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Hey Mister, You Want to Learn to Meditate?

How did a nice scientist like me end up in a strange place like this? My family had no unusual interests — we were normal through and through. Perhaps we were more problem-free than normal, but no strangeness at the roots. I did well at college, graduating with a double major in physics and math. Then on to graduate school where I picked up a master's degree in physics and started working on my PhD. I passed the preliminary exams and qualifiers on the first try and settled into thesis research in the specialized area of experimental nuclear physics. It was 1968

and I was your typical twenty three year old physicist excessively cerebral, out of touch with my feelings, analytical, precise, curious, and above all, intellectually motivated and driven.

Not a hint of strangeness anywhere. If you have known any brash young physicists, you are probably aware that they tend to be unusual — somewhat skewed off the norm, one might say politely. If you are not that polite and were not snowed or intimidated by their domineering intellectual style, then “arrogant” rather than “unusual” would probably be the adjective that would most naturally come to mind.

On a warm day, late in the spring of 1971, while walking into the physics building on the way to teaching an undergraduate class, I noticed a large poster advertising a free lecture on Transcendental Meditation — or more simply, TM as most people referred to it. As a graduate student, poverty was a normal and given circumstance; consequently, anything free caught my attention. “Control your mind,” the poster shouted in large block lettering. “Learn how to relax deeply and lower your bloodpressure.”

“OK,” I thought, “that's nice, but who cares?” I continued reading, “Improve your concentration and decrease your need for sleep.”

What! I read that line again. Now it was interesting as well as free.

A few days later, I attended the free lecture. TM was presented as science — technique and results, stimulus and response.

There was no theory. One regularly performs this uncomplicated meditation process and physiological benefits automatically accrue — period. There was no dependency on eastern philosophy, mysticism, or any belief system. I wanted no associations with things that were non-scientific, mystical, or belief based — in other words, goofy. That sort of hocus-pocus was for gullible people with uncontrolled emotional needs.

The two TM presenters backed their claims up with some serious looking research papers and informal studies by reputable individuals at reputable institutions. It seemed straightforward enough — for the special student rate of only $20, I would be taught to meditate in four hours spread over one week. Better concentration, clearer thinking, improved memory, reduced stress, and I would need less sleep — all for $20 and four hours.

I was skeptical but if it worked half as well as the presenters claimed, it would be a good investment for any student. In those days $20 was a lot of money — serious money for a struggling grad student. Still, it was the 70s, I was a student, and a short walk on the wild side — doing something counter to the main culture — seemed almost obligatory. I signed up.

“Just follow these directions,” the TM guy said with a friendly smile, handing me a packet of paper as he took my check.

# The Sacrificial Banana

A week later, I was on my way to the TM Center to pick up my personal meditation sound called a mantra. It would take less than five minutes they promised — stop by get your mantra, then attend the four training sessions — what could be easier?

As per the directions, on the appointed day I showed up at this seedy little house with a clean handkerchief and a banana. A clean handkerchief and a banana? What a crock! I began to doubt the wisdom of what I was doing and felt more than a little foolish walking up to this house with my banana and hankie. Anybody who needed fresh fruit and a handkerchief to teach me how to meditate was likely to be either goofy or fraudulent. That was the first sign of strangeness. I had seriously thought about showing up without the handkerchief and fruit — just to see what would happen — but realism interceded. I decided instead that humoring them would be a better strategy. Their inane request seemed harmless enough, and more importantly, they already had my $20.

“What's with the banana?” I said derisively, holding my banana up to the first person I saw. “What's fruit have to do with meditation?” I asked. They never said anything to me about fruit and handkerchiefs at the lecture I attended — this seems a little goofy to me.” The person I was addressing evidently wasn't a hardscience type. He was as clueless as I, but questioning the interrelationship among meditation, fruit, and handkerchiefs had evidently never occurred to him. I found that difficult to understand.

His reply had been an exaggerated shrug of his shoulders, followed by a big broad smile. It was now obvious that this guy was doing what he was told without thinking about it. He was probably wondering why I was making such a big deal over a banana that wasn't expensive or much trouble to get. He seemed a little embarrassed and uncomfortable with my directness. I looked away, silently wondering how people could be that uncritical and unthinking about what they were doing. There was something familiar about that smile — I chuckled silently with amusement, and wondered if he was perhaps related to Alfred E. Neuman.

There were about ten people standing and sitting in the waiting area. I found a corner to stand in and waited in silence, hanging onto my fruit, like everybody else. Finally, it was my turn. “What's the banana for?”

I asked at the first opportunity. The initiator explained that they (the TM organization) had a ceremony of sorts that he was required to do — the fresh fruit was to represent the traditional offering a student would bring to his teacher.

“What do you do with all the fruit?” I asked. In my mind, I imagined a huge pile of rotting symbolic fruit — a sad wasteful testament to the uselessness of ceremonial gestures.

“We eat it,” he said with a smile.

Now I understood — it was merely a way to get some free groceries. If they wanted to add on a surcharge of one banana to the $20 price so that they would have something to eat for breakfast — well, that was all right with me.

Nevertheless, I would have preferred that they had been more straightforward.

The man standing next to me was about my age, well dressed, soft spoken, and seemed intelligent and serious — he didn't look like a fruit hustler. Maybe it was not them, I hypothesized, perhaps the people who set this business up knew that they would have a difficult time making ends meet. I let it go. Having solved the banana problem, I went on to the next issue — the impending ceremony.

With the intention of being helpful, I offered a constructive criticism to my initiator. I told him I thought any ceremony was completely irrelevant and that it distracted from the rational image they had carefully presented at the public meeting. He politely nodded, indicating to me that he recognized the discrepancy, but made no other reply.

“I have to do the ceremony,” he said quietly.

It was obvious that he did not care what I thought about his ceremony, or probably anything else — this was just the way it must be done. He looked at me for permission to continue. “OK,” I said, “no big deal, go ahead, do your ceremony if it makes you feel better. 1 will go along as long as I do not have to profess any beliefs or make any promises.” He smiled at me with amusement and immediately agreed.

At his direction, we knelt, side by side, on a small rug in the middle of the kitchen floor. On the floor in front of us was my banana lying in the center of a clean white handkerchief draped over a small plate — a poor man's altar, no doubt. The instructor chanted a little Sanskrit (at least that is what he said it was) mumbo jumbo for about a minute, then was quiet for about thirty seconds, finally he told me my mantra. I repeated it with him a few times until I got it right. In fewer than three minutes I had been given and had properly memorized my very own personal (probably shared by millions) secret mantra.

I was put in a large room with several others and told to silently practice my mantra so that I would not forget it.

“Just repeat it over and over in your mind for twenty minutes,”

he told me. “That's all, after that you can leave — but be sure to come to the first training meeting.”

“What a crock,” I thought, “I paid $20 and a banana for this magic Sanskrit mantra?

What could repeating some word-sound do for my mind?”

I expected nothing, but having come this far, I was determined to follow directions and give it a fair try. The twenty minutes of practice went by slowly at first, but then I drifted off into a pleasant nowhere.

Suddenly, I became aware that some of the initiates who were far behind me in the queue were leaving. “They must think that it is a crock too, and are not going to stay around to practice,” I mused. I checked my watch. “Whoa!” It was way past time to go — I had been practicing some forty-five minutes! I checked my watch again to make sure.

I tried to get up to leave, but I couldn't move. My body simply refused to respond to my will and effort — that had never happened before. My limbs were heavy as if I had been asleep for a long time, yet I was positive that my consciousness had been unbroken — I had not fallen asleep. “This is weird,” I thought, as I forced my thick, viscous, semi-solid body to slowly stand up and walk. Hmmm, maybe there was something to it, and I was doing it! Or maybe I was merely more tired than I thought. That was not a good explanation — I had gotten more sleep than usual the night before.

This is interesting,” I thought, “very interesting.”

I had done something strange, or at least goofy, and experienced something weird (my first trip into inner space) all in the same hour. I remained skeptical, which was (and is) my nature, but I also remained open minded. There were four one-hour sessions remaining and my curiosity was growing. I had undeniably experienced something dramatically unusual. That experience, along with my Scottish ancestry and the fact that my $20 was irretrievably gone forever, provided the necessary commitment to follow this TM

adventure through to the end.

# Watch That First Step, It's a Big One

Two days later I was attending my first training class. There were about fifteen of us sitting on uncomfortable gray metal folding chairs. I looked around to assess my peers. We were a somewhat motley but otherwise normal looking crew of casually dressed students. I was hopeful that I was about to learn something remarkable and useful, yet at the same time I was a little incredulous, almost embarrassed that I had spent twenty perfectly good dollars to be associated with this Indian meditation thing. The instructor looked like us, except that he had shorter hair, was clean-shaven, and better dressed — obviously not a student. He told us about TM, explained the techniques we should use to maintain the mantra in our minds, and answered our questions.

Everything was process oriented. No theory, no more ceremonies requiring sacrificial bananas, no metaphysical mumbo jumbo — just technique.

I liked it that way, I knew there was some Indian yogaguy with a long name, and beard to match, who was the leader of the TM movement, but no one ever mentioned him. Other than the fact that this so-called guru had sold me this meditation technique through his organization, neither he nor his organization was relevant to what I could do with it. I verified that fact in no uncertain terms as soon as the instructor opened the meeting to questions. The only condition was that I could not give away or sell the mantra to others. I instinctively didn't trust anything that had to be kept secret, but this request seemed reasonable enough. The TM folks were not hiding something from the scrutinizing light of open critical review; they were merely protecting their source of income and fresh fruit. I considered it as a copyright or patent — income producing intellectual property to be protected by secrecy. No problem.

Finally, the last question was answered and it was time to practice our meditation technique. I slumped in my steel chair trying in vain to get comfortable and began to occupy my mind with the sound of my mantra. In a few minutes, I was nothing but a single point of conscious awareness existing in a void of nothingness — floating free, doing nothing — existing as conscious mind without extent or form. No thoughts, no body, no chair, no room, no instructor, nothing. It was a remarkably pleasant experience until a single thought began to violate the expansive peace and quiet: “Uh oh... I am not doing this right; I am supposed to be thinking the sound of my mantra!”

That one critical thought interrupted my otherwise thoughtless float in inner space. I needed to get back on task by thinking my mantra. Suddenly, awareness of the outside world rushed in and I was startled to realize that I not only had a body, in a room with an instructor, but it was about to fall out of its chair!

Ooga! Ooga!

Emergency! Emergency! My internal alarms went off.

Quickly I tried to straighten up. My right leg awkwardly shot forward jerking my body back into balance. “Whew! That was a close one — I almost hit the floor like a sack of potatoes — wouldn't that have been a scene,” I thought to myself after it was clear that I had successfully regained my balance. In my imagination, I could see myself thudding to the floor creating a ruckus. My next thought was more practical. “Jeez, I might have banged my head on something — meditation could be dangerous.” I made a mental note to be more careful in the future.

Almost simultaneously the instructor began to speak.

“Come on back,” he said, “practice time is over.”

“Great,” I thought sarcastically, “he noticed, and now he is going to cut everybody's practice time short because I almost fell out of my chair.” I looked up. To my surprise, the instructor was engaged in a conversation with a student sitting on the opposite side of the room. He appeared to be totally unaware of me or my near catastrophe.

“Time's up,” he said.

I looked at my watch. What?! That's impossible! I had just lost twenty minutes of my life. What had I been doing for the last twenty minutes, where had I been?

“Any questions?” he said to the group in general.

I raised my hand. “How do you keep from falling out of your chair?” I asked. Everybody laughed. I was serious; it did not immediately occur to me that my experience was unusual. I don't think he had ever gotten that question before because he looked surprised and didn't know what to say. “What happened?” he asked.

“I started with the mantra, then everything went blank, it was nice, but when I realized I wasn't saying the mantra any longer I almost fell out of my chair and the twenty minutes were already up after only a few minutes.” Everybody laughed again, including the instructor. I suddenly realized that what I had said sounded confused, disoriented, or stupid — take your choice — and that no one else had had an experience like mine.

“Two for two — this meditation could be strange stuff,”

I thought to myself. The question and answer session wrapped up quickly. We were told to practice meditating twice a day for twenty minutes each time. He set the time for our next meeting and we were dismissed. I had meditated (or at least attempted to do so) twice, and both times I had experienced something very strange. What will happen the next time? I wondered. This was exciting — something seemed to be happening. My intellect and curiosity were being tickled. I wanted to experiment; I wanted to know if anything real was involved, would it work as they claimed? If so, then what else could I do with it?

The rest of the training classes resembled the first one, except I sat in a chair next to the wall at an angle so that I could not fall out. “I need to wear a seat belt and helmet, or find a bigger chair,” I thought with amusement, I immediately saw a mental picture of myself sitting in a folding metal chair, in front of a big fan. I was in the middle of an otherwise empty room, wearing a seatbelt, a motorcycle helmet, goggles, and with a scarf flapping in the breeze behind me (thus, the need for the fan). I was thoroughly amused and grinned broadly at the bizarre scene. I immediately thought of Ace-Snoopy sitting on the top of his doghouse engaging the Red Baron in battle with his Sopwith Camel. I often saw pictures like that. Some were funny like that one, some were helpful. They never took but a few seconds, and disappeared as quickly as they came.

With each training class, floating in the blank state or existing in the single point of conscious awareness state became easier and more familiar. Shortly I would learn, through trial and error, to combine the blank state with controlled visuals. The two may seem incompatible, but they are not.

Two months later I was meditating twice a day, being careful to put my body in a situation where it would not fall. The point awareness or point consciousness experience continued. It was always pleasant. I usually wanted to stay longer, but did not because I was extremely busy. I also found it invigorating — it seemed to boost my energy. The biggest surprise of all was that meditation could be professionally productive! By adding the visuals, it turned out to be a great place to work.

I could solve physics problems, design experiments, analyze research data, and write and de-bug computer code ten times more quickly, and with better results while in a point awareness state than I could in a normal state of consciousness. Extremely complex matters seemed to become much simpler and clearer in my meditation state. When you work a full week unsuccessfully trying to find a bug in your analysis software, and then go home and solve the problem — not just imagining that you have solved it mind you, but actually solved it — in just ten minutes of meditation time ...well then, you know that you have found something that has real effects — and real value.

