

# INTRODUCTION

Beginnings are perhaps most propitious if their ends are neither clearly envisaged nor defined. As with children at play, such indetermination can often precipitate unexpected findings, enabling one to discover new and unforeseen aspects in affairs that may seem ordinary or exhausted. At the start of our journeys across the American landscape, Alex MacLean and I hoped that such an open and flexible attitude would help us unearth new insights. Thus, our work together began in the spirit of free travelers, without any self-imposed restriction, agenda, or theoretical hypothesis. We were simply curious about the variety of landscapes that made up America. If there was an original motivation, it was simply our desire to experience and record some of the aerial vistas that are unique to the great landscapes of America; beyond this, our expectations were open-ended. We found, in fact, that this relaxed approach allowed us to cope with the overwhelming impossibility of traveling to every place in the United States and relieved us of the need to fully uncover the diverse temporal and cultural dimensions that inevitably surrounded the places we did visit.

Our initial method of negotiation with the land was to divide the country into geographical regions (for example, the Northwest, the Central Plains, the lower Mississippi), to travel to the center of each, and then to span outward as much as was prac-

tically possible. We would sometimes take these trips together in MacLean's small Cessna. More often, however, I traveled by car or foot, while he flew alone, controlling the plane with his feet, as his head, hands, and camera hung out of the cockpit window.<sup>1</sup>

Although both of us relied heavily upon guidebooks, maps, and cameras, a series of chance encounters with people and land provided a greater sense of orientation. In fact, for all of the planning prior to a trip, we would still find ourselves wherever strange and unforeseen events led us.<sup>2</sup> The sudden effects of chance, error, and luck, dashing wildly across every rational scheme and purpose, were later to affect our appreciation of the various ways the American landscape had been forged, revealing the inevitable inadequacy of human determinations (measures) in the face of time.

## Recordings

Initially, photography served as the primary means of recording our travels. Of course, in contrast to the motion of the traveler, the static nature of the photograph is unable to convey the temporal experiences of passage, the emerging and withdrawing of phenomena, and the strange ways events unfold. There is also a certain immediacy to the experience of a photograph, unlike the durational experience of narrative prose, movies, or soundtracks, for which sequential timing is essential. Nonetheless, the best photographs always entice and capture the imagination of the curious viewer, drawing him or her deep into the uniqueness of the moment. Created within a split second, pictures embody a finding that is unrepeatable; they hold an otherwise imperceptible

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*Circular Irrigator Trace. 14 x 20".*

time still for eternity. As Roland Barthes comments in *Camera Lucida*, this stillness and permanence is what makes a good photograph “uncanny”;<sup>3</sup> it is transparent to its referent while also present as a photograph, sympathetic yet (in)different to its subject, like a ghost that is at once more and other than a simple look-alike. There is an odd autonomy to good photographs, wherein they acquire a status unto themselves and can no longer be considered mere representations. Instead, photographs, for all of their abstraction, have an oddly constitutive power in the shaping of reality and the perceiving of place and time.<sup>4</sup>

I had been aware of MacLean’s aerial photographs for a number of years before our trips together, and I continue to be struck by their uncanny nature. In my work as a landscape architect, they have been both informative and inspiring. His pictures possess an internal eloquence and beauty while revealing aspects of the land that would otherwise remain hidden or unseen. Although MacLean’s photographs are often strange and enigmatic, they are less abstract than they are matter-of-fact, extracting sections of the landscape and re-presenting them for scrutiny. MacLean’s lens does not seek to obscure or distort; he rarely uses a filter and never does he manipulate the photograph in its printing. Instead, his pictures present the land *just as it is*, albeit under particular and rarely replicable viewpoints, circumstances, and moments of light. This momentary realism is complemented by the contemplative and slow manner in which a viewer must subsequently apprehend the photograph. Whereas the richness of color and graphic frontality often allow one to grasp the image immediately, the eye is still lured in and made to linger. It is very difficult to turn away from these pictures without a curious desire to return to them. The imagination roams across their topographical depths and the viewer is prompted to speculate about the narrative of the moment: What is it . . . Where . . . When . . . Who had been there, and what were they doing? This curiosity, evoked by the strangeness of

the photograph, unsettles the immediacy of the first glance, and the image that was at first merely retinal then demands to be read more as a map or a visual text that must be decoded through imaginative interpretation. Here, the viewer becomes less a voyeur and more a participant in the piecing together of a visual puzzle or oddity. This engaging capacity of photographic representation, together with a desire to see and capture aerial America through the photographic medium, provided the initial impetus for our working together on this book.

