

*Me and* THE  
*A Memoir by the Inventor of Biosphere 2*  
BIOSPHERES

JOHN ALLEN

SYNERGETIC PRESS Santa Fe, New Mexico

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DEDICATION

*To my Grandfather and Anil Thakkar, the two greatest men I ever met, one from the West and one from the East who showed me how to be a biospherian. And to everyone who helped and to some of those who hindered.*



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*Sustainable forestry project,  
Puerto Rico, 2008*

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# Preface

*Before I was born out of my mother generations guided me,  
My embryo has never been torpid, nothing could overlay it.*

*For it the nebula cohered to an orb,  
The long slow strata piled to rest it on,  
Vast vegetables gave it sustenance,  
Monstrous sauroids transported it in their mouths and deposited it with care.  
All forces have been steadily employ'd to complete and delight me,  
Now on this spot I stand with my robust soul.*

WALT WHITMAN

I DELIGHTED IN THE REALITY of what I later learned to call Nature. I smelled the fresh-spaded dirt in spring and ran barefoot over grass and clay and small rocks. I slid into sun-warmed summer wallows with the big tough-skinned boars and sows that snuffled about in my grandfather's spacious hog lot. I loved the big-branched tall cottonwoods that flanked the quick-sanded river, from whose safe heights squirrels cautiously peered down at me. I sat contentedly watching the stinging red ants scurrying in and out of their sun-baked, barren mounds that hid the queen.

I dazzled myself by chasing butterflies and running down dirt roads, chased by a cloud of midges. I dipped fruit jars into ponds to catch polliwogs and watched them metamorphose into frogs, picked potato bugs off my grandmother's green plants and marveled at their increase, seined for crawdads in small creeks. I sat on my haunches for hours with Grandmother's Rhode Island Red chickens, listening to the hens bragging when they laid an egg and watching the glossy-feathered roosters strut around, their proud combs waving.

I felt connected to every living thing eating and being eaten, and breathing in and out the same air. Worms fascinated me because they

would eat me after my death. Sharks and tigers fascinated me because they would coolly eat me alive, if they could catch me, enjoying the same hunger-satisfying delicious taste I did when I ate the crisp thighs and tender white meat of a chicken. My grandmother could wring the necks of two chickens at once, whirling one in each hand in opposite directions. Those chickens ran around the backyard with frantic energy, spouting blood until they fell over. She boiled the chickens in hot water in a big iron pot until they could be easily plucked, and cut the brains out of the heads to serve with scrambled eggs.

The men around me bored me when they talked too long about cars – Fords versus Chevrolets –but I tuned in to every knowledgeable word when they talked about crops: when to plow, harrow, harvest, what to plant, the differences between corn and wheat and rice and barley and millet and sorghum. Grandfather told me always to tithe ten percent of any crop I grew to the insects because other beings wanted to eat, too. The men talked about which animals to have around and the differences in cattle – Shorthorns, Whiteface, Black Angus, Holsteins, Guernseys, and Jerseys – and why Grandfather chose a Jersey over all the other cows to milk every day but a Whiteface for beef, while my uncle Frank Ball chose Holsteins for his dairy farm to ship milk to Oklahoma City. I heard about how to judge breeds of horses – Thoroughbreds, Quarterhorses, Morgans, Tennessee Walkers, Appaloosas, and reservation Indian horses. They taught me to tell a rattler from a bull snake and a racer from a garden snake, to appreciate the difference in habits of a chipmunk and a squirrel, and in temperament between bass, trout, catfish, perch, and minnows.

My father was the scion of two famously idealistic lines, the Allens and the Cutwrights; my mother came from the Polks and the Walls, both renowned for their no-nonsense style. The Allens came via covered wagon into the Indian Territory from Kansas, always staying north of the Mason-Dixon line on their way West; the Walls arrived by horse and covered wagon, always staying south of the Mason-



*My English-Scotch-Irish parents, Paul and Opal Allen*



*John, age twelve (sixth from left), father, Paul, and younger brother, Roy, (far left) with extended family at Uncle Frank and Aunt Sarah Nee's farm, Paul's Valley, Oklahoma, 1941.*

Dixon line. My uncles and aunts liked to point out the differences in my two family lines: the Allens, tall mesomorphs, liked idea systems; the Walls, shorter but with even broader shoulders than the Allens, were earth- and people-oriented and liked to puncture pompous balloons. Allens and Walls both shared frontier values of hardiness, thrift, growing your own, individual independence from an early age, and moving on to new frontiers when the old one had been moved in on. The culture that my forefathers created proudly called itself Oklahoman.

To the north of us, beyond two rivers (the North Canadian and the Cimarron), lay the border that separated us from the culture called Kansas. South of my Grandfather's wheat and cattle farms along the South Canadian River, beyond two more rivers, the Washita and the Red, lay the border of a culture called Texas. These two sub-cultures, Kansas and Texas, had spun off from the North and the South when these two sections engaged in a great race to beat each other to the Pacific Ocean in order to control the American State.

To me, my uncle, Bus Wall, was an acknowledged authority since he had been a .400 hitter and a straight-A student at the University of

Oklahoma. It was he who told me that the last person who could hold these two cultures together without fighting had been James K. Polk, my great-great-great-great uncle. Polk had brought America to the shores of the Pacific from San Diego to Seattle and brought Texas into the Union (although Texas had betrayed the Union despite the family's hero, Sam Houston, opposing Texas's joining the Confederacy). After Polk, said Uncle Bus, nobody could hold the Divided House together, and soon afterwards the two cultures fought the Civil War.