This type of illogical yet extraordinarily productive experience was not merely circumstantial; it did not happen only once or twice, off and on — it became a dependable routine. Eventually, I did not wait until all normal methods and efforts were exhausted before turning to meditation. It worked as well when I tried it first, saving a great deal of time and effort by skipping the first three steps of the process. Hard work, long hours, frustration, and exasperation were no longer prerequisites for solving difficult and complex programming and physics problems.

I was surprised and delighted that meditation had a direct objective practical value. That was an unexpected revelation. I tested it and tested it, and then I began to depend on it. I had gotten smarter it seemed, and the other graduate students noticed. They commented on the change in my abilities. Now, more than ever before, they wanted to discuss their research and came to me for help in debugging code.

I told them about TM, but none made an effort to try it. That surprised me. For some strange reason, I had thought physicists would be more open. Meditation appeared to require too big a step out of the comfort zones of their personal and cultural belief systems. “Oh well, it's their loss,” I thought. I did not know it then, but I was on my way to becoming strange. I was, at the very least it seemed, unusually open minded.

My perspective and reality was expanding.

Up to this time, I believed that meaningful existence was confined to an operational reality. That is, if something can be measured it is real. To be measurable, a thing must interact with our senses or with some device that interacts with our senses. If it is not measurable (cannot interact with us or our devices), then its reality or existence (or lack thereof) is irrelevant. It was that simple; things were either operationally real or irrelevant. Things that are not measurable, but can be inferred from other things that are measurable, fall into the gray area of conjecture. All things theoretical or hypothetical fall into this gray basket.

Gray things are acceptable as conceptual constructs or ideals but are not to be confused with real things and are not to be taken too seriously in and of themselves. The primary mission of the academic research scientist is to collect enough valid, repeatable, measurement data to transfer a gray theoretical construct into a real object or effect.

At that time, quantum mechanical wave packets, black holes, quarks, justice, and love all fit into that gray area. It is important not to confuse hypothetical things with real things or you can easily end up chasing your own imaginary tail, or hallucinating the attributes of solidity to smoke.

My mind was not closed, I allowed for the possibility of new information. With enough real measured data one might eventually move a thing, such as black holes for example, from the realm of the hypothetical to the realm of the real — but only with sufficient good quality data. That particular attitude has never changed. I continue to feel that way, work that way, and employ that methodology to sort out what is real from what is not.

Now I had to change my philosophy of reality. There were those things that were nonmeasurable yet functionally operational (including my meditation state, which is properly defined as an altered state of consciousness) that fell into the category of subjective experience with objective results. One can use these nonmeasurable states of mind to operate on real things. (Here, I am using the terms “operate” and “operator” in the mathematical or scientific sense). I had shown that an altered consciousness directed by intent can consistently and directly affect and interact with real things such as my computer code. Complex logical problems could be solved without the intentional application of a rational process. Somehow, a non-measurable subjective experience could be turned into a reliable and effective scientific tool by some sort of consciousness operator. Verrrry interesting!

In contrast to conceptual constructs such as justice and love, altered states of consciousness and their objective results seemed to be measurable, consistent, and reasonably well defined. They were more like the things of science, things that were amenable to research and experiment. If one is in this particular altered state, one can always do these things with it — similar activity will produce similar results for all experimenters.

I was not special; I was the same as anyone else. I wondered if other altered states of consciousness existed and what one could do with them. I was curious — it is my nature to be curious.

My reality expanded. I added the statement: “If a thing is well defined and consistently functional (it can profitably and dependably be used by anyone within the known operational reality), then it must also be real.” It seemed reasonable that only real things could be functional operators within and on an operational reality. How could something not real directly affect things that are real? By definition, in an operational reality, things that are not real have no measurable effect, cannot interact with, and have no relevance to, things that are real.

My meditation had a measurable objective effect — I knew it, and a dozen others had clearly noticed it as well, even if they did not understand why. To me, it was as plain as day and totally obvious; this was no subtle effect being misunderstood by some mushy headed non-scientist. This was no hallucination. I knew what I knew. How many others, if any, agreed with me was not relevant. I had confidence in my mind and my science.

I began to analyze other common altered states such as daydreaming. Were daydreams

(self-directed imagination or purposeful visual imagery) functional? Of course! Why had I not noticed that before? People have been preparing themselves mentally for all sorts of things since the beginning of time. For example, one might repetitively practice giving a speech in one's imagination — making points and fielding imagined questions. The relevancy criteria are: is it consistently functional, does it actually help one's performance in objective reality, and are the effects measurable? Our directed imagination example would rate a definite “yes” on all counts.

Ask any top-notch athlete if focused intentional mental preparation is important to his or her success. Mental effort within the context of a particular altered state must represent a real thing because it produces real effects that are universal as well as specific to that particular mental state. “Altered,” was defined as different from normal. “Normal” meant wide-awake and focused in the physical world — as you are now while you are reading this book. Each altered state has its functionality. Daydreaming is one specific type of altered state. Of all possible altered states, those with no universal and consistent functionality are, by definition, useless and therefore irrelevant. It was only the useful ones that were welcomed into my newly expanded reality — those were the ones I wanted to know about.

Real things, significant things, must now be either objectively measurable, or consistently and predictably interactive with real things. That was a major expansion of my real world. The word “objective” means that these real things must exist universally and consistently for others as well as for me. They must be independent of me and exist whether I exist or not. Others (potentially everyone) must be able to make the same measurements and find the same measurable functionality. Otherwise, they would be only my private hallucinations, not a part of the larger reality we all share.

When I realized the scope of the reality picture was much bigger than I had previously thought, I wondered if there were other subjective experiences that had consistent objective measurable results. Where were the boundaries? How much more reality was out there that I had missed? What other real and functional processes of mind were lurking beyond my limited awareness?

I had been blindly unaware of a significant part of my reality for twenty-some years!

That thought was a mind bender that weighed heavily on me.

That I had inadvertently imposed a major limitation on my operative reality out of sheer ignorance was unacceptable, inexcusable, and more than a little humbling. What other significant parts of my life was I missing? I had to find that answer. Being content to accept whatever is given without pushing hard against the boundaries is absolutely foreign to my nature.

My mind had been forced open by the indisputable facts of my experience, and as a result, I had become less of a philosophical know-it-all. I realized there was much about life and reality I did not know. Arrogance waned as openness and curiosity waxed.

I have not significantly changed my philosophical approach toward defining reality in the thirty-three years that have come and gone since then; today my definition of what constitutes a real experience remains essentially the same. Any credible conception of reality must include subjective experience that can consistently and universally lead to a useful objective (measurable by anyone) functionality.

Much later it became evident that expanding my reality beyond a certain beginning level would require personal growth. I had to increase the quality of my consciousness to understand the bigger picture. Conversely, understanding the bigger picture helped me grow up. They worked together.

Thus, my journey began innocently enough. Interestingly, though nothing much has changed as far as my overall philosophy goes, the continual flow of incredible learning experiences has steadily accelerated. My understanding of reality continues to actively expand.

# Is This Guy Monroe Nuts, or What?

“Get a job!” intones a popular song of my youth. Everybody must get out of school sometime. I was now almost twenty-seven, and had been in school continuously since I was five. With research completed, I settled on my first real job applying classical physics and mathematics to electromechanical and electromagnetic systems simulation. A real job with a real paycheck — imagine that I continued to meditate more or less regularly, but had found that I did not need the mantra any longer. A little research and experimentation indicated that any two-syllable nonsense word ending in “ing” (a resonant sound) worked as well as any other, including my given super-secret mantra. There was nothing mystical or magical here, only a method of controlling thoughts by filling the otherwise active mind with fluff, nothing but science and technique — no bananas or hankies were required.

Repeating the mantra eventually seemed to get in the way and slow me down; consequently I dropped it. The meditation state was now familiar enough that I could go there in an instant and return as quickly. This level of control was handy at work. I could meditate, find solutions, and return without anyone suspecting that I was doing something strange — to the world I seemed to be deep in thought. That I was disembodied point consciousness adrift in the void — gone completely from their world with no residual awareness of their reality — was my secret. Sometimes people would try to engage me while I was gone.

To them, it was as if engaging a dead body. Needless to say, I gained a reputation for being eccentric — with unusual powers of concentration or an unusual ability to sleep while sitting up — nobody could tell which. My boss, Bill Yost, was a super person. He was smart — no frills, no BS, no hidden agenda, no tact, — an engineer through and through. Bright, honest, and straightforward — that is the personality type that I related to most easily. One day Mr. Yost came by my desk and tossed a book at me. I caught it in mid air and read the title Journeys Out Of The Body, by Robert A. Monroe. “What's this?” I asked, surprised by the strangeness of the subject matter.

“Read it,” he said, “and tell me what you think.”

When your boss says, “Read it,” you just read it, you do not ask why.

I read Journeys during the next few days. The book was configured as a diary. It was a “This is what happened to me” type of story wherein Monroe claimed to have collected hard evidence in support of the reality of the out-of-body experience. The experiences, and the evidence of their realness, were laid out matter-of-factly with no theory or belief system attached. It was a wild concept — a more or less independent reality reachable only through the mind. Having prior experience with functional altered states of consciousness, I was probably more open minded than the average scientific type, but not gullible. I knew what was real to me, and my measurement data (experience) included none of that.

It was very interesting,” I told my boss, “but I don't know what to make of it. Is this guy (Monroe) nuts; is he trying to sell books to the gullible; or is he for real?” I asked rhetorically. I continued with barely a pause: “How can you tell where he is coming from? If his story is for real, if you take him at face value, a new aspect of reality opens up that I have never before considered. That would be a definite Wow! But for now, it just sounds wild and I have no way to judge the veracity of it.”

Having spit all this out in rapid fire, barely pausing to breathe, I now took a deep breath and waited for the reaction. I watched my boss carefully to see if I had made a fool of myself by being too open.

As a student, I was used to having to get the right answer.

Was I supposed to condemn it as foolish rubbish or believe it as a strong possibility? I had no idea where he was coming from. He had given me no hints.

I was working as a civilian in a military organization, it was 1972, and the people here were conservative. I was a longhaired, wild-eyed kid-physicist recently out of graduate school. 1 had about decided that my openness had been a political mistake when Mr. Yost finally spoke.

“I agree with you,” he said thoughtfully, “It is a wild concept isn't it?” “Yes it is,” I agreed, “very wild.”

“But consider what it would mean if it were true,” he continued with an enthusiasm that indicated that he had thought about it seriously. I did not reply, “Think about that,” he said, “What does it logically imply if it is true — if the evidence is real and not made up?”

“Yeah,” I said, “Pretty strange stuff — but how can you ever know if it is true or made up?” He nodded in agreement and changed the subject. That was the end of it. Not another word was mentioned about Journeys, at least not for a few weeks.

I had almost forgotten about Monroe's hook, having put it out of my mind as something that could never be logically confirmed or denied — and therefore was irrelevant.

“Would you like to go with us to see Monroe?” my boss asked when we were alone.

“Huh?” I muttered, not making the connection.

“There is a group of us from work going to see Monroe — you know, the guy who wrote Journeys — this Friday after work. Do you want to go with us?” he asked. “Where?” I asked in reply.

“Just outside town about forty-five minutes from here,” he shot back with some excitement in his voice. “Sure,” I said. “I would really like to meet this guy and see if he is crazy or sane, honest or a hustler, delusional or rational.” “Me too,” said Yost with a twinkle in his eye — “me too!”

# Face to Face with the Wizard of Whistlefield

Late Friday afternoon finally came. While our co-workers headed home to begin their weekends, twelve of us piled into three cars for the trip to Monroe's. I did not know these people; I was a relatively new employee within an organization that employed about five hundred people. We were a strange crew, male and female, young and old, very conservative — mostly professional technical types. We were not the sort of people one would expect to be eagerly converging on Mr. Out-of-Body. I was impressed there were this many open-minded people where I worked. As always, anything unexpected demanded an immediate reassessment. I hypothesized that living almost exclusively among hard-core scientists for the past seven years had inadvertently skewed my judgment of people in general -- clearly, there were bias errors in my analysis algorithms. That was a serious problem. Within a few seconds I had laid out a tentative plan for debugging my assumptions and made a mental note to observe these people more closely.

Most were skeptical, one of the ladies was a little frightened, everyone was enthusiastic, and nobody knew what to expect. They all jabbered nervously and endlessly — the scene seemed hyperactive and irrational to me. As usual, I said nothing. I was not a good mixer. I did not relate to unfocused bubbling emotion or to anxiety, and I did not understand these people. Their lives seemed to be driven, or at least animated, by random irrational feelings. They were strangely affected by uncertainty.

At the time, I had no idea that they were the ones who were actually normal. Years of graduate school and a lack of mainstream social interaction had nudged my vision of normalcy a tad off center. I thought that Spock was normal while the rest of the Enterprise crew were hopeless, eternally lucky, mush-heads. I heaved a sigh, “This is going to be a weird night,” I thought to myself, “with all these weird people, on this weird excursion to see Mr. Weird.” As it turned out, except for the people I was traveling with, it was not actually that weird, but it changed my life forever.

Bob Monroe lived on an estate named Whistlefield — five-hundred acres of lakes, forests and fields. A large country manor house elegantly perched on top of a hill, half dozen horses, a barn, and two small lakes thrown in for good measure. It appeared to me that Mr. Monroe was a relatively wealthy Southern gentleman. We slowly motored down the half mile long driveway that was bordered by a freshly painted white board fence. A few horses trotted along with us. “Whoa, this is classy,” I thought. “This guy is no poor raving lunatic — that's for sure.” My analysis continued, “Weird books don't pay that well — it doesn't appear that duping the gullible for their money is going to be a likely motivation.” Nevertheless, I reserved final judgment on that issue until I could meet the man for myself.

The car finally stopped in front of the house. Several large dogs came bounding out to meet us — two Dalmatians and a large German shepherd were vigorously sounding the alarm that intruders were in the driveway. My riding companions thought it better to stay in the car until the friendliness of the dogs could be verified.

