did he want them to be distracted by a feature that seemed out of place. Everything must feel perfect. He also felt that it was important to make holes look much more difficult than they really were. People get more pleasure in playing a hole that looks almost impossible and yet is not as difficult as it appears. His goal was to provide excitement and thrills throughout the entire round played, until the last putt was holed. In his 1920 book Golf Architecture, he lists thirteen essential points to golf course architecture. The reason I chose to speak about Mackenzie is for three of these points. He states that each hole should have a different character; there should be an infinite variety of strokes required to play the holes; and the course should be so arranged that the long handicap player, or even the absolute beginner, be able to enjoy their round in spite of piling up a big score (Doak, 1992). There is no mention of graduating the lengths of holes, as other architects of the day liked to do. The notion that each hole should have character is lost on most architects today. Creating each hole with a differing spirits allows for the participant to get lost, figuratively speaking, in their own voyage of discovery. Something as simple as leaving an opening in front of the green to allow the perfectly steered shot to run up onto the putting surface, adds a thrill to even the weakest of players.

Lastly, the reason I chose Dr. Alister MacKenzie as one of my mentors of golf course architecture, was for the depiction that golf course architect and author Tom Doak, stated of the man. For I strive to fit the persona of such a figure. MacKenzie "...was certainly no run-of-the-mill fellow. His artistic individualism, combined with his scientific knowledge – supported by the force of his strong personality and his special brand of benevolent autocracy – made him a man who caused great things to happen around him." (Doak, 1992)

Desmond Muirhead (1923 – 2002)

Often times considered the Picasso of golf course architecture, Muirhead was a genius, whether you liked his work or not. What distinguished him is that he was an artist and an urban designer first, and a golf course architect second. He was not your typical golf course architect either. Where many have a long history of playing the game of golf, Muirhead has a high handicap and rarely plays. Muirhead was educated as a land planner and architect and did not get involved in golf course architecture until the early 1960s when he worked on numerous communities in Arizona. When he was presented the opportunity to design courses throughout residential areas, he jumped on it. This was a simple way for him to be artfully creative within the human realm. He was one of the first to understand the importance and safety of the relationship between the golfer, golf course and adjacent residential developments. He has written many texts on golf course architecture, philosophy of design, and details of construction. His engaging personality gained him a partnership with Jack Nicklaus, and he worked with him to produce a handful of prestigious courses; most notably Muirfield Village Golf Club in Dublin, Ohio. After parting ways in the mid 1970s from Nicklaus he left golf course architecture to return to large community development in Australia. When he returned in the mid 1980s, he came back with a bang, and this is why I have chosen to include him in the few architects that I have discussed.



He began to design golf courses on his own, but now the holes were becoming art, mythology and sculpture, seemingly without a great deal of regard for playability or shot value. He took a leap, and caused a stir among the traditionalists. Some of the holes included a fire-breathing dragon, fairways shaped like New Jersey, Bunkers like Nordic crosses, etc. One hole, a par-5 at the Aberdeen Golf Course in Florida is shaped entirely as a mermaid, complete with a fan-tail tee box, fish-shaped bunkers, and 'earthen scales' throughout the fairway. Many of his critics loved to hate him and often said "His courses look like they were made to be played from a helicopter." (Strawn, LAM 1993)

"There has to be a kind of proportional exchange between abuse and exhilaration to make the hole interesting. If there isn't, if it's just straight thrill, then something is lacking. It's like the best sex is when you are angry. There is blandness in most other golf courses. There is no blandness to ours. I am pleased with that." (Strawn, LAM 1993)

Muirhead indeed went outside of the box in the latter part of his career. He studied ancient psychology and incorporated his findings into a golf hole. He studied Japanese paintings and tied their stories into the earth. He would often begin a design by walking the site for two or three days, time permitting, and claimed that each site had its own music, and if you listen, you could hear it. He claimed that many golf course architects design the same golf course wherever they are. One thing can be certain, his are all different.

Desmond Muirhead was an artist, as a planner, a golf course architect, and as a thinker; thus the reasoning why I have chosen to study him. No other architect of golf has even attempted what he had done, and I question that. Without these types of golf holes, the element of mystery within the experience of the game is secluded, and the mind is suspended. As Muirhead once stated, "If you play a golf course and know everything about it the first time out, then the designer has failed." Shake the cage, not only make the golfer think about the round, but why not make them wonder what the hell you as the designer were thinking too!



METHODS - A DISCUSSION WITH PROMETHEUS

Prometheus - Greek Mythology. A Titan who stole fire from the gods to give to humankind and was punished by being chained to a rock where a vulture gnawed at his liver.

The legend of Prometheus tells of a god who wished to bring fire to humankind, as this would bring them "nearer to perfection of the immortal gods." He steals the fire in secret from Mt. Olympus and brings it to the eternally grateful humans, who immediately see its potential. For his theft, Prometheus was chained to the top of a mountain, where every day an eagle swooped out of the sky and ate his liver until he was at last rescued by Hercules. In the meantime, generation after generation of people live and prosper, blessing him for the gift he had obtained for them at such terrible cost (DeVinne, 1982).

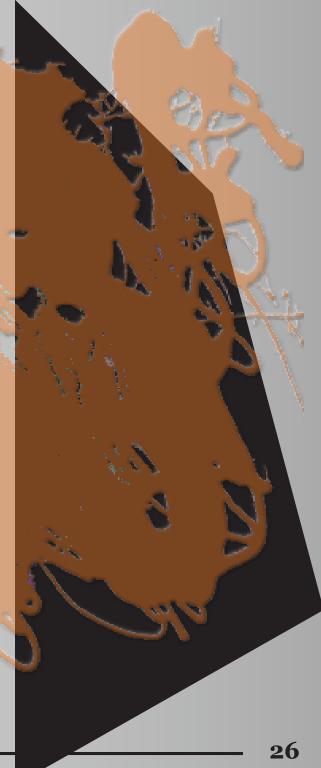
What is it about a bonfire that absolutely encompasses us? Why can we sit and stare at the flame and be in complete awe? Fire seduces us into blocking out all that is around us. There is no surprise. We know what will be there when we create it. We know there will be flames; we know there will be heat; we know there will be smoke; we know there will be crackling. Yet we don't have complete control. Or do we? All we can do is plan for an idea of what will come. Most often we are correct with the feeling we get with a bon fire, yet all we do is predict.



Figs. 1.15-1.17: Bonfire photographs by Eric W. Bragg. (source: www.surrealco-conut.com)

I feel the same is true with a landscape that is designed by an architect. We can design and construct with hopes of a desirable outcome, attempting to know the feeling it will produce in the experience, but never are we certain. We can only plan for a harmonious relationship between man and nature. A picture does not do a fire justice; a video does not do a flame justice. The observer needs to be in front of the flame to understand and truly 'feel' the fire.

In the presence of fire, there is a feeling, or a sequence of events that af-



fect all of the senses: sight, hearing, touch, and smell.

Fig. 1.18: Diagram of The

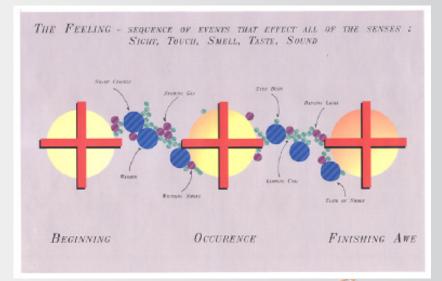
quence of affected senses

with the flame. (source: S.

Feeling describing se-

Rundall)

There is a beginning, an occurrence, and a finishing awe. Within this sequence, there is a substratum or underlying lay-



ers. There is the comfort of heat; the sharp crackle of the wood; the writhing smoke; the burn of the pupils; the spewing gases; the glowing coal; the taste of smoke; the dancing light. The culmination of this sequence of events is a feeling that is desired by all human beings, a complete harmony of the soul.

There is no firm agreement among neurologists as to exactly how many senses there are, because of differing definitions of sense. In general one can say that a 'sense' is a faculty by which

outside stimuli are perceived. As children we are taught that there are five senses: sight, hearing, touch, smell, and taste; a classification first devised by Aristotle. He felt that these five senses were windows to ones soul. A broadly acceptable definition of a sense would be a system that consists of sensory cell type (or group of cell types) that respond to a specific kind of physical energy and that correspond to a defined region (or group of regions) within the brain where the signals are received and interpreted." (DeVinne, 1982) Without the information we receive through our five senses, we could not function as the beings we are. Each sense is important in its own right, but each has its limitations. On the other hand, one sense can be used to compensate for another.

These senses are the catalyst to successful art. Such as a flame, the art must tickle the senses. Art must reach further than simple impression or self-revelation. Art, said Alfred Stieglitz, is the affirmation of life. And life, or its eternal evidence, is everywhere (Giltaij, 2004).