As our travels proceeded we found ourselves increasingly drawn not only to the visual beauty of the land but also to the puzzle of its evolution and making. Moreover, because we believed the landscape to be as good a measure of cultural value and American ways of life as any other, we were in fact gauging the topographical facts of the land as reflections of the character of the society that had shaped it. Through a form of contemplative survey, we were attempting to take the measure of the American landscape, to take stock of a richly constructed inheritance.

The measures of the landscape were not, however, our only focus. While surveying the ground, we found ourselves continually caught up within the measures of our work—the methods, instruments, and practices that were inherent to our viewing. There were judgments, determinations, limits, and values that continuously underlay almost every choice of route, altitude, meeting place, schedule, map reading, lens, aperture, and timing; these would inevitably color our understanding of the landscape, prompting us to reflect upon the nature of representational method and its effect upon subsequent acts. Consequently, our attention finally settled upon the topic of measure, particularly the relationship between how measures employed in seeing the world affect actions taken within it and how particular kinds of reality are then constructed.

The photographs alone soon proved to be insufficient repre-

sentations with regard to this new focus. Instead, the map, with its reference to scale and synoptic mode of presentation, increasingly assumed new levels of significance for us. Although we had always used maps to select and navigate routes, closer readings revealed features and measures that were not always explicit or visible upon the land itself. In turn, this kind of vision enabled a greater level of spatial and topographical understanding. I would often scribble over an old, crumpled map in an attempt to find structural relationships across the ground and to plot paths across it. These notations prompted me to make a series of map-drawings, which became composites of maps with photographic and satellite images, often overlaid with dimensional and logistical equations and other invisible lines of measure. The consistent use of the United States Geological Survey (U.S.G.S.) maps in the making of these drawings provides a seemingly neutral and objective field for the comparison and contrast of forms across regions; in addition, they provided precise orienting coordinates and other cartographic data crucial for navigation.<sup>5</sup> The inscriptions, additions, and deletions that were subsequently made to these maps embody an attempt to acknowledge the primacy of rational, synoptic measure in the forging of the American landscape while revealing the fictional and metaphorical dimensions of the land's construction.

As presented in this book, these map-notation drawings are meant to complement the photographs and at the same time to stand apart from them. Both types of image are aerial, offering a synoptic perspective, but the map-drawings play on certain planning abstractions, such as making visible strategic organizations of elements across a ground plane or revealing certain scale and interrelational structures (from regional to local networks of communication, for example). Consequently, the drawings (but also the photographs, in a different and less explicit way) reveal how typically prosaic and analytical methods of synoptic planning and land systematization harbor a more poetic, creative potential.

## Measures

It is perhaps paradoxical that the initial rambling and sifting through an immense, open-ended landscape would lead us to something as precise and determinate as measure. But, as we hope to argue, the determinations that are enabled by measure are themselves slippery and fictional, often veiling (or even denying) the fact that life—in its innate richness, diversity, and freedom—is predicated upon certain degrees of error, chance, and indetermination. This point is implicit throughout this book and is most elaborated upon in chapter 4, but it might be useful to introduce the various ways we have come to use the term *measure* here.

We sometimes use it in specific ways (relating to dimension, gauge, or precautionary step, for example) and sometimes in its full semantic range, encompassing certain spatial, ethical, and poetic themes at once. Here, not only quantities (numbers, dimensions, allotments) and instruments (utilitarian and technical means) are spoken of, but so too are measures of morality and justice (as in determinations of what is “good” and “proper”), together with various representational, reconciliatory, and poetic capacities of measure (as in the rhythms and harmonies of music, art, and cosmography).

Measure as quantum refers to perhaps the most obvious usage of the term: its numerical, dimensional, and quantitative function. In this sense, measure is the unit as well as the vehicle by which a particular reality is given a mathematical structure. For ancient societies, the numerical and proportional measure of things revealed the harmonious order of the natural world and thereby provided evidence of a divine and unified cosmos. Music, art, and science were all structured around mathematical harmonies (*mathesis*), each disclosing the coherency of the universe and embracing the full metaphorical range of measure described above.<sup>6</sup> Today, however, knowledge of numbers, dimensions, tolerances, and capacities has shifted from the traditional representa-

tional and symbolic emphasis to more autonomous and instrumental functions, with human technologies being used more to dominate and control the natural world than to reveal culturally significant forms of order. In other words, modern developments in mathematical and scientific appropriations of measure have enabled humankind to create a range of remarkable measures that continue to improve human life on earth (reflecting the still-pervasive Enlightenment dream of infinite social progress through rational calculation), while certain existential and imaginative bases of human dwelling are ignored or diminished in value.<sup>7</sup>

Modern calculative technologies and standards characterize a second aspect of measure: that of the instrumental or the means taken to secure a particular end. Instruments—whether musical, mathematical, or technological—cannot, however, be considered separately from dimension and number. Quantum and instrument are bound together; measure enables the making of the instrument, although it is the instrument that allows for measure to appear and become available. A musical scale is dependent upon an accurately tuned instrument, for example, just as the provision of measured amounts of power and water in southern California is dependent upon the dams and canal systems along the Colorado River. In this sense, measure, as both quantum and instrument, affects how actions are taken in the world.