Nonsense! These people were so strange — like frightened children. I wondered what could have possibly happened to them to make them that way. Dogs bark at strangers because that is what they do — it means nothing. I quickly popped out of the car to say hello and rub some ears.

I was immediately mobbed by three wet tongues and wagging tails. It was love at first sight. They acted as if they had not been petted for weeks. It felt good to be out of that crowded car, and to be surrounded by rational beings that knew what they were about. I immediately felt more centered.

I should explain that popping out of that car had been neither brave nor foolish — those clogs were obviously friendly. What I did not understand was why that fact was not obvious to everyone else. I surmised that either I happened to be riding with a group of people who were not familiar with dogs, or that one dogchallenged person's fear had influenced the rest.

By now, everyone was getting out of their cars and looking around, wondering what to do next, “Perhaps I shouldn't have changed into these old jeans,” one of the ladies said apprehensively — she was obviously intimidated by the classiness of Monroe's estate. All three women present were reflexively fumbling in their purses for fresh make-up. “Why do they always do that?” I wondered silently. “Haven't they figured out by now that it won't make any difference?” I was always amazed and amused when people were internally driven to blatantly irrational behavior.

I had, for many years, been curious about the root causes of “cultural insanity” — those absurdly illogical attitudes and actions that our culture considers normal. Some, including “makeup urgency” are entirely benign; others range from mildly dysfunctional to terribly destructive. I had come to the tentative conclusion that the key motivators of cultural insanity were fear-based and emotionally driven. I could not relate in the slightest to either. Nonetheless, I intuitively knew that this was not a good thing, and it did not speak highly of our society's overall level of rationality. I was curious about it, and took careful mental notes whenever I noticed such a display. I did not feel superior. I had no inclination to make comparisons. I was an impartial observer with an insatiable curiosity — that's all. I was merely different, not better or worse than others because of that difference. I had been born, it seemed, a perpetual outsider — and I liked it that way. Outsiders have a more objective and impartial view. As a scientist, nothing was more important than logical clarity and objectivity.

Being different and having an outsider's view had generally been comfortable for me — I saw it as an advantage. It suited me well.

My reverie into the characteristics and causes of illogical social behavior was suddenly upstaged by something more important. The large white door of Whistlefield Manor began to swing open.

Conversations were instantly terminated in mid-sentence. All heads turned with silent expectation. The one, the only, the Amazing, Out-Of-Body-Man, was about to turn to flesh and blood before our eyes. We would all soon know if this guy was nuts, or what.

Out stepped Mr. Monroe into the doorway. For a second or two he seemed the slightest bit tentative — like a man who clearly knew he was about to be examined and evaluated like a captive alien or a strange animal at the zoo. He gazed out at the crowd of nameless heads staring silently back at him. After the briefest of pauses, he stepped fully out onto the elegant open stone porch with confidence and a solid presence. He was not wearing a white suit with matching hat and string tie like Col. Sanders (the only Southern gentleman I could bring to mind). Instead, he looked comfortable, informal, and friendly — more like the dogs than the house.

Robert Monroe was a heavyset man of medium height; he wore a big smile and had a twinkle in his eye. Just looking at him made you feel relaxed. He greeted us all individually as if he were an experienced politician — making quips and jokes as he went “This guy could be Santa Claus,” I thought with more than a little amusement, “a jolly old elf — passing the summer sipping mint juleps on the veranda of his country estate.”

“What are you smiling at?” he demanded good-humoredly as his attention suddenly focused in my direction.

He was now looking directly at me with a knowing impish grin.

For a moment, I had the feeling that he must have read my mind and was amused by my vision of Santa Monroe.

“Oh nothing,” I replied, lamely brushing off the question.

Before he could react, I instantly followed that dodge with a question of my own. “How and when did you first go out-of-body?” I asked. Up to this point, nobody had been that direct. I did not know how to be any other way. It suddenly grew quiet and more focused, everybody was now intently listening.

“It just happened,” he said. “It just started happening about fifteen years ago for no apparent reason.”

“How did you react to that experience?” I continued without pause.

“I thought I might be going nuts,” he said. “It worried me initially, but I couldn't help experimenting with it — that's my nature.”

He had consulted with psychologists, psychiatrists, and a parapsychologist. All found him rock-solid sane which made him feel better and gave him confidence.

Monroe seemed to have inadvertently stumbled into an altered state of consciousness that gave him access to a larger reality, producing some amazing evidential data under controlled circumstances with the parapsychologist. Because it had no deleterious effect upon his mental soundness and competency, he was encouraged to pursue, record, and eventually control his unusual experiences.

“What sort of evidential data do you have?” I shot back.

“Most of it was in the book,” he said, “remote viewing sorts of things for the most part.”

“What exactly is remote viewing?” I asked.

“Obtaining information paranormally by going somewhere in the out-of-body state to collect the target information — without taking your body along, as it were.”

“Oh, I see,” I said sheepishly, realizing that I had asked a dumb question that should have been obvious. My momentary pause gave others a chance to horn in on my private conversation. No one was shy any longer. Toward the end of the evening Monroe took us to the facility that he hoped to soon turn into a lab dedicated to the study of altered states of consciousness. It was obvious to me that he desperately wanted to legitimize what had spontaneously happened to him. He wanted to remove the stigma of nutty and replace it with the approval of an accepting science. He was earnest, serious, and willing to put his money where his mouth was.

He was not posturing or hustling — he was genuinely interested in real science. He wanted legitimacy, not recognition, money, or fame. He was a successful local businessman. Additionally, he was the CEO of a growing cable company and appeared to me to be totally sane, intelligent, under control, and conservative. Best of all he was a rational type. He had an engineer's personality. He was more straightforward and intellectually precise — less emotionally driven — than most of the technical professionals who were now pelting him with questions. The quality of the questioning was erratic — clearly, he was a polite and patient man. If you did not know he wrote about out-of-the-body experiences, you would never have guessed it from his circumstances, appearance, or demeanor.

Then came an offer I could not refuse. Gazing at the bunch of us lounging on the back deck of the nascent lab, Monroe challenged us. “You folks are technical scientific types, aren't you?” He asked rhetorically. We all nodded our heads and mumbled our concurrence, wondering what was coming next. “I am looking for some hard-core science and engineering types,” he continued. “Someone with good professional credentials who could help me do real and proper science that would be acceptable to other scientists.” “So that's why we were invited,” I thought with mounting expectation, “Great!”

My hand shot into the air — a reflexive act conditioned by over twenty consecutive years as a student — I couldn't help it. I could not, it seemed, respond to a question with my arms at my side. Monroe looked directly at me, amused by my waving hand. Feeling a little stupid, I pulled my hand down out of the air and said, “I am a physicist and I am very interested in your research into altered states. If you will teach me what you know about out-of-body and altered states of consciousness, I will help you do legitimate scientific research.” Almost immediately, from the other side of the deck another voice spoke up.

“I am an electrical engineer and I would like to work with you — if you would try to teach me what you know.”

I strained to see who was speaking. It was a young guy, maybe a few years older than me, but not much. I did not know him; he wasn't riding in the car I had come in. Monroe looked at us intently — a long and pregnant pause ensued as he assessed the situation and weighed his options.

Everyone was quiet, waiting to see what would happen next.

I think that Monroe would have preferred older, more established scientists to staff his lab. Someone more mature, with an established reputation — instant credibility. But we both knew that those types were not likely to be interested, or willing to work for an exchange of knowledge. If they had established professional reputations, they had reputations to protect and would never allow themselves to become associated with something this far out on the fringe — this far away from the safety of the crowd.

Scientists, contrary to their own press reports, are mostly just sheep of a different sort. All credibility flows from peer review and the more notable peers of the scientific community would treat altered states of consciousness and out-of-body as intellectual leprosy. Monroe had run headlong into that brick wall of closed-mindedness previously — which is probably why he craved respectability and acceptability.

He quickly evaluated his chances to do better. Finally, he broke the long silence, “What kind of degrees do you have?” Dennis Mennerich, the other volunteer, had a master's degree in electrical engineering. “OK,” he said confidently, “You've got a deal! Call me in a few days and we'll set up a meeting.” He rattled off a telephone number.

The subject changed. I stopped paying close attention to the conversation. I was as excited as someone like me can get — that is, I felt a mild surge of anticipation.

Where would this lead? What could he actually teach us? How would he attempt to teach us? What scientific protocols would be applicable?

What kind of data would we be collecting? What would we be measuring? Question after question poured through my mind. What if it turned out to be bogus? If I found out he wasn't actually interested in real science, I would quickly and politely bow out — that would be easy enough.

The evening had turned out better than I had expected. I was going to be studying altered states — something I had wanted to do for a year or more, but did not know how to start. “This could be a great opportunity,” I thought,.. “Well, maybe, just wait and see what happens, if anything happens at all.”

I did not know it then, but my life was about to take a sharp turn. Strange and stranger (all carefully scientific of course) was about to become as common as air.

After a few days passed, I called the number scrawled on the scrap of paper that I had hastily obtained that night on the deck at Monroe's.

It had been dark, we were outside — at the time the number seemed clear, I dialed it again. There was no answer. I tried it later, no answer. The next day was the same, as was the day after that. No answer. No answer. No answer. I let it go the rest of the week. The next week I tried again. No answer. I decided that perhaps the three was actually an eight and tried that. No answer. I tried information — Monroe had an unlisted number. I let it rest a few more days. Two weeks had gone by since our visit. I tried it with the “three,” then again with the “eight” ... hold on ... somebody began to talk ... jeez, it was just an answering machine! The machine mentioned no names. I left a message. Nothing happened, no one returned the call.

A few days later I decided to try one more time. I was so surprised when a woman's voice offered a polite “hello,” that it took me a second to focus on what I was doing — a real flesh and blood person! Wow!

I asked to speak to Mr. Monroe.

“What is this in reference to?” she asked politely.

I was on a roll. “Is this Robert Monroe's residence?” I asked.

“Yes,” she said, “who is this?”

With immense relief at having made the connection, I quickly explained who I was and said that Mr. Monroe had asked me to call him in a few days and that was two and a half weeks ago.

“Just a minute,” she said.

“Finally,” I thought, “he'll probably be glad to hear from me.”

I imagined that he was concerned that I had perhaps changed my mind. He had seemed excited, even somewhat anxious, about getting his lab up and running.

“Hello,” the voice said on the other side of the line with no sense of familiarity.

Maybe she didn't tell him who I was, I reasoned. “This is Tom Campbell,” I said, “We talked on the deck at your lab a few weeks ago — I am the physicist — you asked me to call.”

“What?” he said. “Physicist? What kind of physicist are you?”

What sort of question was that? From his tone it was obvious that he did not know who I was, and that he didn't remember our deal — or he was pretending that he didn't? He was obviously not sitting around worrying because I had not called sooner. I detailed the visit and the offer that we had agreed upon.

“Oh, that physicist,” he said with dramatic inflection. “What is your name again?” I told him my name a second time.

“There was another guy with you, wasn't there?”

“Yes, there was another guy — his name is Dennis,” I replied tersely and waited.

“Why don't you two come to the lab next Thursday,” he said after a short pause.

“That is good for me,” I replied, “Ill check with Dennis and let you know.”

“Just come on,” he said, “no need to let me know — just come on up to the lab at seven — you and Dennis — is that OK?” “Sure,” I said a little puzzled.

“Do you know how to get here?”

“Yes,” I answered, “I can get there. I'll see you this coming Thursday evening at 7 at the lab.” I paused to make sure there was no misunderstanding.

He mumbled a gratuitous “OK,” sounding mildly annoyed that he had to listen to me repeat the arrangements, and hung up.

“How does he know Dennis will be able and willing to come this Thursday?” I wondered. I sure didn't know that yet. How could he be that sure?

I pondered the circumstances. Does he want me to come by myself if Dennis cannot make it? He didn't seem particularly eager to get started. Or... is his mind a little loose? “Now that conversation was definitely strange,” I mused.

In time, I would eventually get used to Monroe being distracted and knowing things paranormally. His mind was not loose, he was always a step ahead and usually right. Unlike me, he did not need to wait for the facts.

I told Dennis the next morning.

“No problem,” he said.

I told him that Monroe had seemed to know he would be able to come Thursday evening. We looked at each other and shrugged our shoulders.

“Had you told me this yesterday or anytime last week, I would have told you that I couldn't have made it,” Dennis added as an afterthought. “But just this morning, things changed, now I have no conflict.”

This was going to be an interesting adventure — I just knew it. “Who is going to drive?” Dennis asked.

“I planned to take my cycle. Do you want to ride with me?”

“OK,” he said, “I have my own helmet — I used to have a bike a few years back.”

“I have a big four cylinder Honda — two people won't be a problem.” “Great,” he replied, “that should be fun.”

He is pretty courageous,” I thought, “I hardly know this guy, he knows nothing about me, and he is willing to get on the back of a motorcycle with me? Maybe only once.” I chuckled to myself. I got directions to his house and agreed to pick him up at 6:15 p.m.

# The Adventure Begins

The trip to Whistlefield was a combination of interstate and country roads. Most of the mileage was on a brand new and lightly traveled interstate. I loved my motorcycle. I loved speed, I loved acceleration. I loved the feel of finely controlled and responsive raw power and I loved the presence, the sense of being alive, and the focus in the present moment that you get on a big motorcycle. You, the bike, the environment, and fate — one tightly integrated package — a shared destiny. That was fun. With Dennis on the back, I resolved to be conservative; nothing over eighty-five miles per hour on a regular basis was my plan. It would not be responsible, polite, or friendly to be reckless with somebody else's life.

At 120 mph, my bike was rock solid and smooth as silk. It was made for speed, and I was addicted to it. I had driven cycles ever since I was a teenager. With this particular bike, it was love at first sight — the biggest, the best, the fastest. Dennis was fearless, he never once complained or flinched — except once when the drive chain broke while we were humming along at eighty miles per hour and he almost lost a few fingers, a near miss, but when you are young enough to be immortal and invincible, any miss is as good as a mile — we never skipped a beat. Dennis was always ready and relaxed. Mounted on this trusty steel steed we cut the travel time to Whistlefield to less than half an hour.