CONCLUSION - THE THOUGHTS IN MY HEAD

Art to me, functions as a cultural forefront, leading us to discover features of environmental experience that come to emerge as vital aspects of the contemporary world. Nowhere is this more significant than those arts whose very nature bridges the cultural gap between the aesthetic and the practical. The environmental arts of architecture, landscape architecture, and golf course architecture offer unmatched opportunities for recognizing and realizing human values by enlarging the capacity and scope of our experience. These arts of environmental design do more than give shape to space. They create the human realm, the possibilities of vision, movement, and the scope of actual perception. In establishing the perceptual conditions for life, the environmental arts help determine human culture (Berleant, 1991). With such a role and such an influence, we as designers are equal of any. We find ourselves living in an aesthetic environment, a contributing part of its active continuity. Landscape architecture has emerged into the forefront and has redefined our environment into an interactive process between people and places. Once we recognize this, the many subtle ways in which environmental engagement occurs begin to emerge as an art form. Since the beginning of my academic journey into landscape architecture field, I have brought two main ideals with me: the world of which studying the gratifying field of art open my eyes to, and my passion for the game of golf. In all of my works I have attempted to push the norm and stand on the edge of the cliff. Throughout my design experience I learned a valuable lesson; don't be afraid to jump, but always land on your feet.

In order to apply this to the profession of landscape architecture, I had to find the appropriate scenario to apply my methods. Such a setting presented itself to me through the engagement of a local country club and its dilapidated course and dwindling membership, a problem that occurs in almost any geographic setting throughout the United States. The nature of reoccurring courses that need a face lift; these are the settings that present the optimum choice to provide a community with a piece of art that not only improves the business and experience of golf, but improves the quality of life throughout. Yet there needed to be a way to assure that a new design would accomplish these hopes. Through my research of aesthetics and how one perceives a given environment, along with the message of the proceeding forms, I am certain that my project ideas will come to fruition. However, as the distinguished teacher of landscape architecture once said:

"In the final analysis, in even the most highly developed plan areas or details, one can never plan or control the transient nuances, the happy accidents, the minute variables of anything experienced; for most things sensed are unpredictable, and often hold their very interest and value in this quality of unpredictability."

- John Ormsbee Simonds, Landscape Architecture, 1961



THE PROJECT - AN INTERVIEW WITH THE ARTIST

One of the most attractive aspects of the game for the average golfer is the beauty of the surroundings; in fact, when he or she is playing poorly, it may be the only consolation which brings them back. So why shouldn't we try to build the most beautiful courses we can, as well as the most interesting to play? The moods of the golf course routing and the character of the course have a profound impact on the golfers' subconscious, affecting their play. For example, an elevated tee excites the golfer, and may tempt them to over swing, while a chute of trees off the tee may cause them to constrain the backswing. The golfer that has grown up on wide-open links courses often gets a sense of claustrophobia on a wooded course, and drives the ball into the trees all day long. The American golfer who has grown up on a wooded course often feels lost on the links, without trees to visually define the limits of the hole.

The greatest courses do not simply fall back on the natural beauty of the property, but are designed to enhance the beauty by directing the golfer around the property to see it in all aspects. Beauty, however, is in the eye of the beholder. What is beautiful to me may be a nightmare to the next.

"It must be remembered that the great majority of golfers are aiming to reduce their previous best performance by five strokes if possible, and if any one of them arrives at the home teeing ground with this possibility in reach, he is not caring too much whether he is driving off from a nearby ancient oak of majestic size, or from a dead sassafras. If his round ends happily, this is one beautiful course. Such is human nature."

- A. W. Tillinghast

So, a decision has to be made within the mind of the designer, my own decision. I have to be able to 'call my pocket' and state what I am going to accomplish. Or do I? Maybe that is what I have been discussing all along. Create an aesthetic experience that allows the participant to make the distinction for themselves. Let them attempt to assemble their emotions in a sublime setting. Immanuel Kant's take on the Sublime is wonderful. He describes it as an overwhelming experience beyond comprehension, a point where the imagination reaches its limits and succumbs to "emotional delight." (Kant, 1899) That is what is being attempted; Sublimity in nature; Sublimity in a game; Sublimity in art; Sublimity in you. I want to create a piece of art that is as much a part of the golfer as it is a part of me. And the test of pre-defining what the participant will think and feel is the most difficult challenge. It is merely a prediction. But for the purpose of this project, assumptions must be made. The course will have 18 different inspirations through nine golf holes. The holes will be generalized to what I feel is 'aesthetically pleasing'. This oversimplification of character is essential to establish a starting point, as the possibilities are boundless. The



thrust and meaning of each part or feature of the experience is enhanced by its relation to other parts or features. Elements of the experience have the qualities they do because of their relation to one another, and because of how they are positioned in this particular whole. The magnificent thing about designing a golf hole is that it is a perfectly controlled perspective, one of the few perfectly controlled perspectives in life. I as a designer, place two tee markers down on the ground and say 'Stand here, participant, and nowhere else, and you will look at what I put in front of you.' Conversely, the experience is immeasurable, and that contemplation is one of the most powerful elements of the arts.

It is here that I stand. The deciding factor of whether or not the participant will return, the ultimate goal of a golf course architect. To establish an experience that is more than the game; to invite the golfer to take something home besides his or her score; to create emotion that brushes all of the senses; to create a piece of art that seduces you and makes you giddy; to create a Grand Central Station. Push the limits and see what happens. Be bold. Stand out. Be an individual. It is the only path to happiness.





DESIGN INTENT



Fig. 2.2: Untitled fire painting. (source: S.Rundall)

THINK LIKE AND ARTIST...

Artists think differently. Some artists will try to shock you. Some artists will try to make you feel warm and fuzzy, and some artists will try to make you angry. But there is one thing that all artists have in common...they all try to real you in....

The bonfire engulfs you in similar ways. It catches your attention and seduces you, blocking everything else out. The only difference is that the fire is constantly changing.

When you are walking through a museum in a gallery of paintings, some you will walk right by; some you might glance at. Then there are a few that hit you. It is a feeling that is not soon to be forgotten. Such as my experience with Jackson Pollock's *Mural*.

I then begin to think of things outdoors that have had this similar affect on me. I immediately think of the affect that Frank Gehry's buildings have had on me in my lifetime. They are bold; they are unique; and they demand your attention. These buildings make a statement and yet are functional at the same time. For me, these work.

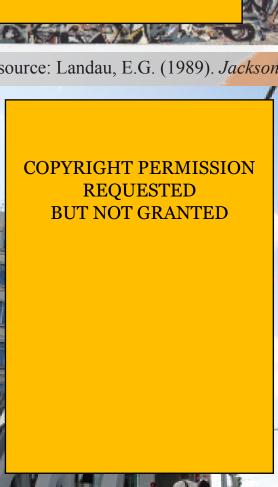


Fig. 1.1: Jackson Pollock's *Mural* 1943. (source: Landau, E.G. (1989). *Jackson Pollock*)

Fig. 2.4: Photograph of Frank Gehry's Dancing Building, Prague, Czech Republic. (source: Gilbert-Rolfe, J. with Gehry, F. (2001). *Frank Gehry: The City and Music*)

COPYRIGHT
PERMISSION
REQUESTED
BUT NOT GRANTED

Fig. 2.3: Photograph of Frank Gehry's Stata Center at MIT, Cambridge, Ma. (source: S. Rundall)





COPYRIGHT PERMISSION REQUESTED BUT NOT GRANTED Figs. 2.5-2.7: Princess Diana Memorial

I then began to think about spaces in the landscape that I have experienced that affected me the same way. Sadly, none came to mind. Now I know they are out there, I just personally have never experienced any.

One landscape architect that comes to mind is Kathryn Gustafson. The Shell Headquarters in France is a design that I am sure would capture me in ways that many other landscape fall short of. Gustafson mimicked the flow of the earths fossil fuels throughout the terrain which is essentially a roof garden for the car garage below.

Another of works worth mentioning is the Diana Fountain in London, working with the gentle movements of water and texture.



BUT NOT GRANTED

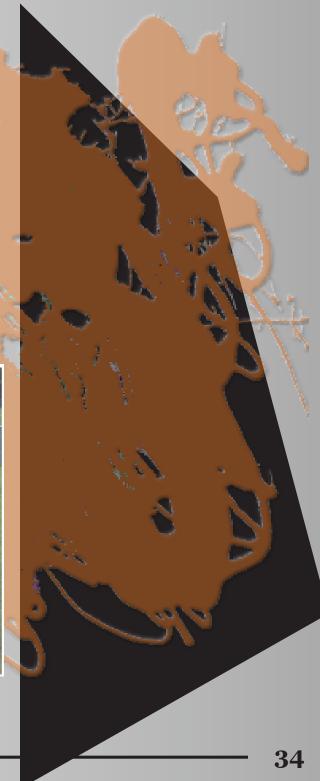
Fountain, London. (source: Amidon, J.