These resultant actions become a problem, however, when the producer of instruments neglects to attend to the social and cultural ends of their work, emphasizing instead the instrument (or the means) as an end in itself. The excesses of instrumentality are characterized in the “detached” development of the nuclear bomb, for example, or in the procedural execution of the Holocaust. These technocratic activities, apparently devoid of human reflection, are mirrored in less ominous but equally empty ways by the emphatic value modern society places on increased efficiency and utility. If things are not profitable, useful, or of immediate and measurable benefit, they are often deemed to belong to the

domain of the romantic and deluded. Philosophers and thinkers of the past two centuries have argued that this situation is symptomatic of a larger anthropocentric obsession with power and domination. Among the many deleterious consequences of this modern paradigm have been the reduction and homogenization of life and place-forms, as well as the many social and ecological ills that continue to plague human relationships with the earth.

Thus, the numerical and instrumental values that guide the use of measure point to a third meaning of the term, one contained in the distinction between what is “good,” “just,” or “correct” and what is “bad,” “inappropriate,” or “wrong.” Through their dimensions, proportions, and instruments, measures inevitably convey various levels of ethical and social propriety. Consequently, the measures employed and enacted across the land—legislatively, spatially, technologically—are themselves measures of a society’s ethos, expressed most poignantly in the interplay of appearance, usage, and cultural codes of representation. In this understanding, number and utility may be conjoined with beauty and virtue, a potential that many ancient societies recognized but that many in the modern world appear to have forgotten.

Illustrated throughout the book is this tripartite play on the meaning and agency of measure. The interrelationship of numerical, instrumental, and ethical dimensions of measures taken across the land, together with the potential for greater reciprocity and poetry between them, forms the basis of the following words and images. The American landscape is herein presented as a densely measured construction site made up of survey lines, clearings, highways, railroads, hedgerows, fields, canals, levees, dams, buildings, towns, and other spacings, constructs, and marks that secure settlement and enable human occupation of land. Consequently, the way a particular landscape looks is considered inseparable from, and integral to, the day-to-day activities and values of its occupants. In this way, quality and value cannot be detached from

quantity, just as spacings, tolerances, and limits cannot be considered separately from ideology, ethics, and social responsibility. Thus, the measures of land have a threefold nature: they are at once the guide, the outcome, and the gauge of cultural activity and meaning.

One of our intentions in this book is to show how actions taken upon the land can either precipitate or preclude the possibility for more wholesome and harmonious modes of dwelling. We wish to argue that to continue to relate to the land either as an exploitable resource or as merely a scenic phenomenon is to fail to recognize the dynamic and interactive connectedness between human life and the natural environment. We do not wish to suggest a return to a pretechnological age or to promote romantic illusions of Arcadian life upon the land; instead we seek to restore to measure its full metaphoricity—its full capacity for representation—especially as this might forge new forms of interrelationship between people and land. Although we hope to disclose various imaginative extensions of measure and geometry, we do not deny the emancipating power of modern technology.

Perhaps our ultimate intention in this book is to show how the increased precision of modern calculative rationality—with its universal, linear, and methodical rigor—lies (ironically) at the

very source of all that is successful and exhilarating in modern life, on the one hand, and of all that is failing and vulgar, on the other. From the detached and synoptical view of the bird, this modern paradox is graphically expressed in the constructions and traces that mark the ground. From above, the various relationships among physical dimensions, human activities, natural forces, and cultural values can be seen to be as orderly, productive, and sophisticated as they are brutal and errant.

Through the use of photographs, map-drawings, captions, and essays, we intend to reveal how the measures of the American landscape are of marvelous and paradoxical dimension. Perhaps, if our culture can recognize, build upon and, at the same time, resist the various capacities of modern measure taking, we may come to realize that freedom and democracy are in fact predicated upon restraint and limitation, just as factual precision is predicated upon fictional errancy. Such dialectical syntheses may be the only realizable way to avoid single-minded tyranny on the one hand and meaninglessness on the other; they may also be the bases upon which imaginative forms of measure taking might enrich the modern cultural world and precipitate new, creative possibilities for human dwelling on the earth—measures of beginnings that harbor indefinite ends.