Once we got through the initial getting-to-know-you data exchanges, schedules were quickly worked out and routines established. Dennis and I would go to the lab two or three times a week and sometimes on weekends.

We would spend the first hour or so setting up equipment, soldering wires, designing and making measurement devices — in general, wiring and outfitting the place to be a lab. After a while, Monroe would join us at the lab and then the real fun began.

Under Bob Monroe's guidance, Dennis and I would begin a systematic exploration of altered states of consciousness. We were constantly working towards consistent repeatable, evidential experience. After a few hours of exploration, Bob would invite us back to the house for discussions, chitchat, planning, or perhaps to meet some other investigators that were working in related areas. His lovely wife Nancy, the ever proper, polite, and most congenial hostess, would often join our discussion. Dennis and I were so bright eyed and bushy tailed in our dogged pursuit of the outer edge of reality that our constant state of total amazement, night after night, amused her to no end.

Bob knew everyone in the country, it seemed, who was investigating, or experiencing anything unusual. They all came to Whistlefield eventually to meet Bob and share the results of their individual efforts. Bob was like a magnet in this disconnected community of leading edge researchers, experimenters, and freelance kooks, because of his no nonsense, straightforward manner and wonderfully open mind.

There was no snake-oil being hawked at Whistlefield. Because of Bob's reputation, and the operation and reputation of the lab, there was a steady stream of tremendously interesting visitors. I was impressed there were so many intelligent and sober individuals, sometimes with impressive credentials, who took this area of endeavor seriously. These were not whacked out druggies doing their counter-culture thing. Bob had zero tolerance for that sort — he did not want to tarnish his legitimacy by being associated with drug users. The Timothy Leary types were out. Other than that, Bob was open to almost everything anybody took seriously. However, he was also always skeptical. Open minded and skeptical — he wanted to see hard evidence — claims were interesting, but never enough.

Most of the visitors were middle-aged, serious professionals looking for serious answers to serious questions. They, for the most part, were looking for validation and hard evidence. There were the occasional groupies trying to increase their credibility by associating with Bob and his research effort, and a few whose main object was to impress him with their unusual talents. Bob had little patience for either. He politely but firmly sent the pretenders and noncontributors on their way.

# The Science of Altered States

The lab building contained, among other rooms, a control room and three isolation chambers. One chamber had been constructed with complete electromagnetic shielding so the earth's magnetic field and other stray radiation would not wash-out or overpower the effect that carefully controlled electromagnetic fields might have on altered states of consciousness. Each chamber was constructed to provide as much sensory deprivation as possible and was connected to the control room by audio and a host of measuring devices.

I borrowed some unused, sophisticated and expensive electrostatic sensing equipment and audio signal generators and Bob purchased a complete EEG

(electroencephalograph) setup and a professional audio mixer. Bill Yost brought in an exceptionally sensitive high input-impedance voltmeter.

Dennis and I designed and made a device for tracking Galvanic Skin Response (GSR). Before long we had a reasonably well-equipped lab to work in even if it did have solder splatters all over the floor.

We measured Bob. He measured us. One key datum Bob had derived from his personal study of out-of-body experience (OOBE) was the perception of a 4 Hz oscillation within his body and consciousness just before exiting his body and sometimes just after returning to it. Experimentation showed that when an instrumented person was caught in that pulsation state in our lab, the EEG

indicated the brainwaves collected by multiple pairs of electrodes were unusually

coherent (in phase), collectively synchronized, and modulated at 4

Hz. The GSR reading would begin oscillating at 4 Hz as well. Bob intuitively knew that this pulsation state was a key artifact, and we set out to reproduce it — capture it and hold it steady, on demand, and under our control.

A literature search had turned up a few old scholarly studies of out-of-body experience, which was also known as “astral projection.” A half dozen highly respected, wellcredentialed, medical and technical professionals had been seriously studying out-ofbody experiences for decades, mostly around the turn of the last century. A book by Dr. Hereward Carrington and Sylvan Muldoon entitled The Projection of the Astral

Body, published in 1929 by Samuel Weiser of New York, suggested the pineal gland

was somehow involved. Astral Projections: Out of the Body Experiences, by Oliver Fox and The Study and Practice of Astral Projection by Dr. Robert Crookall

(University Press, 1960); agreed that the pineal gland was perhaps a key organ affecting the out-of-the body experience.

We were in the cut and try mode of operation and would try anything at least once. Dennis and I always applied any unusual experimental devices to ourselves first. Only after we tested how it affected us, and became convinced of its worth and safety, would we try it on others to gain a wider sample — friends, visitors, passersby, anyone, we were not picky. We were looking for something that would work with anybody and everybody.

For example, one of the things we tried was to shake the pineal gland at 4 Hz. We built a huge capacitor with 2-ft2 plates to generate a uniform and strong electric field. We were committed and dedicated to the pursuit of our quest — risk taking was not an issue. With something like a 250,000 volt, 4 Hz AC signal being fed to the plates, I stuck my head between them and tried to reach a working altered state. I stayed there about an hour or so experimenting with different voltages and frequencies against different altered states, hoping for a resonant effect to occur that would have a dramatic effect on the state of my consciousness.

Suddenly I began to feel woozy. My head started to wobble dangerously between the exposed metal plates. The experiment was stopped. I had a terrible headache for about three weeks.

We worked with negative ion generators to provide controlled backgrounds, and used ultra-high impedance input voltmeters to study the changing electrical potentials generated by a body in an altered state vs. a normal one. We measured the dynamic build-up of static charge around our heads with borrowed equipment as we eased in and out of various brainwave configurations measured by the EEG.

It may seem a little like mad scientists toiling in their hilltop laboratory at the midnight hour but we were as serious, sober, and straight as our counterparts working traditional problems in universities everywhere. We were careful about our science. Our methodology was good. Were we cautious and conservative? No, we were not cautious. If there was any reasonable chance of gaining knowledge, we took it. We were hard driven to find honest answers — real, verifiable, repeatable results. We wanted to know, and this was the chance of a lifetime to find out. We were fearless in our pursuit of truth because the risks were totally invisible to us — sometimes, the naiveté and brash enthusiasm of youth has its advantages.

Meanwhile, while Dennis and I were working in and on the lab, Bob was leading us and teaching us to experience and explore the nonphysical.

He would first lead us into a deep relaxation state, then using visualization we would begin to focus our thoughts, center our attention — let go of our bodies and the environment. These exercises produced various states of consciousness that were similar to the meditation state I had learned to achieve with TM. Bob thought that perhaps there was opportunity on the boundary between being awake and asleep. We practiced hovering on that edge. Put the body asleep and keep the mind awake simultaneously. Eventually we got good at it and it did not take us long to get there. After developing a basic competency in defining and establishing willful repeatability of a half dozen altered states of consciousness, we began experimenting and exploring the functionality of each state. Each mind-state had its own unique functionality — things you could do, abilities you had, while in that state.

# Breakthrough

One day while I was at work, Dennis dropped by and showed me an article he had found in the October 1973 Scientific American. It was a short article, by Gerald Oster, titled “Auditory Beats in the Brain” that described a phenomenon called “binaural beats.” Simply put, if a pure tone of say 100 Hz was put in one of your ears, and a pure tone of 104 Hz in your other ear, you would perceive a 4 Hz beat frequency along with the 100 and 104 Hz tones.

Dennis waited while I read it. “Let's try that at the lab,” he said. “Sure, why not?” I replied. Dennis had been gathering information on the binaural beat phenomena for some months and had created a binaural beat audiotape for us to experiment with. Our hope was that the beat frequency, occurring in the corpus callosum between the brain's hemispheres, would drive the brainwaves.

Dennis' intuition was correct. The binaural beats obviously affected our state of consciousness. During the next week we begged, borrowed, and bought the necessary equipment to expand our experiments. Bob had gone out of town for a week or two; subsequently, we experimented with the effect of binaural beats on altered state of consciousness on our own. After a week of trial and error experimenting, we were more excited about the possibilities.

The effect was powerful. Using the binaural beat to entrain brainwaves as measured by the EEG was a fact. The effect on one's state of consciousness was dramatic. Bob came back and we started testing what this technology could do.

The good news was that by trial and error we were able to significantly optimize the effect we were looking for. The better news was it seemed to work as well on everybody as it did on us. Now we had a technique for putting people with no training into specific altered states of consciousness, at will, on demand, with consistent results.

We focused on the 4 Hz beat and created a set of audiotapes that guided the listener into what Bob called “Nonphysical Matter Reality”

(NPMR). “Physical Matter Reality” (PMR) contained my body, the lab, the house where I lived, and my daytime job. Once in NPMR, the fun began. Now we had the potential to collect evidence that would be based on a much larger sample of subjects. As we gained experience with more people, we continually improved the effectiveness of the audiotapes. In about eight months we were ready for the world to give us a try. Bob put out the word that we needed a limited number of guinea pigs to try out our binauralbeat brainwave entrainment techniques for facilitating the projection of one's consciousness into the nonphysical as an aware operational entity. The response was overwhelming.

Soon, Bob was booking every room at the nearby Tuckahoe Motel.

The Tuckahoe management, having seen better times, agreed to let us string wires throughout their facility. Dennis and I had a lot to do before the big weekend when we would discover if our methodology was as effective as we thought it was. We expected about twenty totally naive subjects — and we planned to keep them that way by telling them nothing. We did not want to lead their reactions and experiences by giving them any expectations.

Building mobile measuring equipment and audio equipment for large groups was a challenge. We barely made our deadlines by working evenings and weekends for three weeks, but with the help of Bill Yost and Bob's stepdaughter, Nancy Lea Honeycutt, we had the equipment installed, checked out, and ready to go late in the afternoon of the last day. What a panic! In a parallel activity, Nancy Lea, who had joined our research team after her graduation from college, orchestrated and administered all the necessary arrangements. Somehow, at the last moment, everything pulled together. It was worth it. During Friday night, all day Saturday, and half of Sunday, the attendees had the time of their life. There were so many paranormal happenings that weekend that we had a difficult time getting them all recorded. These naive subjects were reading numbers in sealed envelopes, remote viewing, manifesting lights in the sky, visiting their relatives, reading next week's newspaper headlines, and much more. It was a circus! Fun, but exhausting. Dennis, Nancy Lea, and I ran the show, with visits from Bob off and on throughout the weekend.

We collected lots of solid evidential data — the results were more dramatic than we had expected. Things were never the same after that.

When word got out about the effectiveness of Monroe's program, Bob was swamped with requests from people of all sorts wanting to participate, Bob began to see the makings of a business and Dennis and I, along with Nancy Lea, became trainers more than researchers.

# But Is It Real?

Let's slip back in time and view the whole from a slightly different perspective. My association with Bob Monroe presented a fantastic opportunity. With those years of practice, Dennis and I could easily differentiate among the various altered states of consciousness and get to them, shift between them, and come back to a normal state at will. However, it was not that easy to begin with.

We worked hard and modified the rest of our lives to accommodate our work. I had decided that while I was working at the lab, I would take no mind-altering drugs of any sort. It was going to be confusing enough without that variable floating around in the equation. I had never used any illicit drugs as a student because it did not seem rational. I lived out of my mind, it was my ticket to success — I didn't want to mess anything up.

But now I swore off even an occasional beer. Not a drop — socially or otherwise. I became a devout tea-totaler for the cause of clarity.

A few years later, food additives, preservatives, caffeine, and sugar were permanently banished from my diet. I reasoned that subtle natural effects might be washed out by the impact that these substances had on consciousness. I was right — the difference was dramatic. The success of our research hinged on the clear perception of subtle shifts in consciousness, anything that could potentially muddy those waters was dropped by the wayside.

We logged thousands of hours exploring and probing the limits of reality, produced a huge pile of measured data, and filled up boxes full of audiotape that recorded every word of our sessions. The mental space we practiced in was nonphysical — bodiless. Unlike my previous TM

meditation, we were active, willful, autonomous agents within this larger nonphysical reality. We went places, did things, communicated with nonphysical beings.

It was fun, but neither of us could take it too seriously, Bob was careful to never lead the witness. He played the part of neutral observer — never hinting at what we might experience or how we might experience it. He didn't want his experiences to influence or bias us. As far as we could tell, he had no expectations of what we could, or would, accomplish.

Bob knew that if we were to experience the larger reality as he did, we would have to get there on our own. He could guide, but not lead — that would ruin the independent quality of our effort. He wasn't looking for an echo — he wanted to accomplish real science. Initially, Dennis and I had the same problem. “Is this stuff real?” we would ask each other. How could we tell if what we were experiencing was inside (we were imagining it), or outside (had its own existence independent of us)? That was the burning big question for both us — and for Bob as well.

Eventually we gained enough mental control and facility in working with altered states that Bob thought that we were ready to begin collecting some evidence to determine the operational significance of what we were experiencing in NPMR. Dennis and I were excited about the possibilities, and willing to accept the facts however they came out. We had been eager to objectively test the operational significance of our subjective experiences for some time. Bob had wanted us to wait until he thought we were ready.

Neither of us was particularly optimistic or pessimistic — we wanted to know the truth.

We were in the discovery mode and open to all possibilities. As long as our methodology was sound, we were confident that eventually enough results would accumulate to tell their own story.

One of our first experiments was for Dennis and me to take a trip (experience) in the nonphysical together. Our independent descriptions of what we were experiencing should correlate closely if the experience were real and independent of either of us. From the beginning of our training, we had learned to give real-time descriptions of whatever we experienced. A microphone was suspended from the ceiling above each of our heads. What we said was recorded on tape. Dennis and I could not hear each other because we were in separate soundproof chambers.

Dennis and I quickly achieved the appropriate altered state, left our bodies, and met in the nonphysical as planned. It was a long adventure. We went places, saw things, had conversations with each other and with several nonphysical beings we happened to run into along the way.

Bob had let us go a long time before he ended the session and called us back. We pulled off our EEG and GSR electrodes and stumbled out of the darkness into the hallway of the lab.