(2005). Moving Horizons: The Landscape Architecture of Kathryn Gustafson

and Partners)

COPYRIGHT PERMISSION REQUESTED BUT NOT GRANTED







So this is how I began. With an understanding of phenomenological theories of aesthetics, I wanted to create an overwhelming experience beyond comprehension, a point where imagination reaches its limits and succumbs to emotional delight. Sublimity in nature; sublimity in a game; sublimity in art; sublimity within the person experience my design. With my passion for the game of golf, I wanted to attempt this on a golf course. I want to create a piece of art that is as much a part of the golfer as it is

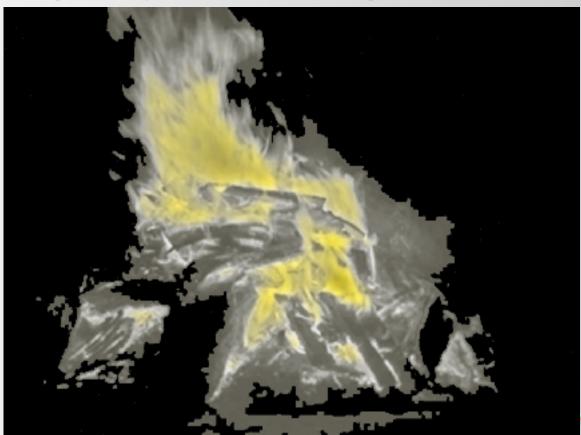


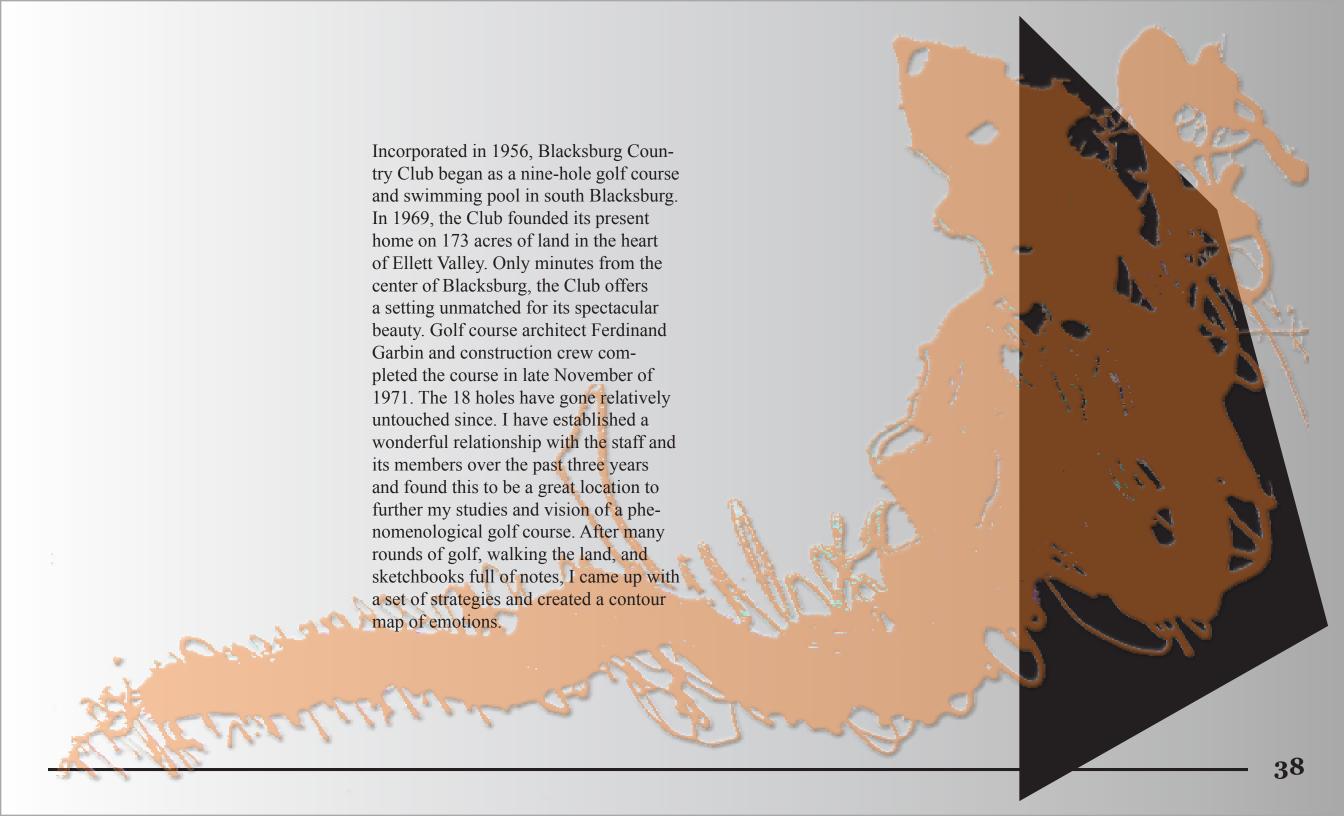
Fig. 2.11: Graphic image of Fire Art created 2006. (source: S. Rundall)

a part of me, the artist. And the test of pre-defining what the participant will think and feel is the most difficult challenge. It is merely a prediction. The course will have 18 different inspirations through nine different holes. The possibilities are boundless. The thrust and meaning of each part or feature of the experience is enhanced by its relation to other parts or features. Elements of the experience have the qualities they do because of their relation to one another, and because of how they are positioned in this particular whole.

THESITE



Fig. 2.12: Aerial photograph from helicopter of Blacksburg Country Club, Blacksburg, Va. (source: S. Rundall)



STRATEGIES

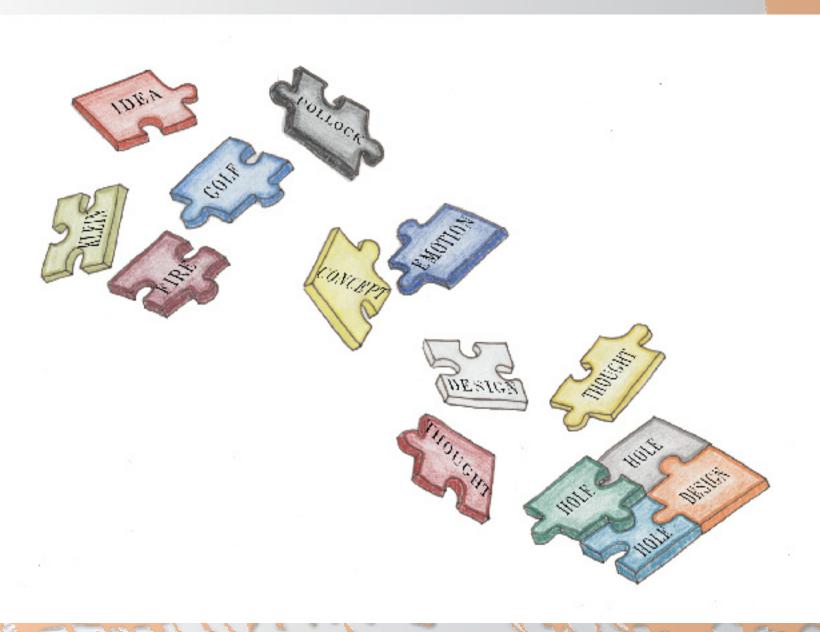
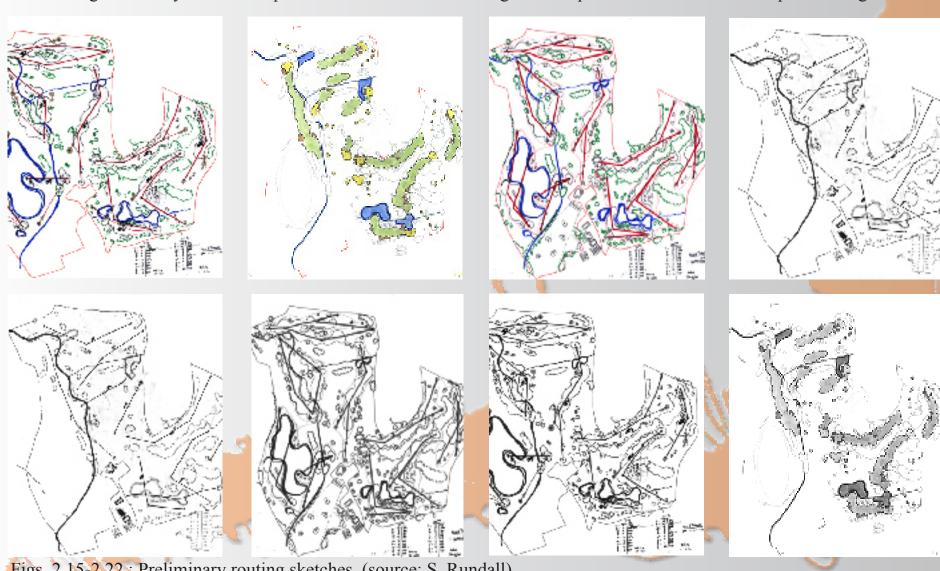
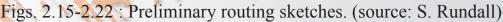


Fig. 2.13: Strategies puzzle diagram. (source: S. Rundall)



I then toyed with many different routing plans for a 9 hole golf course attempting to provide an entirely different experience for the golfer on each hole. My goal was to enhance the existing conditions contour map of emotions by providing more exciting holes. After numerous attempts and many great holes, I narrowed them down to best combination of 9 holes. But, a 9 hole course is often seen as not enough holes at one location; players want a longer course. I then took my first set of holes and studied how I could make an entirely different experience by designing another set of tee boxes, sometimes another fairway, while using the same greens. I designed a 9 hole course that can be played a second time through from a different set of tees creating an entirely different experience as the first time through. I was quite satisfied with the completed design.