Uncle Bus worked as a firefighter in Oklahoma City rather than, in his words, as a "bought and paid-for intellectual." Uncle Bus said Oklahoma culminated the American dream because Oklahoma culture synthesized the North and the South, via Kansas and Texas, as well as the great plains of the West. Our Great Plains climate and geology fostered a vaster view of things, he continued, since trees grew mainly in the river bottoms, and no mountain ranges blocked the view to turn people's vision up to pie-in-the-sky.

In addition, Oklahoma meant "home of the Red Man." More Indian tribes lived in Oklahoma than in any other state. In fact, the greatest Oklahoman had been a Cherokee, Will Rogers. There was a bit of Indian in most frontier families because the men had gotten out ahead of the women and married Indian women, as had my great-grandfather Buck Wall, so Uncle Bus told me. Uncle Bus proudly declared that Oklahomans had written the longest state constitution specifically to limit state power, exemplifying all the best principles of the two greatest figures in world political history, Thomas Jefferson and Andrew Jackson. Jefferson wrote the theory and constitution of a sustainable democracy; Jackson put it into practice. Under the powers of its state constitution, Oklahomans had impeached three rotten governors in the first thirty years of its existence, whereas other states had to suffer scoundrels till the next election.

Above all, I never grew tired of hearing of why Western Oklahoma was different from Eastern Oklahoma (lower rainfall), why South-

eastern Oklahoma was called Little Dixie, why the Panhandle was different because it was the cattle-dominated dry high plains out past the short grass wheat country. Though I didn't know the word then, all that windswept, flash-flooded talk felt like sheer magic – it always lassoed and calf-roped its target. Later I learned that kind of talk shared with pure poetry direct perceptions of Nature – a sunburnt language that integrated fact and symbol.

I was intrigued by everything that lived underground in the soil: the night crawlers' trails of dried slime gleaming in early morning sunshine, twisted roots, mushroom threads, tireless blind moles, and farseeing prairie dogs sitting alertly at the entrance to their escape holes. I strolled by the riverbank and gazed at the strong bare roots of great cottonwoods which still held the trees upright although stripped of the protection of several feet of earth by the recurrent, remorseless floods brought on by the use of the mold board plow and the destruction of the deep intertwined grass roots.



*John at age ten started a two page weekly newspaper, the Chit-Chat, reporting news of world events. It had fifty subscribers and sold for two cents a copy.*

At the age of nine, I learned how to use the public library. For good or ill, I devoured authors who taught me that the world was divided into art, science, philosophy, religion, physics, chemistry, biology, culturology, linguistics, astronomy and history, and on and on into books, chapters, paragraphs, sentences, and phrases. I decided to master them all – at least to a level where I could hold a conversation with the past masters of each specialty – and to develop three areas where I would be a master and maybe write one of these magic books.

And I never tired of barefoot, bare-chested walks in winter green wheat grass or hot yellow August stubble or loafing by those flood-cut banks. I really loved being natural and hated the shoes that tightened my toes and kept me from touching Mother Earth. Whenever I could get away with it, even in winter, I would wear only a T-shirt or strip it off on milder afternoons to enjoy the bracing cold. The rabbits and the squirrels lived in the cold, why couldn't I? Walking through sweet

flowering purple fields of alfalfa, I would reach the tangled bank of the river and sitting on some flood-delivered log, watch water spiders skim on quiet pools, crows flap, and keep an eye out for the rare Baltimore Oriole with its telltale flash of orange. Later I learned that all those objects of watching could be treated as subjects for biological science, but I wasn't really excited by old Mrs. Dolan when she had us dissect frogs and memorize the names for parts of dead animals.

When I turned eleven, Mars loomed large and red in the sky; reading the Martian stories of Edgar Rice Burroughs, I dreamed of beautiful Deja Thoris. I would walk to the edge of Grandfather's open porch, stretch out my arms to Mars, and wait faithfully to be transported to that planet, like John Carter had been. When night fell, I would throw myself on my back to gaze at the Milky Way, watch the bats flit by, and hope to join Sitting Bull, Crazy Horse, and Quannah Parker up there in the Happy Hunting Grounds. Three of the original astronaut corps told me they had also tried to do the same thing as John Carter.

I always considered *me* – the part of myself that was so connected to Nature – as much smarter than *John*, who was always reading textbooks, getting to school on time, dressing warmly, making alternate All-State in football and A's in every subject, and getting lost in crazy make-believe dreams about delightful girls. *Me* found it more interesting to listen to the fluttering leaves of the cottonwoods and the agile squirrels. *Me* always took the side of Huckleberry Finn, not Tom Sawyer. *Me* preferred Bomba the Jungle Boy to Tom Swift and his Electric Car. However, *me* would let *John* read whatever I wished. John was a very interesting butterfly or hummingbird to *me*.

What *me* really liked was the whole living, dying, changing, highly differentiated, intricately connected world – the great biosphere of Earth. And nothing much has changed in all the years since I ripened into Age.



*Age eleven in Okemah, Oklahoma.*