In the control room, Bob was waiting for us. After a quick exchange, we knew that this would be a good test because we both had experienced many specific interactions. But were they the same interactions? Bob looked at us deadpan. “So, you two think you were together?” he asked, trying to sound disappointed. We looked at each other and shrugged our shoulders.

“Maybe,” Dennis said tentatively, “at least we perceived meeting each other.”

“Listen to this!” Bob said emphatically. The tapes, rewound as we disconnected electrodes and climbed out of our chambers, began to roll forward. We sat down and listened. The correlation was astonishing. For almost two hours we sat there with our mouths open, hooting and exclaiming, filling in the details for each other. Bob was now grinning, “Now that tells you something, doesn't it?” he exclaimed beaming. He was every bit as excited as we were.

I was dumbfounded. There was only one good explanation: THIS

STUFF WAS REAL! My mind searched for some other more rational explanation. “Perhaps only one of us imagined the trip and the other was reading his thoughts telepathically,” I said trying to cover all the possibilities. That was almost as far out as the first explanation, but not quite.

The undeniable fact was: We had seen the same visuals, heard the same telepathic conversations, and experienced the same clarity. “This stuff might actually be real,” I said aloud to no one in particular. Dennis and I sat there wide-eyed, incredulous, and at a loss to explain it any other way.

I said those same six words: “This stuff might actually be real,” over and over to myself fifty times during the next few days. I could not believe it, but I had to. I was there. This was my own experience. I was not reading this in a book about somebody else. In the vernacular of the times, I was blown away. You cannot understand the impact something such as this has until it happens to you. One more data point was in. My reality was about to get broader and stranger.

We repeated that experiment with similar results. It wasn't a phenomenon that depended on the two of us. Nancy Lea and I shared equally astonishing joint experiences. We tried other things as well. We read three and four digit numbers written on a blackboard next to the control room. Somebody would write a random number and we would read it while our bodies lay asleep.

Then they would erase it and write another one, and so on and on. We went places — to people's homes — and saw what they were doing, then called them or talked to them the next day to check it out. We traveled into the future and into the past. We tried to heal people's illnesses with our minds and intent because that was a good technique for interacting evidentially with the energy of others.

We designed, generated, and tested intent focusing tools for our use in the nonphysical. We diagnosed illnesses in people we never met, but that somebody else knew well. The evidence poured in. Now there were hundreds of data points; later evidentiary experiences tended to be more clear and often more dramatic, than the initial ones. We began to discern subtleties of the altered states where things worked well and where things did not work well. We refined our processes and improved our efficiency slowly during the next three years — it was a painstaking trial and error process.

Dennis and I were the same demanding and skeptical scientists that had started this adventure, but we had stopped asking if it was real. We now knew the answer. We also realized that one has to experience it oneself to get to that point. Nobody else can convince you. You simply must experience it yourself. All the data in the world, regardless of how carefully taken, become suspect if you are not there to participate and know the truth of the matter first-hand. Old beliefs must be shattered before you can begin to imagine a bigger picture. Until the inescapable logic of unambiguous first-hand experience hits you squarely between the eyes, the truth does not sink in deeply. That is the way I was, and so is most everybody else.

I suppose by now, Dennis and I were certifiably strange. We were strange because of what we knew to be true by our carefully evaluated experience. We could not deny what we had seen, heard, and measured — even if it was incredibly strange. We knew how careful, skeptical, and demanding we were. We knew how high our standards of evidence were. We also knew that nobody else could possibly understand unless they experienced these truths for themselves. Once you find true knowledge, ignorance is no longer an option — and if the knowledge you find is unusual, then strange becomes a way of life.

Our activity was not entirely internal. For example, Dennis and I were encouraged to volunteer for some remote viewing experiments at a well-known sleep & dream lab. The object was, under controlled conditions, to describe pictures being displayed in another room. As it turned out, being able to describe all the pictures correctly was not the most remarkable thing that happened.

When the EEG scrolls were returned from Duke University (where they had been sent for more detailed analysis) a higher level of strangeness was evidenced. We were told that Dennis's EEG results produced the highest levels of alpha-waves ever recorded at Duke. Mine exhibited strong simultaneous levels of alpha and theta unlike anything they had ever seen before. Both were singular events previously unseen by the Duke researchers because of the narrowness of the peaks. This was particularly meaningful because during the 60s and 70s, Duke University was recognized worldwide as the leader in parapsychological research.

Our brainwaves were, it seemed, tightly focused to specific, nearly single frequencies. We were not particularly surprised by the tight focusing, but duly noted with interest that out of thousands and thousands of EEG analysis results, ours stood out as blatantly unique (“Your data blew them away at Duke,” we were told by the researcher). We had for some time felt that what we were learning and developing was uniquely effective at producing specific altered states, but now we had corroborating evidence — an independent lab at Duke had substantiated a physical manifestation of this uniqueness.

Once the mental door of indisputable fact is pried open, the light begins to flood through. The old questions returned with new meaning. Now my reality, my picture, was bigger than I could have previously imagined.

Nevertheless, I continually wondered if there were other subjective experiences that could produce consistent objective measurable results. Where were the boundaries — how much more reality was out there that I had missed? Could there be other operational states of consciousness hiding in the darkness of my ignorance?

I was driven to understand how everything was related, how it all worked together. Surely, there was some sort of science at the root. We had lots of data, but no selfconsistent model to explain the how's and why's of it all — to define the interactions. How did reality function? What were the processes, the limits, and the rules? Is this the way it is, or only the way it seems? What did the Big Picture look like — where all the data are consistent and makes sense? How could any self-respecting physicist not ask these questions?

Bob, Dennis, and I would discuss it down at the house after the work at the lab was done. We informally came up with some “the way things were” and “the way things seemed to be” statements, but they lacked deeper understanding. We surveyed the existing models — mostly a mishmash of emotion laden, belief focused, unscientific balderdash with little or no hard evidence that was reproducible. That was not what we were looking for. This was a scientific inquiry, not a new-age gathering of the faithful.

Finally, we ran across a candidate model — a place to start. Though imperfect, it was more or less rational, consistent, and coherent most of the time — that made it much better than the rest. Its explanations and descriptions were not complete, nor necessarily a place to end up, but it did provide a theoretical basis from which to tentatively and skeptically begin. This model came to us in the form of Seth Speaks, by Jane Roberts. That the material was channeled was not a problem for us. By then, we were all personally familiar with the nonphysical and its host of sentient beings. In fact, it was a plus. Would you ask a fish about mountain hiking trails? No, not if you expected an accurate or useful answer.

We began to spend much of our training time at the lab testing and interpreting Seth's concepts, and procuring information from our own nonphysical sources. We worked on these issues for several years, slowly gaining ground. It was sometimes confusing, sometimes clarifying, but always interesting and always evidence was required.

I worked harder at these particular models of reality issues than the others. I was the theoretician of the group (what you might expect from a physicist), Dennis was more into applications (what you might expect from an engineer). Bob was a practical man focused primarily on whatever worked and upon gaining and maintaining objective credibility. Bill Yost contributed his engineering insights, management skills, encouragement, and support. Nancy Lea did much of the daily support work, and became a full partner in our explorations of nonphysical reality (as had her sister, Penny Honeycutt, a few years before). It was a good team.

We were all aided and abetted all along the way by our families (who for the most part participated in our research from time to time) and many unmentioned others. The research flowed in whichever direction seemed most productive at the time. Bob did not direct as much as he facilitated.

Having perfected the wise and knowing smile of all good teachers who know how to let their students figure it out for themselves, he managed to float above the day to day effort and let our individual research take us wherever it would.

# If This is Tuesday, I Must Be in Physical Matter Reality

Meanwhile, back at the lab, Dennis and I were putting in about fifteen to twenty hours a week. After I would get home from the lab, often at two or three in the morning, I would lie in bed practicing what I had learned or continuing that evening's experiments. After two or three hours of sleep, I would get up and go to work. The evenings I didn't go out to the lab, I would continue experimenting after everyone else fell asleep until a few hours before getting up and going to work. I was putting in forty-five hours a week studying altered states and the larger reality while simultaneously putting in fifty hours a week at my day job and raising a family.

My son Eric was about five years old at the time. Like most kids that age, he had frequent spontaneous out-of-body-experiences (OOBE). We would go out of body together — I would go by and join him — we would have a blast. One time we were exploring the oceans together when a huge whale approached us. As our bodies slipped easily through the whale, Eric's head for some reason bumped against each of its ribs, one after the next. It frightened him a little; typically we did not interact with our surroundings.

We came back immediately.

Eric usually had total and clear recall of our nightly adventures. We would often discuss them in the morning — it was great fun for both of us. Exploring the larger reality turned out to be an excellent father and son activity, though perhaps somewhat unusual. Do not misunderstand me. I was not warping Eric's tender perspective, or jerking him out-of-body. At about five years of age, most children naturally and spontaneously have lots of OOBEs. I was merely joining him so that we could go together. It was comforting and reassuring to Eric to have me along — he was going with or without me, I was able to structure the experiences to be both fun and educational (such as exploring the oceans).

Instead of denying and discarding his experiences as foolish dreams (typical parental reaction), I was shaping and sharing them with him. He thought it was cool and looked forward to our outings. Eventually he was no longer a natural, and our forays into the wilds of nonphysical matter reality (NPMR) ended as easily and naturally as they had begun. He, by the way, now has an advanced degree in aeronautical engineering and to this day clearly remembers bumping his head on those whalebones.

have always been a sleepy head — nine to ten hours a night is about right for me. Yet

by spending so much time in altered states where my body was deeply relaxed, if not officially asleep, I got by on two or three hours of sleep per night — night after night after night — year after year.

At work, I was exceptionally productive, but becoming stranger. I was spending almost as much time in NPMR as I was in physical-matter reality (PMR), and it showed. I soon earned a reputation for being an absent minded professor. PMR and NPMR seemed to blend into a continuum and I found I could live in both realities simultaneously; it was no longer a matter of leaving one and going to the other. Now, it was merely a matter of shifting and splitting my focus — I lived and was continuously aware, sentient, and conscious (except when sleeping) in both reality systems simultaneously and permanently.

At first, I could only sequentially (albeit quickly) switch between them. Then I learned to engage mentally in NPMR on one thing while carrying on a conversation and driving a car (or motorcycle) at the same time.

Most of the time there was no confusion between reality frames, but now and then, for a few seconds, until I forced myself to differentiate between them and get my bearings. I was occasionally not sure which reality I was in. Both were equally real, they were just different and had different functions. I began to marvel at the mind's capacity for parallel processing.

For one relatively short (about six months) period, I was spending more time in NPMR than in PMR. I was a space cadet and obviously needed a keeper. Luckily, being a physicist, and maintaining high professional productivity, I could get by with being eccentric. Nevertheless, I soon realized that I needed to regain a better balance. With a little experimenting, the optimum balance was obtained. I remained eccentric, but didn't need a full-time keeper to remind me of what was coming next in PMR.

With the two realities so completely inter-mixed, I began to notice connections between the two. One spring day while walking back to the office after lunch, I noticed that golden-white foam was draped over the trees in a nearby park. A quick reality check indicated I was solidly focused in PMR.

“Wow,” I exclaimed with mild surprise, “that is really pretty, but what is that stuff?” By now I was so used to being amazed by the larger reality that what was normally strange had become strangely normal. I studied the white foam; it had the texture of cotton candy. It connected all the trees into one large luminescent mass. It reminded me of a grove of cypress trees along the Gulf coast loaded with glowing Spanish moss.

thought it was very interesting but had no idea what it was.

I wondered if other people could see it. I made an effort to be obviously looking at something. A few passersby turned their heads to see what I was looking at and then went on about their business without any noticeable reaction. I knew that they must not have seen what I saw because what I was looking at was not ho-hum in the least. It was massive and beautiful. If others could see it, there should have been a crowd forming.

I went back to work, and looked out of my third-story window to see if the lightfoam was still there. It was. I closed the door to my office and began to study the phenomenon I was experiencing. I discovered that I could make it disappear and reappear by adjusting the state of my consciousness. Within a few days, I noticed that everything living had this fuzzy light around it and that there were strands of this nonphysical cotton candy connecting everything to everything. What about inorganic matter, I wondered. I moved my attention to buildings, telephone poles and powerlines.

To my astonishment, there was a smaller more uniform close-cut off-white light around everything! The light around the power-lines was in motion and bushier than what was around the poles. I was incredulous and I looked repeatedly to make sure. I shook my head, then closed my eyes and opened them again. What I saw remained the same. I had hypothesized this odd light as some representation of life energy. Buildings, telephone poles, and wires with life energy? I knew I had to throw that idea out. The light around the wires danced. I immediately wondered what I would see around an electrical appliance.

Would inside things have an aura too, or was it related to sunlight? I looked at the clock on my wall. It not only had light around it, but the light was highly structured and in steady motion. I looked at my programmable calculator and saw a finely structured complex pattern. I turned it on and set it to work — the patterns changed and scintillated as it worked. Now I was amazed all over again. What was I looking at?

Within a few days I noticed that people had auras around them that changed and scintillated as their owners talked to me about important things in their lives. A movie theater not only contained ordinary people, but also rows of swirling colored forms. I could turn all of it, or any of it, on or off by shifting the state of my consciousness. Years later, I would only need to shift my intent.

The connections linking living things became visually obvious.

could literally see that everything was connected. Even inanimate things such as clocks

and computers had their complex moving nonphysical energy pattern.

This same experience did not happen to Dennis. Perhaps he did not immerse himself in the exploration of NPMR and its theory to the extent that I did. I was extreme in my dedication to the effort. We often grew in different ways at different times and had usually, eventually, ended up with similar experiences.

We were in this thing together and I had discussed my experiences — seeing energy forms — with Dennis as they happened.

One day he brought me a group photograph of five people and dropped it on my desk.

“These are all Soviets,” he said, “one of them is supposed to be leading research in psychic activity in the Soviet Union. Which one is the psychic?”

I had never looked at pictures in this way before, but with focused intent, their auras blossomed up exactly as they did with flesh and blood people. That was fascinating!” I thought. Conscious intent is everything — space and time are not fundamental. Wow!