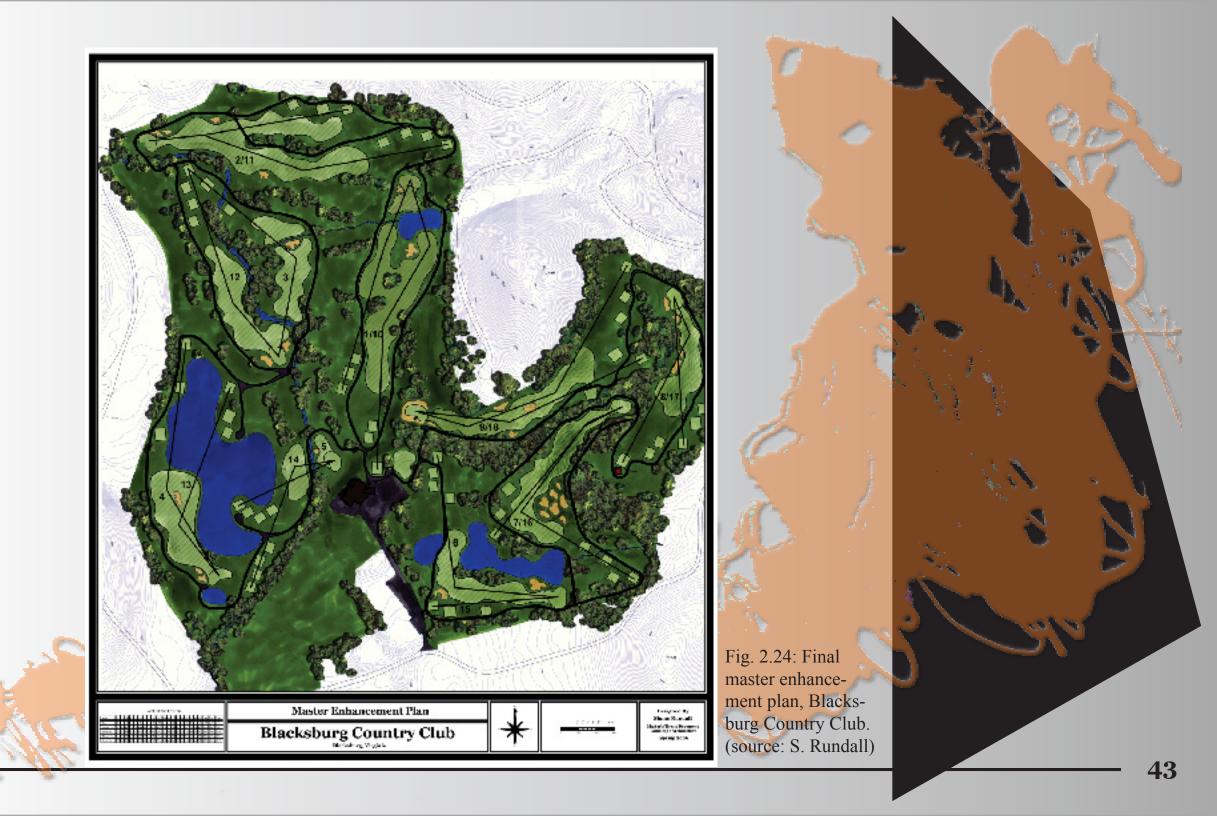




Fig. 2.25: Hole 1 and 10 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)

Hole 1 and 10

The first and tenth hole has dual fairways with one set of tees located 25 feet higher in elevation than the fairway. This dual fairway par 5 demands an accurate green approach hitting over a small pond fed by a small creek running from the mountains.

inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)

The second and eleventh hole is also a dual fairway set-up with a band of trees dividing them down the center. Both sets of tees are placed considerably higher than the fairway providing the golfer with a sense of power. The fairway tightens towards the green with the introduction of the Roanoke River onto the property.

Hole 2 and 11



Fig. 2.26: Hole 2 and 11 model (1/16

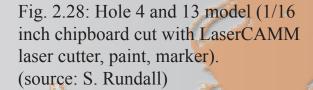




Fig. 2.27: Hole 3 and 12 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)

Hole 3 and 12

The third and twelfth hole enter into the flatter portion of the site. However the design of this dual fairway, long par 4 demands an accurate tee shot with the Roanoke River bisecting the fairways. The small creek coming from the mountains feeds into the river in the middle of the twelfth fairway forcing the player to cross water twice along their journey to the green.



Hole 4 AND 13

The fourth and thirteenth hole visually are the two of the most challenging golf holes on the course with the presence of a large man-made lake. However, the distance to carry the water is relatively manageable even for the average golfer with the precise tee locations.



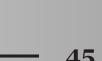
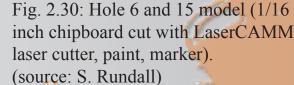




Fig. 2.29: Hole 5 and 14 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)

Hole 5 and 14

The fifth and fourteenth hole are exciting short holes that provide the player to show their accuracy in front of the clubhouse grill. The green is placed just on the other side of the Roanoke River at the bottom of the hill that the clubhouse sits atop, allowing spectators to cheer on fellow members, good or bad!



Hole 6 and 15

The sixth and fifteenth hole is the turn into the final three holes, which most will find to be the most challenging and rewarding. These two hole are set along a beautiful pond system with lush vegetation and aquatic life. Try not to look too long while passing by for speed of play on the course.



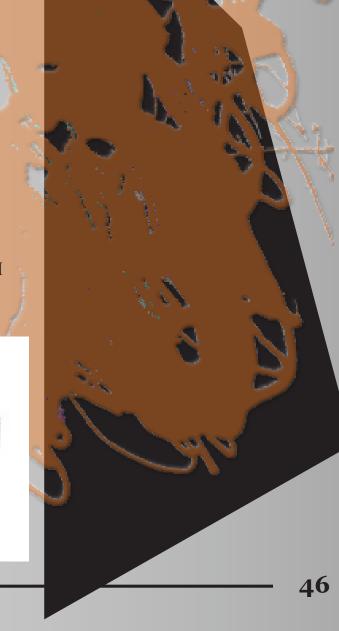




Fig. 2.31: Hole 7 and 16 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)

HOLE 7 AND 16

The seventh and the sixteenth hole just might be the toughest two holes on the course. The steep topography on your right combined with the wood-lined left provide a wonderful seclusion from the rest of the course. But, try to avoid hitting outside the fairway because you will have a terrible time locating your golf ball in the long prairie grass and wooded area.

Fig. 2.32: Hole 8 and 17 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker). (source: S. Rundall)

Hole 8 and 17

The eighth and seventeenth hole is too quite demanding because of the sloping terrain. The big-hitters will love this hole because the tees are placed close enough to the green to reach it; providing you clear the large oak protecting the hole at greenside left. Avoid hitting left as you will encounter the wooded area once again searching for that ball.





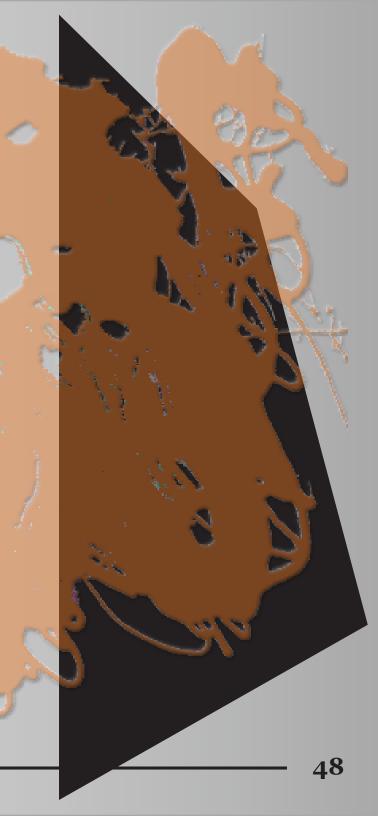


Fig. 2.33: Hole 9 and 18 model (1/16 inch chipboard cut with LaserCAMM laser cutter, paint, marker).

(source: S. Rundall)

Hole 9 and 18

The finishing holes are arguably the best finishing holes in the area. The long par 5 layout is wonderfully undulating and lined with trees on both sides. Watch out for the hiding bunker in the middle of the fairway, for it will ruin your possibilities of finishing with a birdie. This hole ends with an island green, surrounded by a larger bunker. This prevents your ball from rolling out of the county as the green takes up the entire hill it is placed upon. For you history buffs, there is an old chimney stack in the middle of the greenside bunker left from an old house that sat atop the hill overlooking their vast farmland.