“Which one is the psychic?” Dennis asked again.

I looked back at the picture, sure enough, one had a much more developed energy body — particularly around and above his head — than the others. “This one is different from the others,” I said pointing to one of the men in the picture. “I am not sure what the difference means yet,” I cautioned, “but this one is definitely different from the others.”

Clairvoyance was still a new experience and I did not know the significance of much of what I saw. At this point, I was more into formulating basic connections and had not thought about auras having unique meaning.

Dennis looked at me and grinned. “That's the one,” he said with enthusiasm.

I was surprised. Dennis knew the answer — this was a test! I didn't mind; actually, I was pleased, another data-point was in and I had learned something valuable and amazing about time and space being a subset of a larger reality, “I have so much to learn,” I thought to myself, suddenly overwhelmed by the unfathomable depth and complexity of reality, Dennis went back to his office. I took a deep breath and wondered what would happen next, where was all this going, what else was out there waiting to be discovered? I felt small, humbled by the enormity of my ignorance. It was

clear that I had barely begun to scratch the surface of something so immense and fundamental that I could barely imagine it.

At the same time, I was excited by the possibilities and determined to discover whatever I could about the nature of reality. I am a physicist and science and discovery are my passions — I was born wanting to know why and how. After twenty-two years of continuous education, I realized that I had studied only one small subset of the natural world. I was young, my learning seemed to be accelerating, and reality was far cooler, more complex, and more interesting than I could have ever imagined. To someone like me, it doesn't get any better than this — I was energized to discover any truth that would yield to my experimentation.

# End of an Era

Back at the lab during the middle to late 70s, running the seminars dominated everything. We were overwhelmed with demand. People from all over were clamoring to experience Bob Monroe's tapes — and all from word of mouth. Bob saw an economic opportunity on the horizon. He was a businessman, and this business (supporting the lab facility) had been a constant financial drain. Perhaps, he thought, he could get two birds with one stone. He eventually succeeded, but basic research was the first casualty for a few years.

Eventually he was able to add the basic research back at a much greater level than it had been before, as well as provide a life changing and enriching experience for thousands of people. But all that took time, and the era of Bob, Dennis and Tom working until the wee hours of the morning, trying to make science out of the strangeness they discovered, was gone. Its time was rightfully over, fate had been extraordinarily kind, and we ended on a long sweet high note. We were each ready to broaden the scope of our efforts in our own way. It was time for us to soar, coast, or crash on our own.

In the end, Bob was proved right, as usual. He captained his ship flawlessly from the initial tentative launch, through the tricky undercurrents of close-minded rejection by the larger society, while at the same time skillfully avoiding the shallows of easy, safe, generally acceptable answers. With Bob at the helm, high standards of proof drove off pirate charlatans who wanted to co-opt his success and commandeer his hard won credibility. Through dedication to honest science, personal integrity, and an intuitive knowing that was steady and reliable, Bob optimized his gifts for the greater good.

I do not wish to leave the impression that Bob, Dennis and I were the only explorers at Whistlefield Research Laboratories during the early seventies; there were others as well who made important contributions to Monroe's overall effort. A few became regulars making extended connections of various durations, while others were merely passing through trading knowledge like bees pollinating wild flowers. Nancy Lea had joined the research effort with Dennis and me after her graduation from college and soon became an integral part of the team, collecting evidence, testing concepts, participating in singular as well as joint explorations — even soldering wires on occasion. She began to carry more and more of the workload as Dennis and I reached and passed our limits of available time.

Eventually Dennis and I needed to go home to our families. Nancy Lea took over the seminar operations and after a few years of successfully building and managing the business, she became the director of The Monroe Institute of Applied Sciences. The truer picture is that the overall effort at Whistlefield was a joint one. It was a busy place with a lot going on and many talented, interesting, and dedicated players.

The end of any era must necessarily share time's stage with the beginning of a new era. With the demands of the activities at Whistlefield winding down, I had more time to integrate and assimilate the continual whirlwind of extraordinary experiences that I had encountered. The nature of reality, a Big Picture that brought coherency to the wealth of collected data, began to take form in my mind. Any model or theory had to consistently account for, and accurately contain, the entirety of my experience — the roots of which ran deeper than I had previously imagined.

I have often told people who were inquiring about the possibility of learning what I have learned that if a bone-headed physicist like me could do it, anybody could. I would point out that I began from a cold start with no particular natural talent and learned everything from scratch the hard way. If I could, they could — and probably with less trouble.

I do not want to leave anyone with the impression that spiritual growth (improving the quality and thus decreasing the entropy of your consciousness) is like working in a salt mine. Besides being useful, spiritual growth is also thrilling, interesting, rewarding, fun, and joyful. Once begun, it is so exciting an adventure that you will gladly want to put more of your time and energy toward it. It is also practical. Increasing the quality of your consciousness immediately increases the quality of your life.

# A Guide to Meditation & Meditation Technique

True enough, in matters of evolution there is no free lunch.

Nevertheless, contemplating and evaluating the ideas of others can be an immensely helpful aid to your progress, and to your effort to grow the quality of your consciousness. You do not need to figure everything out for yourself.

The advice of others can be like having a map to guide your explorations. An incorrect map can send you off on a wild goose chase. You must evaluate the correctness of the map as you go — because, before you go, you can only guess and assume your way through a shallow evaluation of any map. A useful map must necessarily be somewhat general, whereas each journey must be individual and personal.

Before going on to the wholly new concepts of the next chapter, let's first pull together what we have learned about the origins and consequences of belief and the requirements of personal growth so that those who are so inclined can get started on developing the experience base you will need to construct your personal Big TOE or, at least, evaluate this one.

In the preceding chapter we determined that you must do your own exploring and grow your own wisdom. You cannot progress by letting others do the work. To believe what someone else (including me) tells you (to become a believer) is lazy, risky, and amounts to accepting someone else's belief or knowledge in place of your knowledge. Copying the behavior or beliefs of others, or reciting or memorizing their knowledge, cannot produce significant spiritual or personal growth for you. Although some guidance by a fellow explorer may help you better understand your challenges and choices, discovering Big Truth and increasing the quality of your consciousness is fundamentally an independent individual effort. Talking about it all day and all night with the greatest of gurus won't produce one iota of real progress.

Your lasting progress must be the result of your personal effort.

Personal growth is most efficiently and effectively the product of good science. This is subjective science or personal science, not to be confused with either organized or personal religion or objective science.

Subjective science is the mother of objective science. Real personal science requires real, verifiable, measurable, objective results. Here, the word “results,”

at the most basic level, refers to significant, continuing verifiable progress toward the

improvement of the quality of your conscious being, the evolution of mind, the growing-up and maturing of spirit. Why? Because that is the nature of the reality we live in. You will see that the physical nature as well as the spiritual nature of our reality is straightforwardly derived from the natural process of consciousness evolution. By the end of the next two sections, science will have logically derived the origins, nature, purpose, and mechanics of both spirituality (increasing consciousness quality through evolution) and your physical world.

You will eventually discover that our reality is fundamentally nonphysical (from a PMR perspective) and is animated and driven by profitability toward states of lower entropy. If your efforts do not produce measurable, significant growth, your personal science is only illusory. The knowledge gained through personal science continually and dramatically modifies itself as it grows and changes. On the other hand, cultural, personal, religious, or scientific belief systems require only a sincere belief in the assumed truth of their associated dogma, doctrine, and creed.

A belief system requires faith in the correctness of its beliefs. Because correctness is simply assumed, actual results are not required (correctness cannot be objectively demonstrated — that is the nature of belief). Mature and stable belief systems, including those generated by cultural, scientific and religious belief, once in place, do not tend to change. There is a logical disincentive to modify significantly what is, by definition, assumed to be complete and perfect. In contrast, the knowledge gained from mature personal scientific experience is always in continual flux.

Open minded skepticism and continual scientific exploration for new data make sure of that. The search for truth is, by its nature, in a constant state of discovery, refinement, assessment, and reassessment because new data continue to pour in as long as the individual is aware and interested in growth.

Honest truth seekers never become know-it-alls — there is always room to improve yourself as well as your knowledge. When you know it all, when you believe that you have all the answers, you have, in fact, lost it all — nothing remains but a hollow shell.

You do not need any particular belief, disbelief, or faith to motivate you to start on this journey. You need only to grasp the possibility of a greater reality of some sort. After that, the desire to discover the truth should be motivation enough. Additionally, if this just-perhaps-possible larger reality is also potentially very important and significant to your life and being, nothing should hold you back from expending the necessary energy to explore the truth of the matter for yourself.

You can and should learn from others to the greatest extent possible, but you must grow yourself. Learning from those who have gone before can speed your progress; however, choosing those that you think you can best learn from is an iterative process that must constantly be reevaluated in light of your experience and your results. Those who can be most helpful, at any given time of your life, will change as you and your situation changes.

Do not get stuck in patterns, habits, or rituals. Do not look to groups or organizations to tell you what to do. Do not fall into belief traps. Have confidence in yourself. You not only can do it yourself, but you must do it yourself eventually, quickly or slowly, easily or with great struggle. We are all constantly evolving our consciousness. Evolution forces choice and change. Remaining the same by choosing the no action option is not possible.

Change cannot be avoided. Change can take place as either positive growth or negative deterioration; the individual choices you make ultimately determine the direction (positive or negative) of your growth.

A good teacher provides encouragement, makes the learning experience more intense and more concentrated, and gives the student an opportunity to learn more quickly. Unfortunately, the more you need a good teacher, the less likely you are to be able to tell a good one from a bad one.

A good teacher focuses your effort to speed up your progress; a bad one misdirects your efforts and inhibits progress. Always stay skeptical, open minded and belief free, and most of all, taste that pudding — continue to require and evaluate actual measurable results. If six months go by with no obvious measurable results, this indicates that you need to buckle down and get serious, or change your approach.

Results, results, results, results.

Actual, clear, unsubtle, measurable results — that is how you must evaluate the efficacy of your process. Intellectual knowledge and intellectual results are not the results I am referring to. These are no substitute for the real results of a growing, changing being. Knowing about it can be interesting and helpful, but it should never be confused with being it.

A change in the quality of your being, growth in the quality of your consciousness, evolution of your spirit: these are the results I am talking about — results of the being, not results of the intellect. It is about who you are, not what you know. It is about why you do what you do, not what you say, or what you do. When you start intending, doing, and being differently, you will produce measurable results. The tests you must pass are not written ones. Great factual knowledge cannot help you pass a test of the quality of your being. You are who and what you are — and it shows — no matter how good you might be at controlling your behavior with your intellect.

Truth is absolute, but how to discover it, and express it within your being, must be personal. Develop your tentative road map by applying open minded skepticism to the experience and conjecture (theory) of others. Then modify that map as you collect your data.

This makes good sense, and offers you the possibility of leveraging the accumulated knowledge and wisdom of others as you define your unique growth path. Adopting a set of beliefs is a comparatively unproductive and risky approach to the evolution of your being and the quality of your consciousness.

How do you go about increasing the quality of your consciousness? How do you purposely pursue the evolution of your spirit? If dogma, ritual, and intellectual or emotional group-gropes are out, how do you get from here to there on your own?

For the scientists who are wondering what consciousness and all this blather about spirituality has to do with physics, let me assure you that I have not lost my focus and that this discussion is directly on the path to a scientifically legitimate, more general theory of physics. However, we are now, and will be for some time, developing the necessary basic concepts required to construct this Big TOE. Because this is a Big TOE and not a little TOE, a larger perspective supported by several wholly new paradigms must be developed. This process may appear, from time to time, to wander through irrelevant, ridiculous, or far out ideological territory but if you can maintain open minded skepticism through the end of Section 6, you will eventually understand these unusual connections and their significance to science.

Because this is science and not theology, let me digress in the following aside on the process of getting from here (wherever you happen to be) to there (an increased quality of consciousness). The journey to higher quality consciousness is more simple and straightforward than you might think.

I cannot promise easy and quick, but I can promise easyto-do techniques and exercises that are simple and effective. For some it will be as easy as learning to swim, for others progress may come slowly; nevertheless, all dedicated and courageous explorers can succeed superbly if their desire to do so is sufficient.

Because improving the quality of your consciousness (spiritual growth) is not, and cannot be, an intellectual achievement, it makes little difference how you intellectually approach the initiation of such improvements. How you start or what you do to improve the quality of your consciousness is insignificant compared to the act of starting.

Additionally, an improvement in the quality of your being does not automatically flow from any external activity or practice. All you need is the will and the insuppressible drive (energy) to grow your being and the path, the process, to do so will appear before you. You are surrounded by opportunity to grow; your optimal path starts from wherever you are. I am talking about changing your being, intent, motivation, and attitude; modifying the quality of your interactions with others — changes in behavior and action (what you do) are secondary (results, not causes) and will follow on their own. Primary changes, when significant, are clear, obvious, and measurable to you and to others.

The evolution of consciousness is an extremely difficult concept for the Western mind to grasp because we are exclusively focused on the materially productive fact that right results are the products of right action. Westerners want to know what action they should take to get the results they want. Because they deal almost exclusively with external actions designed to produce external results they do not appreciate that internal results follow a different logic. What you are presently doing, how you live your life from day to day, is probably good enough as it is — what you need to change or improve is why you are doing it. When the “why” — the motivation and intent of what you do — is right, the “what” will take care of itself. Improving the “why” can start anywhere any time because it requires modifying internal variables, not external variables; nothing must change but you.

You can hope and pray for someone else to provide you with enlightenment (trust me, that won't happen), or you can take the steps to develop and grow it. Do not expect to find shortcuts through the flypaper realms of religious, scientific, or personal dogma, or along the midway of a New Age carnival. You must keep your mind free to change and grow.

The right question is: How has the fundamental quality of your being changed.

The answer to that question defines the metric of your progress.

Self-proclaimed success means nothing; progress must be demonstrated by clear and obvious results.

The answer to how the fundamental quality of your being has changed is either totally obvious to everyone (including yourself), or not much progress has been accumulated. Genuine results are not subtle. You and most other people, given enough time with an individual, have the capability to tell the difference between a wise and loving being and one that is only trying to appear that way. This is not rocket science; it is not difficult to determine if you are making real progress. A significant change in your capacity to love is as subtle as the healing of a badly broken leg — nobody, including you, could miss noticing the change.

Are you like a deer caught in the headlights of an oncoming car — frozen, unable to take the first step?

Because of our cultural belief that we must do something in PMR in order to affect change (even if that change is within our consciousness), most people are effectively paralyzed and cannot take that first step. “What should I do?

Where should I start?” they ask, looking for a prescription or set of clearly directed “how to” steps. Improving the quality of your consciousness, energizing spiritual growth, and gaining a Big Picture perspective are not accomplished by changing what you do, but by changing what you are. Reread the previous sentence at least twice and think about your need for a physical process to develop your consciousness. You are a product of your culture — you cannot help that.

Spiritual growth, improving the quality of your consciousness, is about changing your attitude, expanding your awareness, outgrowing your fears, reducing your ego, and improving your capacity to love.

To succeed, you must change your intent, and modify your motivation. The problem (and the solution) is one of being, not one of doing. You can do everything by the book, meditate regularly, be conscientious, try very hard, go through the proper prescribed motions and still make little progress. Going through the motions does nothing if the mind is not open to, and in pursuit of, fundamental internal change.

The prospect of fundamental internal change can be very frightening. When change begins to occur, many people run away because they are terrified of the unknown. They are afraid of where the changes may lead (which is often directly into the face of their fear) and of not being able to intellectually control the process. They find that shaking the foundation of their being at its deepest level is too unsettling an activity.

What if the entire I-structure comes tumbling down into ruins? The ego begins to fear its own dissolution and death.

Fear and belief cause many well-meaning people to reject fundamental internal change, particularly if their beliefs are incompatible with the required changes. Instead of embracing change and facing fears, many would-be spiritual seekers focus on the external rituals associated with some type of mental or spiritual discipline: They go to church or learn to meditate. Many meditators and a few church goers hope to produce measurable external changes and to have cool internal metaphysical experiences.

In the West, meditation is acultural and an individual, rather than a social, activity. Most church goers continue their attendance out of social convenience, habit, duty, or cultural expectation — whereas most meditators eventually decide that meditation does not do anything for them, or at least not enough to be worth the effort and time required for a long-term commitment. A few of each group pretend their effort has made them superior. The more honest and objective of the failed meditators give up in frustration or due to a simple lack of interest and soon forget about it. “I tried spiritual exercises, and they didn't work for me.”

Practicing some form of meditation to effect external change, gain paranormal abilities, placate the guilt of doing nothing, or simply because you think you should, is analogous to a carpenter trying to build cabinets while holding the screwdriver and hammer by the wrong ends. All the pieces are there, but the execution is flawed. Make the required internal changes and the measurable external changes will occur on their own.

You have to grab the screwdriver and hammer by the wooden end or you will come to the erroneous conclusion that they are useless tools that only someone else can effectively use. Or, more arrogantly, that nobody could use such stupid tools, that cabinets are a logical impossibility, and that all carpenters are delusional frauds and fools.

You must realize that you cannot modify being merely by taking physical action within the local physical reality.

Westerners have a particularly difficult time understanding this fact and often feel helpless without a way to compel results from the outside. The opportunity to bolt to personal success and freedom by employing a more complete knowledge is lost in a culturally conditioned false commitment to the little picture.

Belief traps are bigger problems than most of us think they are.

I know, after all that, you still want to know what you should do, how you can best modify your being, and what the most effective techniques are. Let me guess, you feel that you could use a hint — a little help, a little direction to get started. All right, all right, I give up! To help you get started here are some things you can do that may lead to opportunities to grow your being; however, it is entirely up to you to recognize, seize, and develop the opportunities that come your way. You already have plenty of opportunities, but let's pretend that by doing what I am going to tell you, more obvious and easier opportunities will appear before you. That will get us started with a hopeful, positive attitude.

What is more likely to happen is that by conscientiously working at the following exercises, your perspective will change, enabling you to see opportunities that are now as invisible to you as water is to a fish that lives two miles down in the middle of a four mile deep ocean. With no light and only a dim awareness, the fish knows nothing of water.

Water just is, has always been, and is taken for granted. The fish does not ponder the nature of water, it swims in it. We swim in an ocean of consciousness. We are not aware of the ocean, but only of our local interactions with it.

The first and most necessary ingredient is a sincere desire to grow the quality of your consciousness — to evolve your being — to permanently change yourself at a deeply personal level.

The second most necessary ingredient is to have the courage to change — the courage to face your fears — to face death and personal destruction, for that is the story your ego will tell (and try to get you to believe) when it comes whining to you with its tail between its legs hoping to dissuade you from increasing the quality of your consciousness.

Why would your sweet little ego do a mean thing like that? Because the ego's main job is to keep you feeling good by managing various systems of belief that are designed to keep your fears beyond the reach of your intellectual awareness. Increasing the quality of your consciousness requires you to face your fears, overcome them, and dissolve your ego. You should expect the ego to struggle mightily.

Ego does not necessarily imply arrogant self-centeredness. Ego comes in an infinite array of expressions — arrogance is only one. Being timid, unsure, or a worrier are also manifestations of ego. Insecurity and anxiety about that insecurity are common. How each personality expresses that insecurity and anxiety reflects individual quality and style. The strategies that are used to deal with fear, though common at the top level, are uniquely applied to each individual. Great ego reflects great fear; it does not necessarily reflect great arrogance or great pride, though it may reflect both. Self-centered, selffocused, and self-absorbed are three of the many possible aspects of ego — each of these three can be directed either inwardly (producing timidity) or outwardly (producing arrogance) to create personality traits that appear to be opposite.

Courage and determination will grow sufficiently to overcome fear if the intent to succeed is sufficiently strong, steady, and clear.

I will more carefully define ego and explain its functions (how it works and achieves its goals) in an aside in Chapter 8, Book 2. Go there now if you are seriously confused.

The most obvious pathway to the exploration of consciousness is through the exploration of your personal consciousness — a scientific investigation of your subjective experience. Studying consciousness from the outside (objectively) is like studying biology by looking at pictures of zoo animals. Consciousness is fundamentally individual and personal. Our objective sense of consciousness is derived from the reflection of our personal consciousness from the uniquely curvy surface of a mirror that we call “another.”

Our objective experience of other consciousness is the result of an interaction of our personal consciousness (representing one set of possible choices or ways of being) with another, which suggests to us new configurations, interactions, and possibilities for our being. We project our awareness of consciousness into “other,” define the nature of “other” in terms of ourselves, and thus see only a reflection of ourselves in the mirror of interaction with “other.”

To preserve the symmetry of interaction, we also serve as a uniquely shaped mirror in which others can see themselves reflected in challenging new ways. Within this funhouse hall of interactive mirrors, your consciousness is a singular actor. Opportunities for change arise, choices are made, reality is actualized, and progress or regression in terms of personal growth is achieved. Your conscious awareness defines your personal reality. There are as many different shades and levels of personal reality as there are of personal awareness. “Other” provides opportunity for the improvement of the quality of your consciousness by accurately reflecting the truth of you.

If improved consciousness quality along with personal effectiveness, growth, and power are your goals, approaching consciousness from the inside, from the scientific exploration of inner space, is the only logical approach that delivers results. An approach from the outside will limit you to collecting the facts about the shadow that consciousness projects upon the wall of PMR.

We project our personal consciousness onto the field of action of a multi-player interactive reality game whose point is our individual growth and learning. The experience of consciousness, as well as the evolution of consciousness through choice, is entirely personal. However, an awareness of a larger (source) consciousness and an understanding of its properties are accessible through scientifically probing and objectively assessing the value and operational characteristics of the subjective experience of personal consciousness.

One method of accomplishing an assessment of subjective inner space is through meditation. Learning to meditate is like learning to play a musical instrument: It takes a serious steady effort before you should expect to make music instead of screeching noises. It takes dedication over a much longer time before you can master the basics of the instrument and play it well. Unfortunately, most people who pick up an instrument and give it a try give up before they ever learn to play it well. So it is with meditation.

As mentioned previously, going through the motions, or in this analogy, pretending to play an instrument, regardless of how perfect or impressive the visual (external) display produces no significant results.

There are many effective paths to personal growth — meditation is only one. Within the wide range of practices that circumscribe what we have loosely defined as meditation, there are many different types, approaches, and methods. Because it is the easiest, most effective, and universally applicable, a simple mental-awareness meditation is the path of choice for most teachers and students who have no dogma to propagate. Within this subset of meditation, there are many differing techniques. The technique you choose is not as important as the application of steady effort — so choose a technique that suits you. Within this genre of meditation, you do not actually have to learn how to meditate; you need only to learn how to stop blocking the meditation state from occurring naturally.

Though we are pursuing the dubious subject of what you can do in order to undo what you have inadvertently done, I will help you out here because I know your cultural beliefs force you to begin with a physical process. It will be helpful to your doing and undoing if you understand meditation — its purpose and how it works. With this understanding, you can custom design your own personal spiritual growth doing thing — a physical and mental process that may lead you toward a higher quality of being. The doing process cannot get you there by itself, but it can serve as the on-ramp.

The meditation state that I encourage you to achieve represents a condition of inner attentiveness wherein you become aware of your personal consciousness.

This, in time, leads to the awareness that you are a unit of consciousness among many such units. Eventually, you will regain your fundamental identity as a spiritual (nonphysical) entity — as well as understand your relationship, your oneness, with all consciousness. Personal growth is a natural result of meditation.

Becoming aware of your consciousness is analogous to that fish becoming aware of water. The fish is aware only of its interaction with water. It experiences water through doing, through action, through its objective causal interactions with water. Yet water has existence and significance in its own right beyond the interactions of that and other fish. To become aware of water, one must differentiate between water and a subset of the properties of water. The fish is aware only of the latter.

The fish experiences water only in terms of its limited interactions (experience). It experiences variations in current, temperature, salinity, viscosity, and dynamic limitations, but does it actually experience water in a fundamental or broad sense? Is the fish right? Is water nothing more than the sensed variations in its properties? Does water with no variations in its properties cease to exist as water, or does it simply become an invisible background to the fish because the fish can no longer perceive it?

To appreciate your and the fish's limitations, imagine the perfect sensory deprivation tank where your local environment disappears because of zero input to your senses. Granted, this is not a perfect analogy, but you get the idea.

When you are totally immersed in something, such as cultural belief systems for example, that something often becomes invisible because you cannot differentiate it from the background of your local reality — there is no contrast to bring it to the attention of your senses.

Consciousness is like that.

Like the fish, we define our consciousness in terms of our doing — in terms of the physical actions it allows us to take. The major attribute of consciousness can be summed up as awareness, yet we and our fish brethren are aware only of what we can physically do with it, how we interact with a subset of its properties. Moreover, we can only interact with that subset of properties that are contrasted enough against the invisible background of primal consciousness for us to notice. We create a foreground of contrasts, relationships, and variations in the fabric of absolute consciousness that we define as representing ourselves. “See that cute little wad of wrinkles in the fabric of consciousness? That's me!” But you are more than the wrinkles; you are also consciousness, a piece of the whole. Meditation lets us experience the invisible background of consciousness. It lets us notice the water itself, not just variations and contrasts in its local properties relative to an invariant constant.

The point of meditation is to enable you to become aware of your consciousness and thereby introduce you to your larger self. Becoming aware of your consciousness at a fundamental level will eventually lead you to see the real you, the complete you, the whole you, the sacred and the soiled — fears and all. Without the ego to hide the scary parts by inventing an attention-getting “I vs. other” delusional contrast, it is not always a pretty sight.

How does meditation lead you to experience your consciousness? By turning down the contrast, noise, and other activity that makes up the busy foreground — by turning dawn, and eventually turning off, the cacophony of mental interactions, judgments, and operational processes. To become aware of your consciousness as opposed to being aware of the thoughts that inhabit your consciousness) you must eliminate the obsessive preoccupations most of us have with ego based self-definition — the contrasts that you use to define yourself against the relatively unchanging, invisible background of your individual consciousness. Meditation is thus an act of not doing. It is an exercise in removing enough of the contrasting clutter of your mind to get a glimpse of the real you.

Individual consciousness is a subset of absolute consciousness. You are not only the clutter, the wrinkles, the ego, the thoughts — even if that is how you unwittingly define yourself. You are much more than that. Meditation allows you to discover that fact in a uniquely personal way. That is its purpose — self-discovery — a glimpse of the fundamental reality of which you are an integral part.

This discovery is possible for humans because, at least theoretically, our memory capacity and processing capability is somewhat greater (and contains less entropy) than that of the average fish.

The fish will never directly experience or contemplate unvarying water (the fish equivalent to total sensory deprivation), but you can experience the fundamental nature of your consciousness if you truly want to. If your desire to know yourself and to know the truth at the deepest level of your existence is not strong enough to provide the necessary focus, energy, and persistence required to succeed, you are not yet ready to begin that journey. There is no rush and no penalty for not being ready. It is much better to wait until you are ready than to push yourself into a state of self-limiting frustration.

Do you see why meditation is almost universally prescribed as the first step — the doorway to understanding and exploring consciousness, as well as to the attainment of spiritual growth?

It makes sense that a program to develop your consciousness should naturally start with finding and becoming acquainted with that consciousness. There are other methods, but they apply less universally, are more difficult to learn, and are much more difficult to teach. Meditation will work wonderfully when you are ready.

You may first need to work on getting ready by developing an honest desire to grow spiritually and the courage to pursue Big Truth to its conclusion. You may need to first overcome some of the fear and cultural beliefs to which you have become attached.

How does meditation clear out the clutter and reduce the noise level of a mind caught in a self-referential endless loop of obfuscating circular logic? The technique is simple and straightforward — the trappings of ritual, dogma, belief, and physical process are mostly irrelevant. You simply stop the incessant operational, self-referential, contrast producing chatter of the mind by filling the mind up with something less distracting, less self-focused and less obsessively driven. While the mind is preoccupied with nonoperative busy-work, you can experience the still center of your being. Eventually, after much practice, you can let go of the mental busy-work and explore the larger reality of consciousness from an imperturbable, still, and quiet place that will slowly develop and grow larger at the center of your being.