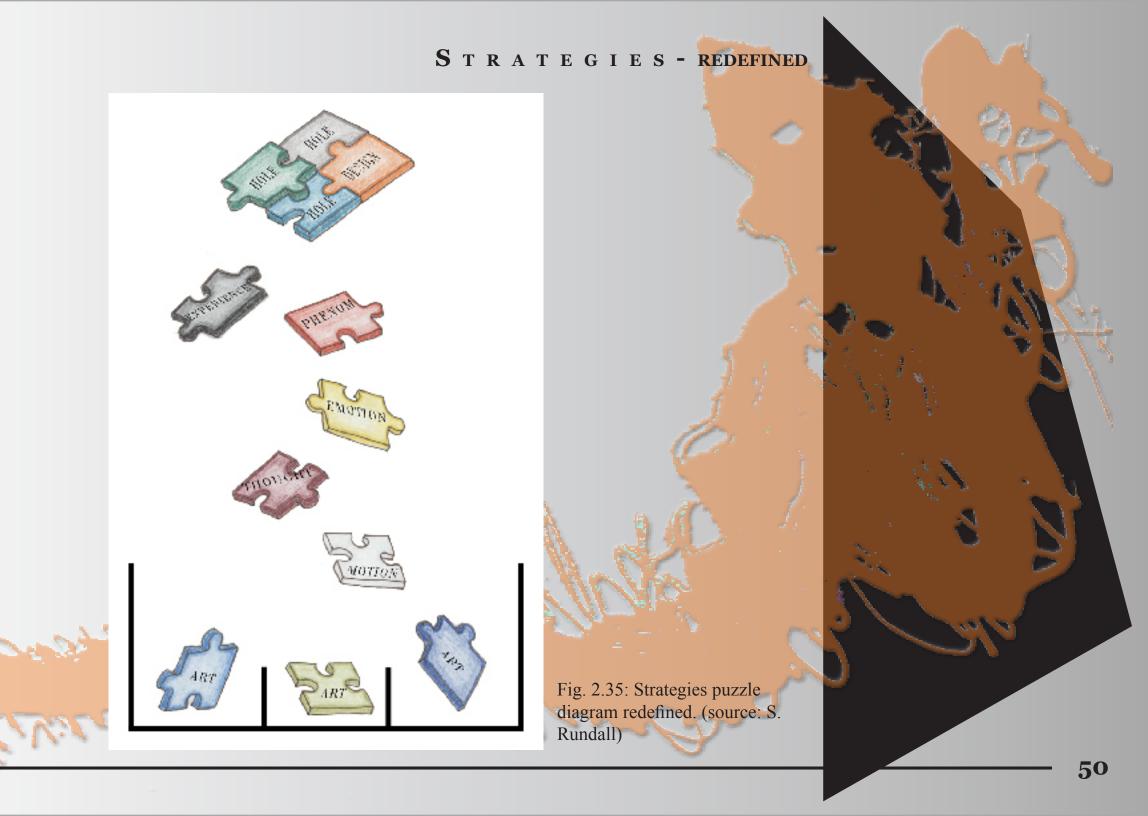


In my opinion, this is a good golf course. But you can find a good golf course anywhere you are with a little bit of traveling. I wasn't quite there; I hadn't accomplished my goals yet. Nothing about this course would absolutely hit me; seduce me; or real me in. I needed to create an experience that was like no other. I wanted the holes to be unique and memorable. I needed to push the limits of the ultimate goal of a golf course architect; to get the participant to return. Establish an experience that is more than the game; to invite the golfer to take something home besides his or her score.

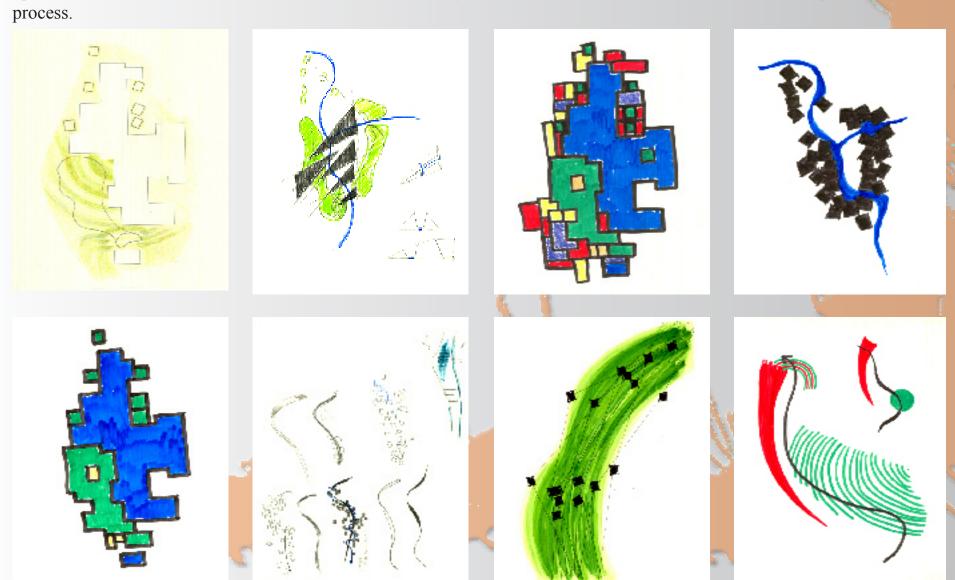


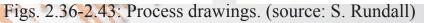
Fig. 2.34: Aerial photograph from helicopter of Blacksburg Country Club, Blacksburg, Va, of hole number 8 green. (source: S. Rundall)

So I regrouped. I studied my models; I walked through them visually and digitally. I went back to the site and walked some more. I began to think of things that truly inspired this idea in my head. It was the artistic side of me that wants to push the limits and see what happens. Be Bold. Stand out. Be an individual. For this is my only path to happiness. This prompted me to come up with a new set of strategies. What if I treated this course like a gallery in a museum? Each hole being a separate piece of art, yet having something in common; the game.



At this point I made the decision to focus on three particular sets of holes for this study; holes 3/12, 4/13, and 9/18. I began to pull an endless amount of thoughts from my head regarding emotion, movement, topography, seclusion, flow, ruggedness, openness, sun/shade, wind, views, and the touch beneath my feet. Below are a handful of my sketches during this boundless process.









Hole 3/12 - Conceptualized Process

This hole came from me analyzing the golfers movement and experience through both set of holes. The movement of the water flowing alongside or through the fairways and the as the golfer is trying to accomplish a task. The impact of the water on the golfer has a tremendous effect on the shot choices he or she would make. This thought lead me to think of the misconception that many golf courses get from the non-golfer. The idea that golf course suck the life out of the areas water supply. A strangling of sorts. Now some golf courses do in fact abuse the circumstances of which they are set in, such as a lush green course in the middle of a desert. However all golf courses receive this negative view by many people. I made the decision to play on this notion. I saw the dual fairways surrounding the Roanoke River as this hand that was engulfing the water. So I began to sketch some ideas of how to portray this hand strangling the life out of the water supply. I created a series of triangular shaped mounds representing each finger in a fist.

Fig. 2.44: Conceptual image of hole 3 and 12. (source: S. Rundall)



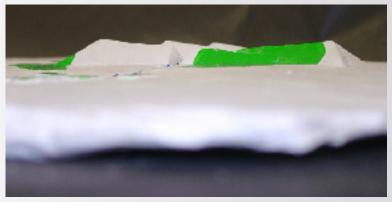


Fig. 2.45: Plaster model of hole 3 and 12, view from tee boxes. (source: S. Rundall)



Fig. 2.46: Plaster model of hole 3 and 12, view from right fairway. (source: S. Rundall)



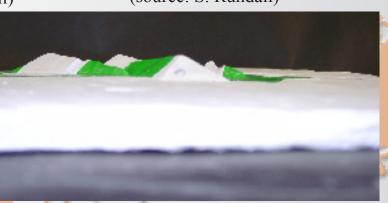
Fig. 2.47: Plaster model of hole 3 and 12, view from above. (source: S. Rundall)



Fig. 2.48: Plaster model of hole 3 and 12, view from left fairway. (source: S. Rundall)



Fig. 2.49: Plaster model of hole 3 and 12, view from green. (source: S. Rundall)





Figs. 2.50-2.51: Plaster model of hole 3 and 12, view from west and east side. (source: S. Rundall)

53



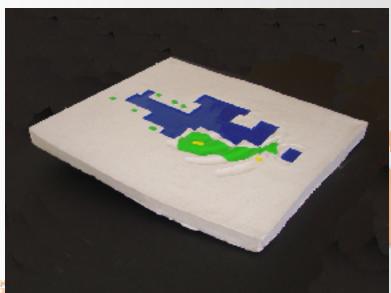
Hole 4/13 - Induced Process

This hole came from the many sketches I did of transforming the man-made lake. Most lakes are designed with a smooth flowing pattern along the edges; a natural look. The thought of opposites took a hold on me throughout this design. I wanted to create a square shaped lake, with linear forms. I began to trace the edges of my designed lake using only straight lines. It quickly took form of what appeared as a building footprint. If a building was placed next to water, the ripples would reflect off of the buildings surface. It this case the water was the building, so I wanted to mimic the water movement on the land. I wanted ripples to appear on the fairway and have the golfer experience a physical 'flow' throughout the hole. There is a smaller pond located behind the green; I mimicked ripples from it too. This ripple-on-land effect would allow a collision of ripples at the greens surround, where the majority of undulations take place on common golf hole. This induced process creates a flow through the hole ending with a collision of experiences at the finish.

Fig. 2.52: Conceptual image of hole 4 and 13. (source: S. Rundall)

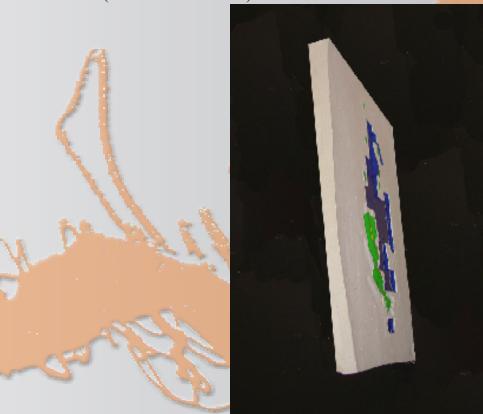


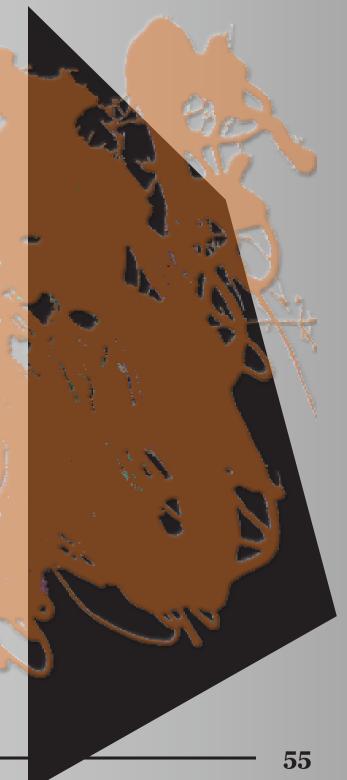
Figs. 2.53-2.54: Plaster model of hole 4 and 13, view from above and west side. (source: S. Rundall)





Figs. 2.55-2.56: Plaster model of hole 4 and 13, view from east side and west side depth analysis. (source: S. Rundall)





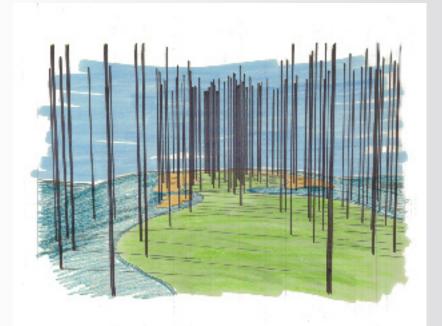
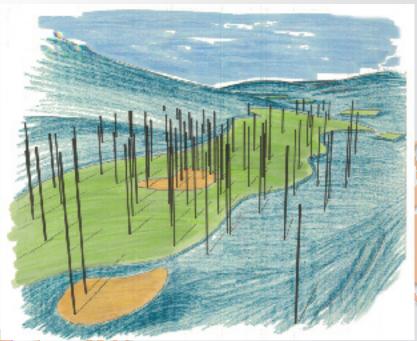


Fig. 2.57: Conceptual drawing of hole 9 and 18, view from middle of fairway towards green. (source: S. Rundall)



Hole 9/18 - Human Process

This finishing hole has a wonderful, natural flow of topography. With the steep hill on the right and the shallow ravine on your left, combined with the green sitting atop another hill, dropping off 25 feet behind, this provides somewhat of a roller coaster ride for the participant. This type of setting awaiting the golfer on the finishing hole gives a sense of excitement mixed with fear and can produce all kinds of shots from all kinds of golfers. The idea behind this design was based on a painting that I am yet to complete. It is titled 1st 100 Rounds, depicting a golf fairway with 100 different ball flight patterns with correlating landing points. I took these points and plotted them our onto the layout of the finishing hole. At each landing point, whether it is off the tee, middle of fairway, or on the green, I placed a 4" pipe into the ground at various heights depending on the elevation of the ground. The higher elevation, the shorter the pip; the lower the elevation, the higher the pipe. This takes on a quality that not only emulates young tree trunks but adds a powerful shadow effect across the manicured turf.

Fig. 2.58: Conceptual drawing of hole 9 and 18, view from middle of fairway towards tee boxes. (source: S. Rundall)

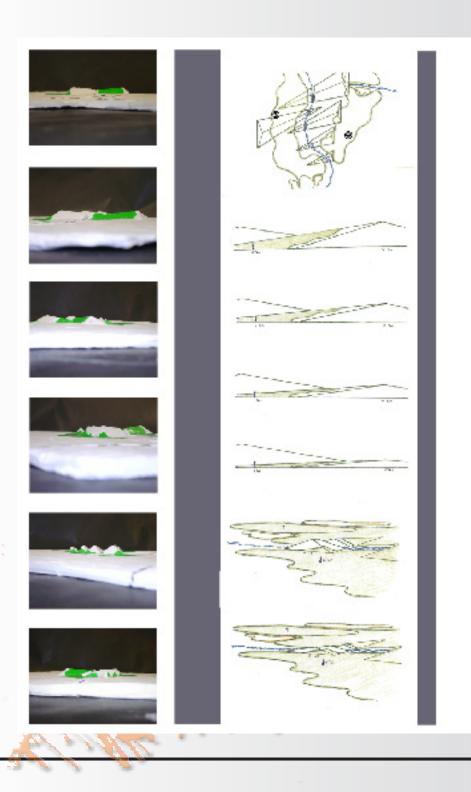


I was bold. I was different, and my designs definitely stood out. But there was still a problem; I didn't want Candyland golf. I didn't want the words 'miniature golf' to come out of the mouths of the golfers. The challenge that was set in front of me now was to take these designs and refine them to make them functional. The Frank Gehry approach; make the building stand out and make a statement, yet keep them functional.



Fig. 2.59: Chicken mini golf. (source: Science Museum of Minnesota, www.smm.org Copyright 1997)

So I regrouped. I needed to actually place myself into my designs; actually play the holes and find the problems that exist. I wanted to keep the integrity of my design, yet make them playable by all levels of golfers. I wanted the experience to be a joyful one, not an aggravating trip to the course. There is a time and a place for mini-golf, this was not one of them.

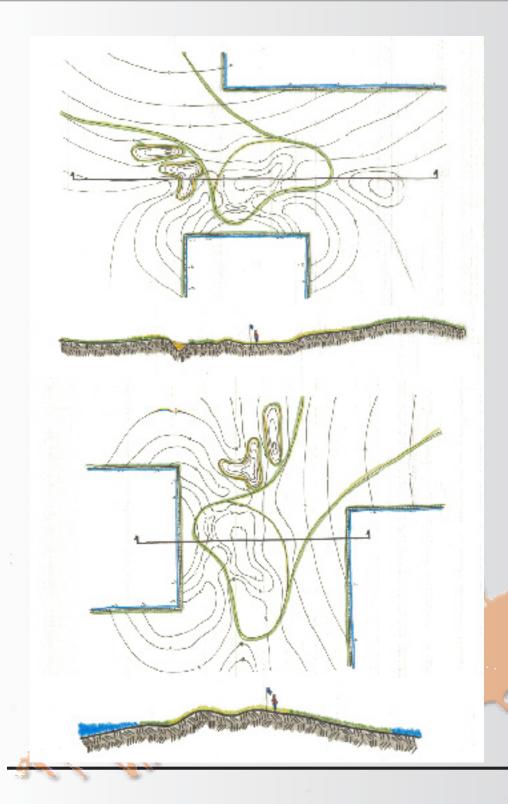


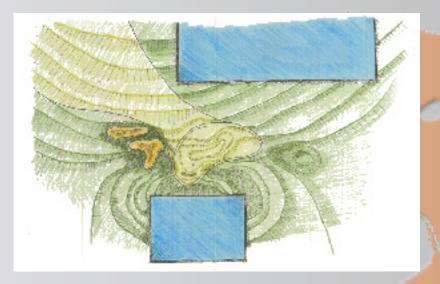
Hole 3/12 - refined

The problem with this hole was that the mounds that I created were out of scale with the golfer. The studies on the left show a six foot golfer standing next to a 20, 15, 10, and 5 foot mound. With the larger mounds, the golfer would not be able to see his or her target. In addition, this would allow for safety concerns as anyone teeing off would not be able to see any preceding players on the hole. I came to a conclusion that a 5 foot mound would be necessary for this design to be reality. This would allow visibility for both the golfer in the fairway and the group following.

Fig. 2.60: Conceptual image of hole 3 and 12 refined. (source: S. Rundall)







Hole 4/13 - Refined

The primary success of this hole is the actual rippling of the ground surface, especially where the two water features meet; at the green surrounds. I then proceeded to complete a grading plan around the green and analyzed the sections that it would present. It took some precise detailing to get the proper elevations for the golfers experience of a wave motion. The desire would be for the golfer to experience an up and down motion while either walking the hole or riding in a golf cart and experience this same movement with their putting stroke on the green.

Fig. 2.62 (above): Conceptual grading plan of hole 4 and 13, refined green surrounds rendered. (source: S.Rundall)

Fig. 2.61 (left): Conceptual grading plan of hole 4 and 13, refined green surrounds with sections from two angles. (source: S. Rundall)





Hole 9/18 - Refined

The finishing hole had an obstacle problem to put it simply. There were far too many poles in the fairway and green. The hole would have been fun to experience once, but that is all. The participant would become too frustrated to play it a second time. So I narrowed them down. The resemblance of trees was apparent to me and I allowed them to take on this quality. Designing them in bunches off of the fairway to emulate a massing of trees. Within the fairway I selected a few locations that would be based off of a statistical data and the most common areas of landing; depicting the original thought of landing areas. Instead of using poles in the middle of the fairways, I placed small one foot by one foot square sand traps. Within the tee box, I chose a pattern that would reflect the change of daily tee locations and created smaller square sand traps; emulating the divots caused by congested club swinging.