Some traditions call this mental busy-work assignment a “mantra.” Traditionally this is a sound of some sort, but in this Big TOE we are bound only by science, not tradition. We quickly move to toss belief, dogma, and ritual out of the window and focus, by experimental result, only on the active ingredients of mantra. Science allows the concept of mantra to be generalized to accommodate the various ways we take in and process information through our five senses. Typically, people tend to take in most of their experiential input data through their ears (auditory), eyes (visual) or sense of touch (kinesthetic). Many people absorb information more effectively through one of these avenues of data input than they do through the others.

Over the previous decade or so, the popular literature is full of assessments of personality type and characteristics by data input preference. It makes no sense to force everyone dawn the traditional auditory path — some people simply do not get it that way.

If you are not now successfully meditating, and have no idea where or how to find a suitable technique to do so, I will provide to you, free of charge — for this one time only — a mentally calming busy work mantra custom made for your personal mind that is based upon each of the dominant perception types. Simply use the one or combination that seems to work the best for you. For those more heavily into smell and taste than the average humanoid form, I am sure that you can follow the three examples given to custom fit a smelly or yummy mantra to suit your individual preferences.

After explaining each mantra, I will, against my better judgment, tell you what you can do with them. Oh, no, not like that — I wouldn't be that rude! I understand that your Western mind-set needs to begin everything with physical process whether it makes sense or not.

Those who seriously want to get started on their spiritual journey, but find themselves caught in the headlights of physical action-reaction causality, will now have something to do. It may or may not help you improve the quality of your consciousness — that depends on you — but it will give the committed doers a place to start. Often that is what is needed — a place to start — a doable approach to the problem of how to modify the quality of your being. This could be the step you need to break free from the mesmerizing glare of those cultural beliefs that reduce, rather than extend, your vision. Try it: You may surprise yourself with some dramatic results.

For the audio types, we need a sound that means nothing, is two syllables, and ends in a soothing or vibratory sound.

Here are a few examples of proven quality — take your pick or make up one of your own: “sehr-ring”, “daroom”, “ra-zing”, “ca-ouhn”, “sah-roon”, and “sherloom.” For a simple multi-syllable repetitive string (chant), try: “ah-lum-bar-dee-dum — ah-lum-baadeedum.”

When the “bar” and “baa” regularly interchange themselves effortlessly, you will be well on your way.

These are sounds, not words — it is important that they carry no intellectual meaning. The point of this exercise is to quiet your operative intellect so that you can experience consciousness directly by reducing the variations, comparisons, and contrasts that your egointellect imposes upon consciousness.

Feel free to mix and match — put any of the first syllables in front of any of the second syllables to produce no fewer than thirty-six unique mantras. For most people, it won't make much difference which sound is used, but if one sound feels more natural than the others, use it. Obsessive-compulsive types should take care not to get wrapped around the axle trying to find the best one — any will do.

Lighten up; do not be intense and serious.

Have no expectations. Sit in a comfortable quiet place where you will not be disturbed, close your eyes, and fill your mind with the sound of your chosen mantra — no need to make an actual sound. Focus your attention on the sound. Let the sound fill your mind — think of nothing else. Use whatever devices you need to stay focused on the sound — merely listen to it repeat itself. The repetition may be simple and straightforward or occur in interesting ways — perhaps with complex variations.

Eventually, let the sound of the mantra slow to a rhythmic, bland repetition and then slow and smear further into a continuous background sound. If thoughts creep in gently put them aside and refill your mind with the sound. If intruding thoughts constantly stream into your awareness, give the mantra a more active form. As thoughts disappear, leaving your mind empty, simplify and soften the sound of the mantra. Continue the meditation process uninterrupted for at least twenty minutes, twice a day for three months before evaluating the results. If the sound slips away, but no extraneous thoughts appear, let it go and drift in the quiet blankness of your consciousness — you will love it.

Visual types need a non-personal visualization that begins with complexity (but not detail) and ends with simplicity. You may start with a black and white soccer ball — then let the colors change to red and blue, let the ball begin to rotate slowly, let the colors change. Your image should be as clear as a watercolor painting, not as precise as a high-resolution photograph. Switch to a series of simple geometric shapes such as spheres, cubes, circles, triangles, cylinders, rectangles, and lines. Let them rotate slowly.

Slowly change their size and colors. Choose one shape and let it change very slowly. Watch your images intently — think of nothing else.

Gradually progress your images toward greater simplicity and slower motion. Do not force the images; let them do what they want to as long as they do not disturb your tranquility. Look at your images uncritically and dispassionately, as if you were watching a plotless movie. If thoughts creep in, gently put them aside and refill your mind with more active images. Continue the meditation process uninterrupted for at least twenty minutes, twice a day for three months before evaluating the results. If the images slip away, but no extraneous thoughts appear, let them go and drift in the still oneness of your consciousness.

If you enjoy natural places, you might start with a scene — perhaps a generic beach.

Hear the waves, feel the sand, smell the salt spray, listen to the sea gulls. Be there with all of your senses. Slowly simplify your image and focus on a few items at a time. Eventually you may narrow your focus to a single grain of sand. Go in close to inspect the tiny crystal from every angle. Choose the viewing angle you prefer and see how the light plays off the surface of the crystal. Back away until you can barely see its surface features. Hold that view as only you and the grain of sand quietly coexist within the void.

Choose images that particularly suit you.

Be careful not to try too hard, and do not struggle with high resolution, image quality, or anything else. Images may be felt as well as seen. Struggling to make your meditation be how you think it should be is always counterproductive.

No expectations. No struggle. No demands. The point is not to force your will on the process, but to let the process unfold naturally as it captivates your attention.

Remember that what you are trying to do without trying is to not do. Read that sentence again — don't you just love it? If it makes sense to you, you are on your way. If it sounds like idiotic gibberish you should go back to the beginning of this aside and start over — but don't get stuck in an endless loop — twice is enough.

For the kinesthetic types, we need textures that are non-personal, interesting and pleasant. For example, feel a rich velvet or fur coat as you mentally rub your hands slowly over it. Dig into it with your fingers, feel it rub across your arms and face. Explore the buttons or zipper, the seams, sleeves, and collar. Become tiny (or create a giant coat) and roll around on it, crawl into a pocket. Slowly let your sensing of the coat become simple and rhythmic. You might do the same thing with walking barefoot in squishy mud, or walking in the rain, or swimming in a pool filled with grape jelly. Start with complexity and progress to more and more simple rhythmic sensory stimulations.

If thoughts creep in, gently put them aside and refill your mind with the sensations. Continue the meditation process uninterrupted for at least twenty minutes, twice a day for three months before evaluating the results. If the sensations slip away, but no extraneous thoughts appear, let the sensations go and drift aimlessly in the boundless depths of your consciousness.

Smell and taste mantras would work similarly to the kinesthetic mantra above. Use your imagination. Do not be afraid to mix and match the senses; combine them in ways that work for you. Have no intellectual or emotional connection to your mantra. Maintain only enough complexity to keep extraneous thoughts away — nothing should be in your mind except the sound, sight, feel, taste, or smell of the mantra. As intruding thoughts become less of a problem, simplify your mantra. When you no longer need it to maintain a state of blank thoughtless existence, let it go.

Speaking of experiencing a state of thoughtless existence through meditation — let's do another ego-tweak — a real blatant one this time — and have some fun.

Hey ladies, why do you think most spiritual gurus are men? Think about it. Do you give up? Because, men are born thoughtless and remain that way the rest of their lives! Why else? Oooh ...what a

low blow!

Uh oh, easy fellows, I was only kidding — just a little double-entendre word play. Come on now...what's the matter guys? Remember the rules: peace and light — no violence until after I leave.

Oh well, at least the ladies thought it was funny — they get it.

The point here is to learn to control your thoughts and your operative mind so that you can experience your consciousness.

This is a first and necessary step. Later you can learn how to direct that consciousness once you have freed it from a noisy, frantic, ego serving, perpetual tail chase. Do not try to direct it too soon — that will only delay your progress — get in touch with, and follow, the source of your intuition. Do not pursue or chase after specific or general results. All results must come to you. If you go after them, it will only delay your progress.

Continue to experiment and to taste the pudding periodically. Natural, easy, patient, and gentle are the hallmarks of a successful process. Result driven, ego driven, success driven, frustrated, forced, fearful, and having preconceived notions and expectations are the hallmarks of a wrong-headed flawed execution of the meditation process.

Experiment to find what works best and what feels most natural to you. After you find it, stick with it for a while. If thoughts intrude, as soon as you realize that your mind is no longer exclusively working with the mantra, put them gently aside. If thoughts continue to came, increase the complexity of your mantra a little. As thoughts disappear and do not return, decrease the complexity.

Never try too hard. If you ever become frustrated, you are trying too hard.

This is most important: Have absolutely no expectations and no specific goals.

This is also important: Do not begin to judge how well or poorly your meditation is working until you have found and implemented a productive meditation process twice daily for at least three to six months — then taste the pudding.

Do not analyze or compare, just experience — this is not an intellectual exercise and your analyzing justifying intellect will only get in the way. Never force the mantra — go with it, flow with it, and let whatever happens happen — this is a gentle activity with no preconceived notions of what the outcome should be or feel like. There will be plenty of time for evaluation and pudding tasting after you gain some basic competence. There must be a time to be critical, but not now — you do not know enough to be productively critical yet.

Let every meditation be an entirely new and unique experience. Do not force every meditation experience to be like a previous experience that was judged to be a good one. Continue tasting the pudding at three-month intervals. Look for the existence of measurable results in the form of objective changes in your being. After six months, ask people who are close to you if they notice a change in your approach to life. Be aware of your mental state, and how that state changes as the meditation progresses.

Customize your meditation to suit yourself. Your meditation should become easier, more effective, and more efficient over time. Be patient, do not rush the process — trying to speed-up or push the process will only delay your progress.

Pay careful attention to the choices you make throughout your day. Examine your motivations and intent relative to those choices. By an act of your will, modify your intents to be more giving, caring, loving, and to be less self-serving. Shift the focus from you, from what you want, need and desire, to what you can give to, and do for, others. In the same manner, change where and how you invest the energy that follows your intent in your relationships and interactions with other people.

Examine your motivations and intent as described above immediately before and after, but not during, each meditation.

You must be consistent — that is most important. Once you get used to the exercise, thirty minutes twice a day is enough to accomplish both the meditation and the examination of your choices — take more if you wish, but much more is not necessary.

If you constantly end up in a state of frustration instead of a state of expanded awareness, let go, back off, and take a break until you can find a different perspective, a different attitude, or a different intent. Try a different mantra. Perhaps you are trying too hard.

Perhaps you are limited by your belief and fear, or lack the necessary courage and drive. Perhaps you need to read and follow the instructions more carefully.

Perhaps you are using a meditation technique that does not suit you. Perhaps you are not ready at this time. Don't worry: Everything works out in its own time. There is no blame, no reason to feel badly, and no failure on your part.

Continue to apply the meditation process gently and consistently and one day, when you relax, success will take you by surprise.

Everyone grows in their own way and in their own time. No one faults children for not being adults, though most children wish they were adults. There is no practical technique that allows you to skip steps. You are who and what you are — accept that gracefully. Work on getting ready by continuing to practice the given exercises gently and with no expectations. There is no faster process or better way to get ready than that.

Thus, we see that getting prepared and ready to grow, as well as actively progressing along a growth path, as well as optimizing the growth path that you are on, all follow the same prescription.

It matters not what your initial conditions are or where your starting point is, the same set of meditation exercises are optimal and appropriate for all.

That is why virtually everyone who wishes to follow the Path of Knowledge toward spiritual growth, toward improving the quality of their consciousness, is instructed to begin with daily meditation. Each individual will naturally extract from their meditation what they need for their next step. This personalization of the growth process takes place naturally because each individual is essentially engaged in a “bootstrapping” (pulling themselves up by their bootstraps) operation with his or her own consciousness. The meditation experience is as individual and personal as is your consciousness.

This is a life's work; it takes significant time to take root, blossom and bear fruit. Results will accrue in proportion to the energy that is invested productively. For example, with moderate effort, significant results should become obvious within six months to a year. Continue to apply the meditation process with gentle resolve; there is no rush, no test, and no diploma. You have all the time you need to get it right. Some will get it right away; others may take a long time. Gracefully accept however it comes to you — you have no choice. A teacher can only encourage and facilitate the evolution of your consciousness by helping you find opportunities to exploit on your own — spiritual growth, as any growth, is an internal process and cannot be forced from the outside.

Hopefully, these meditation exercises have addressed your need for a physical process to facilitate positive consciousness development. However, in doing so, I may have created a new problem for you — how to deal with the frustration that is often created by the inadequacy of doing to produce dramatic spiritual progress quickly. The Western attention span is notoriously short. To make matters worse, dramatic results are often required to overcome strongly opposing cultural belief systems. The fact is that progress in meditation, like progress in playing a musical instrument, usually accrues slowly and only becomes dramatic after significant time and effort has been invested. Progress accrues by the accumulation of many unnoticeable tiny successes. Take the long view and have patience.

Westerners caught in the glaring headlights of their cultural beliefs desperately need something to do before they become spiritual road kill — run-aver by mindless conformity and a blind obedience to the cultural norm. Thump! Splat! Oh jeez, what a mess! All the king's horses and all the king's men will have a difficult time getting that one back on the road to spiritual progress again.

Actually, it is unfair of me to pick on Westerners as being particularly limited by needing to do something in order to be something. Most Easterners are in the same doing-fixated boat. Their do-boat may appear to be bigger — not as confining perhaps — but just as limiting. Doing within a spiritual-cultural tradition is as problematical and unproductive as doing within a material-cultural tradition.

If you are so inclined, you now have something productive to do as well as an expanded perspective on the limitations and personal nature of that doing.

You now know what to do and how to do it, and if you settle in for the long haul with a serious commitment to finding Big Truth, you will succeed beyond your wildest dreams.