Fig. 2.63 (above left): Conceptual drawing of hole 9 and 18 refined. (source: S. Rundall)

Fig. 2.64 (middle left): Conceptual drawing of hole 9 and 18 refined, view of tee box. (source: S. Rundall)

Fig. 2.65 (below left): Conceptual drawing of hole 9 and 18 refined, view of mid-fairway. (source: S. Rundall)



So, if there is one thing that you can take from this thesis vision, as many of my fellow classmates are aspiring to become professional landscape architects, don't just do the assignment. Don't just do what is asked of you. Don't just provide green space, ample seating room, sunny and shaded ar-



eas. Don't just make the client happy; making them a raving fan of you and your work. Be bold. Be unique. Make a statement. Step way outside the box. Push the limits and see what happens. Be an individual. It is the only path to happiness.



POST DEFENSE THOUGHTS

Dave McGill: Do you think you are done? Do you know when to finish? There is no end to this question. It will be asked one-thousand times before you make a decision. It is time to answer the question for where you are today. I would like to see the three paintings that tell about the emotion conveyed on the three chosen holes. Lay down the canvas and show the set of strokes that sums up the today, that becomes the building point for tomorrow.

Dean Bork: Shane has stacked the wood high and not lit the fire.

Brian Katen: Giant emotional compared to subtle emotional.

Wendy Jacobson: Disconnect between the qualities of experience through art and actual design.

Brian Katen: How do you get inside the plan?

Wendy Jacobson: Make a representation of the art. Seeking the moment of making the art.

Dean Bork: The medium of landscape is plastic...transforms the game of golf into something fundamentally different. How do you implement expression with out destroying the game? Take us back into the landscape.

How do you capture process within the landscape? The art cannot exist without a remnant of the process of making it.

Brian Katen: Moments of discovery within the process. The putting green becomes a place that helps create a topographic memory of how landscape is sculpted. Being able to feel the presence of forces that created the landscape.

Wendy Jacobson: There are moments that can only be appreciated in an immediate way. There is a need to look at movement through the landscape. How do you communicate how you experience a place, and then describe it...

Brian Katen: We all struggle with trying to project...how to get a sense and feel of a place or experience. There is a way this experience comes alive before it is built. How do you find ways to advance perception through a design...?



REFLECTION

As I started this investigation, I knew it would be a challenge; a constant state of contemplation. This portion of the book is a reflection of what I would do differently if the table was set the same. What is missing? What were my mistakes? What were my shortsightings?

All along the idea has been there, and all along there has been confusion of how to convey a perceived phenomenon without it actually being present. To design with the assumption of an experience and show it graphically, is a trick for us all.

There has been a desire to prove that this can be done without actually constructing it. The next challenge was to investigate how I could 'capture' what the individual would experience throughout my design.

The following is an attempt to place you within the finishing hole, number 9/18.

APPROACH

The intent was to record the existing conditions of the course where my proposed holes would be placed. The techniques discussed were digital video recordings of the ground surface while in motion and implementing my designs, or by simply taking numerous photographs of the location and configuring my own technique of motion into the frames. After numerous attempts to capture the correct experience with the video recording and failing, I resorted to taking 260 digital photographs of my movement throughout the desired hole placement, with a golf participant moving along with me.

The approach to compile these images became an abstract vision of what the finishing hole would play like. I super-imposed a digital 3-D model of my design with selected images and created multiple moments of movement throughout chosen segments of the hole. The following pages are three attempts of this abstract representation of experience.



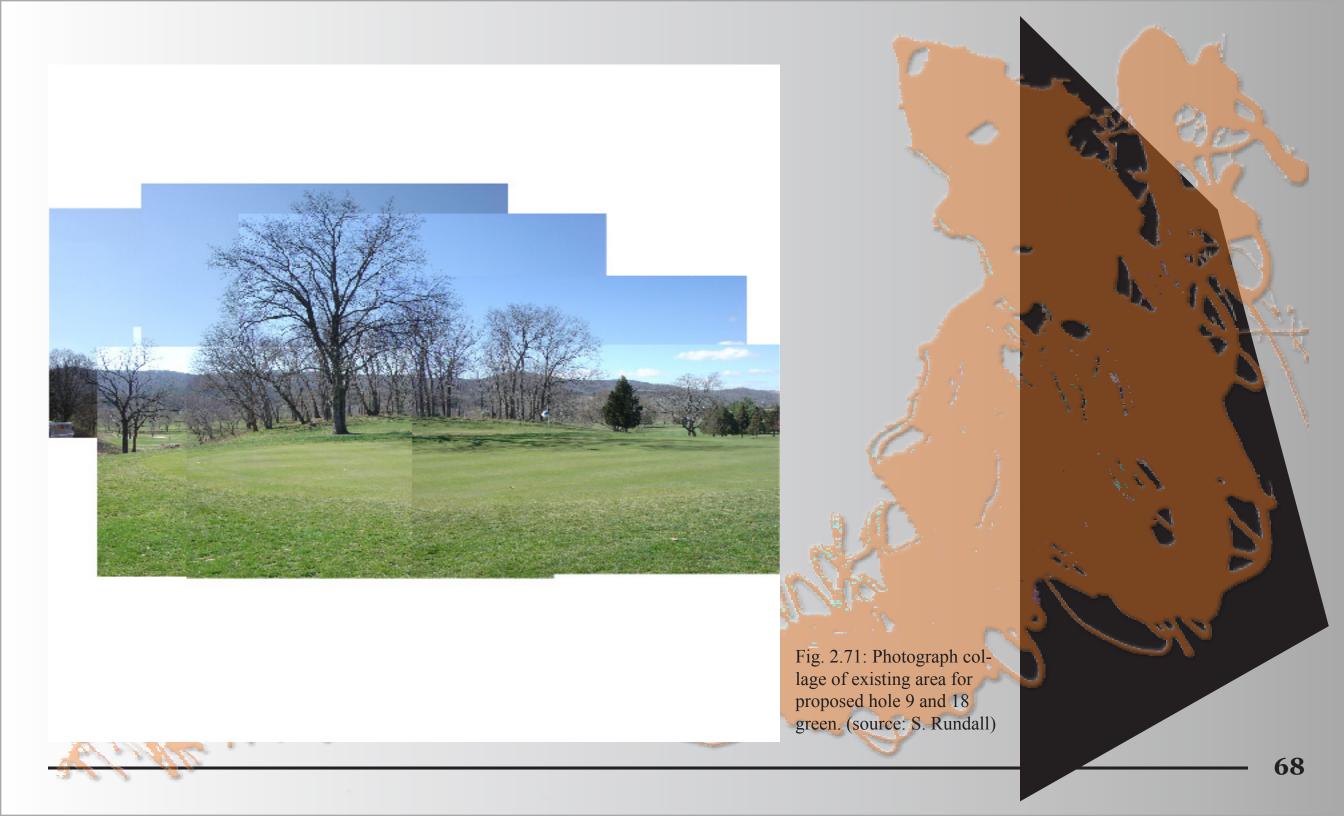


Fig. 2.67: Photograph series of Nate Lahy swing golf club on existing hole-6, Blacksburg Country Club, Blacksburg, Va. (source: S. Rundall)











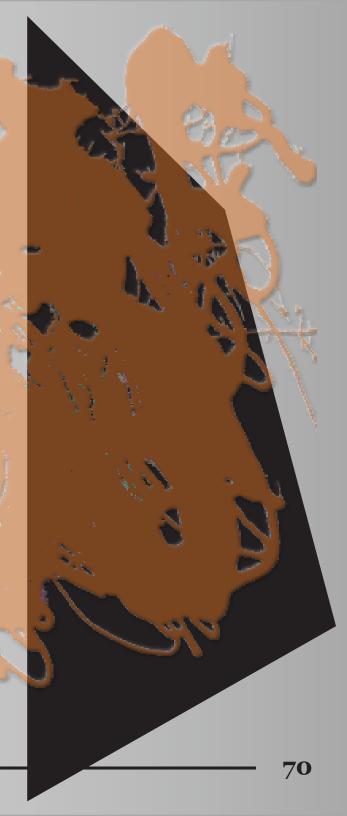
RELEVANCE

This exploration has been both a revelatory and an exhilarating journey. Since I first took on this idea of creating a 'Jackson Pollock golf course', it has pulled me in all directions and made me aware of the challenges involved with creative design in landscape architecture. The combination of powers between landscape architecture and land art have infinite possibilities to produce an experience of beauty. How does one experience the landscape? Can it be defined? Can this be controlled or predicted with any certainty? And what is the process to get there?

The start of my academic journey in landscape architecture was a simple one; I fell into a pattern that many professionals acquire in their careers; a stagnant one. I wasn't having fun. I wasn't being creative. I was doing what was asked of me in order to obtain my degree. It was not until this project that my eyes were forced open to realize that I wasn't being the designer that I aspire to be. I had a vision, with absolutely no idea how to find the path to begin, let alone reach the destination.

This thesis has allowed me to thoughtfully and rigorously engage the sense of perception of the participants in the landscapes that we design. The study of phenomenological aesthetics of perception is crucial to landscape architecture. This eliminates the common misfortune of our designs looking better on paper than they actually do when they come to fruition. It forces us as designers to provide an aesthetic experience, not just an aesthetic appearance. The design becomes more than an observation of, or participation with, but rather something lived throughout.

You might be asking if I have found the answer? I have not. This exploration has allowed me to understand, not necessarily know. How will I know when I am finished? It is similar to asking Jackson Pollock or Pablo Picasso if their paintings were complete after one attempt; I doubt their answers would be yes. It is a lifetime of trial and error; a lifelong journey of searching for the answers. As designers, we are asked to accept this challenge and to not just stand on the edge of the cliff, but to take the leap...



BIBLIOGRAPHY

- Amidon, J. (2005). *Moving Horizons: The Landscape Architecture of Kathryn Gustafson and Partners*. Basel, Switzerland: Birhauser.
- Appleton, J. (1975). *The Experience of Landscape*. New York: John Wiley and Sons, Inc.
- Berleant, A. (2005). *Aesthetics and Environment*. Burlington, Vermont: Ashgate Publishing Company.
- Berleant, A. (1997). *Living in the Landscape: Toward an Aesthetics of Environment*. Lawrence, Kansas: The University Press of Kansas.
- Berleant, A. (1992). *Environment and the Arts*. Burlington, Vermont: Ashgate Publishing Company.
- Berleant, A. (1991). *Art and Engagement*. Philadelphia: Temple University Press.
- Berleant, A. (1970). *The Aesthetic Field: A Phenomenology of Aesthetic Experience*. Springfield, Illinois: Charles C. Thomas Publishing.
- Bragg, E. W. (2004). Retrieved November 2005, from http://www.surrealcoconut.com
- Cornish, G. and Whitten, R. (1981). The Architects of Golf: A Survey of Golf Course Design from Its Beginnings to the Present, with an Encyclopedic Listing of Golf course Architects and Their Courses. New York: Harper Collins Publishers, Inc.
- Cotton, H. (1975) *A History of Golf Illustrated*. New York: B. Lippincott company.
- DeVinne, P.B. (Ed.).(1982). *Tormont Webster's Illustrated Encyclopedic Diction ary*. New York: Haughton Mifflin Co.
- Dewey, J. (1934). Art as Experience. New York: Minton, Balch and Company.
 - Doak, T. (1992). The Anatomy of a Golf Course. New York: Lyons and Burford.
- Friedman, B.H. (1969). *Jackson Pollock: Black and White*. [Interview with Lee Krasner] New York: Marlborough-Gerson Gallery.
- Gilbert-Rolfe, J. with Gehry, F. (2001). Frank Gehry: The City and Music. Amsterdam: G+B Arts International.



- Giltaij, J. (2004). Senses and Sins: Dutch Painters of Daily Life in the Seventeenth Century. Ostfildern-Ruit, Germany: Hatje Cantz.
- Graves, R.M. and Cornish, G. (1998). *Golf Course Design*. New York: John Wiley and Sons, Inc.
- Halprin, L. (1970) *The RSVP Cycles: Creative Processes in the Human Environment*. New York: George Braziller.
- Halprin, L. (1972). *Notebooks: 1959-1971*. Cambridge, Massachusetts: MIT Press.
- Haultain, A. (1908) *The Mystery of Golf.* republished (2000) Boston: Houghton Mifflin.
- Holmes, A.M. (2005). [Interview with Clifford Ross, author of Wave Music]. New York: A Blind Spot Book.
- Hurdzan, M.J. (1996). *Golf Course Architecture: Design, Construction and Restoration*. Chelsea, Michigan: Sleeping Bear Press.
- Jackson, J.B. (1996). *A Sense of Place, A Sense of Time*. New Haven, Connecticut: Yale University Press.
- Jackson, J.B. (1984). *Discovering the Vernacular Landscape*. New Haven, Connecticut: Yale University Press.
- Jackson, J.B. "Landscape as Theater". *Landscape* 23, no. 1 (1979) pp. 3-7.
- James, H. (1960). *The Ambassadors*. Boston: Houghton Mifflin.
- Kant, E. (1899). *Critique of Pure Reason*. trans. J.M.D. Meiklejohn. New York: The Colonial Press.
- Kaplan, R. and Kaplan, S. (1982). *Humanscape: Environments for People*. Ann Arbor, Michigan: Ulrich Books, Inc.
- Kaplan, R. and Kaplan, S. (1989). *The Experience of Nature: A Psychological Perspective*. Cambridge, Massachusetts: Cambridge University Press.
- Kaplan, R., Kaplan, S. and Robert, S. (1998). *With People in Mind*. Washington DC: Island Press.
- Keane, T. (1990). *The Role of Familiarity in Landscape Aesthetics: A Study of Tallgrass Prairie Landscapes*. Doctoral Dissertation. Ann Arbor, Michigan: University of Michigan.



- Kerouac, J. (1985). On The Road. Cutchogue, New York: Buccaneer Books.
- Kupfer, J. (2003). "Experience as Art". In A. Sukla (Ed.), *Art and Experience*. Westport, Connecticut: Praeger Publishers.
- Landau, E.G. (1989). *Jackson Pollock*. New York: Abradale Press, Inc.
- Landau, E.G. (1983). *Artists for Victory: An Exhibition Catalog*. Washington: Library of Congress.
- Lassus, B. (1998). *The Landscape Approach*. Philadelphia: University of Penn sylvania Press.
- Merleau-Ponty, M. (2002). *The World of Perception*. ed. trans. O. Davis. London: Routledge Taylor and Francis Group.
- Merleau-Ponty, M. (1964). *The Primacy of Perception and Other Essays*. ed. J.M. Edie. Evanston, Illinois: Northwestern University Press.
- Merleau-Ponty, M. (1962). *Phenomenology of Perception*. London: Routledge and Kegan Paul Ltd.
- McHarg, I. (1992). *Design with Nature, 25th Anniversary Edition*. New York: John Wiley and Sons, Inc.
- Muirhead, D. (1961). *Green Days in Garden and Landscape*. Los Angeles: Miramar Publishing Company.
- Ormsbee Simonds, J. (1961). Landscape Architecture: The Shaping of Man's Natural Environment. New York: McGraw Hill Book Company, Inc.
- Polcari, S. "Jackson Pollock and Thomas Hart Benton". American Machinist. March 1979. pp. 120-124.
- Pollock, J. (2002). *Pollock's America: Jackson Pollock in Venice; the "Irascibles"* and the New York School. ed. K. Vanderoe and P. Karmel. Milan: Skira.
- Raitz, K. (1995). *The Theater of Sport*. Baltimore: Johns Hopkins University Press.
- Restany, P. (1992). *Yves Klein: Fire at the Heart of the Void*. New York: Journal of Contemporary Art Publications.
- Richardson, F. (2002). Routing the Golf Course: The Art and Science That Forms the Golf Journey. Hoboken, New Jersey: John Wiley and Sons, Inc.



- Rose, B. "Jackson Pollock at Work: An Interview with Lee Krasner". Public Relations News. Vol. 47 1990. p.90.
- Sailer, S. (2005). "From Bauhaus to Golf Course: The Rise, Fall, and Revival of the Art of Golf Course Architecture". In *The American Conservative*. April 2005.
- Schjeldahl, P. "'Les Drippings' in Paris: The Jackson Pollock Retrospective" The Village Voice. February 1982. pp. 94-95.
- Shackelford, G. (2000). *Alister MacKenzie's Cypress Point*. Chelsea, Michigan: Sleeping Bear Press.
- Shackelford, G. (1999). *The Golden Age of Golf Course Design*. Chelsea, Michigan: Sleeping Bear Press.
- Stich, S. (1994). *Yves Klein*. London: Cantz Verlag and the Hayward Gallery.
- Strawn, J. "Desmond Muirhead and the Art of the Golf Course". Landscape Architecture Magazine. September 1993. pp. 12-14.
- Vanderoe, K. and Karmel, P. (1999). *New Approaches*. New York: Museum of Modern Art.
- Weilacher, U. (1999). *Between Landscape Architecture and Land Art*. Boston: Birkhauser and Verlag.
- Wilson, E. (1980). *Sociobiology*. Cambridge, Massachusetts: Belknap Press of Harvard University Press.
- Wind, H.W. (1956). *The Story of American Golf: It's Champions and It's Championships*. New York: Simon and Schuster.
- The Tillinghast Association: The Life and Times of A.W. Tillinghast. (n.d.) Retrieved November 2005, from http://www.tillinghas.net



152 LLAGUNASTREBT# 205, SANTABARBARA, CALIFORNIA, 93101 РИОЧК: 540.818.3978-В МАТЬ: ЯНАМ В В ОМОДАЬ Б. @ ЧАНОО. СОМ E D U C A T I O N - · · · · VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY, BLACKSBURG, VA · · · · · Master of Landscape Architecture, May 2006 UNIVERSITY BACHELOR OF FINE ARTS, MAY 2002 Design Intern. Summer 2005 BLACKSBURG COUNTRY CLUB. GOLF COURSE ARCHITECT, SEPTEMBER 2004 - PRESENT GOLF CREATIONS. MARENGO, Construction Project Manager, Summer 2004 PLEASANT VALLEY LANDSCAPING AND NURSERY, IOWA CITY, IA HEAD LANDSCAPE FOREMAN, FEBRUARY 1999 - AUGUST 2000 BLUE TRUCK LANDSCAPING. CEDAR OWNER/Designer/Landscaper, Summer 1994 - Summer 1998

After the completion of this document I will be moving to Santa Barbara, California with my girl-friend, Alison Kelley, to begin my professional career. I have accepted a position as a Design Associate with the largest design/build firm in Southern California, Landscape Development, Inc. working for their design branch in Ventura, California.

