

## GUEST EDITORIAL

### On the Potential Role of Psi in an Expanded Science of the Physical, Experiential, and Spiritual

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*People who say it cannot be done  
should not interrupt those who are doing it.*  
—George Bernard Shaw

**Note:** This paper is an experiment for me, so there may be rough spots. Its basic goal is to share my excitement about possibilities for parapsychological applications to help investigate reality, hopefully to stimulate readers who will advance these ideas. . . . I'm relatively retired now. It was originally scripted as an invited address. I'm a good speaker, and it's easy for me to share possibilities by the way my voice and gestures communicate my excitement, and the controlled pace of a lecture lets me build the right atmosphere. Too, when I'm a well-known scientist and colleague to the audience, I can deepen rapport by being relatively informal and personal while outlining the basic science. But converting this to a journal article eliminates much of the above advantages inherent in speaking, and a journal article should more formally demonstrate some of the scientific roots of my proposals, especially to younger investigators who don't know my previous work. So the experiment I'm trying here is to stick close to the somewhat personal, informal, enthusiasm-conveying tone of a lecture but demonstrate its scientific roots with extensive Notes. I invite you to read just the text, pick up on the feelings, put questions and criticism aside for the time being. "Take the trip" with me, while skipping the Notes (I know you'll peek at the first few anyway). Then if you have picked up enough enthusiasm to want to go deeper, go back through reading the Notes to get the references, methodological deepenings, questionings, etc. And then . . . maybe you'll be one of those who advances our fields along these lines!

In 2018 I was honored by being asked to give an invited lecture at the annual meeting of the Parapsychological Association. What would I talk about?

I think of my primary professional identity as being that of a transpersonal psychologist, interested in the wider aspects of the human mind—actually I'm interested in too many things, but that's how I attempt to focus—but parapsychology has usually taken up about a third of my professional time. The problems posed by the existence of psi are especially interesting, and psi phenomena and their implications are very important for people in general,<sup>1</sup> as well as for scientists. Also, since it is still largely a taboo topic in science, for various irrational reasons, parapsychology has remained a very tiny scientific field, with very few people working in it, even part-time, and very few resources available for wide-scale experimentation. So my first thought of what to talk about in my lecture time was that in the half-century—plus that I've worked in parapsychology, I've seen a lot of promising, initial developments that didn't really get followed up adequately, so perhaps I could devote my hour to discussing methodological problems and promising leads that had slipped between the cracks?

I am very empirically oriented. At least that's what I discipline myself to be: What are the observable facts in a particular area? That's the primary thing, indeed the essential thing to work from. I say *discipline* myself to be that way, because most of my life I've been what I call, in a term I coined, a *thoughtaholic*. I love clever thoughts! If I were to go to something like an Alcoholics Anonymous meeting and was asked what my drug of choice was, I would say something like "Ideas! Concepts! Theories! They get me so high! I get so attached to them!" Thinking about things and coming up with what seem to be insights about them has been a major quality of my consciousness since I was a child.

That's why science is a wonderful personal discipline for me. If I had to characterize essential science very simply, I would say we're curious and want to find out things. We create clever ideas as to *why* things are the way they are, *but must constantly ask if our clever theories fit the current observable data and predict future, observable data?* If they don't fit the observable data, or make any testable predictions, the theory is a nice idea but it's got to be modified or dropped in favor of something more adequate if it's to be part of essential science. Back to the drawing board! Data are *always* more important, more basic than theory!

As important as accounting for observable facts is, I didn't want to give a mainly negative talk about methodology and problems we haven't solved, things that didn't work. Yes, there are real problems, but we can potentially solve them! Negative focus would also tie in too well with the fact that the field of parapsychology has been stuck in the more proof, more proof, . . . more proof ad infinitum stage, ignoring the fact that most of the opposition to its findings is irrational, stemming from common human shortcomings

of people rather than from their scientific skills. To the contrary, I believe that *parapsychology now has the potential to build investigative tools that will be central to an expanded scientific and human/spiritual understanding of the mind*. What I've learned working with parapsychology, altered states of consciousness, transpersonal psychology, and related fields has been a personal inspiration to me throughout my life, and I want to share that inspiration!

Inspiration, sharing of a vision, is a lot easier in a lecture than in a journal article (Longwinded 1954, Criticality & Delusion 2004, Poverty, Bureacracy, & Politics 2001, Grammarsansmerci 1967, Proofreader 2113), for although I love footnotes (Presentation Committee for Professional Ennui Generators 2001, Tedium & Ennui 1986) when I'm perusing a detailed experimental report (Multivariate Inverse Bayesian Statistics Standards White Paper, 2001, 2004, revised 2013, Fussbudget, Beancounter, & Doubter, 1987),<sup>2</sup> as you, dear reader, are probably already noticing rather directly in making sense of this sentence, a journal article is not good for conveying and sharing inspiration. Thus the attempt, described below, to reduce the chances of scholarship habits burying inspiration . . .

Now into my 80s, I don't know how much longer I'll still be active in parapsychology and related fields, so I wanted to create some inspiration for my colleagues, especially the younger ones. There are exciting and valuable things we can learn to do! So vision with me a while, let the practical difficulties be in abeyance for now . . . I believe that the kinds of investigators who read the *Journal of Scientific Exploration* will actually be more open to this possible vision than many parapsychologists, for, clever, devoted, and methodologically advanced as most parapsychologists are, they have been on the defensive from irrational attacks from pseudo-skeptics for so long that their thinking has gotten trapped in that more proof, more proof . . . more proof mentality, instead of visioning where we could go . . . and starting to take us there.

Beginning back in the 1970s, we went somewhere important! I was fortunate to be a consultant for the initial research project on developing and using *remote viewing*, carried out at a major research institution, SRI International, in Menlo Park, California. I worked closely with the main project researchers, physicists Russell Targ, Harold Puthoff, and, a little later, Ed May. Besides seeing what struck me as powerful and useful psi happening in many of the remote viewing experiments and applications, I learned an interesting thing about the way physicists have worked through recent history, namely that they don't always stick just to the data, just to the facts. In spite of my emphasis on it above, scientists sometimes got excited about ideas just because they were "interesting." Albert Einstein is a well-

known example. Who in the world would be crazy enough to spend a lot of time wondering what it would be like to ride through space alongside a light beam? This had nothing to do with things you could clearly observe and measure in the laboratory at that time, and yet it led Einstein to some very interesting theories, theories later receiving excellent empirical confirmation. There are many other instances in the history of physics of “interesting” ideas leading to valuable discoveries.

Remote viewing was the primary procedure involved in three major parapsychological advances during my career: (a) the initial development of the procedure and its successful intelligence-gathering applications at SRI, (b) the usefulness of remote viewing in archaeological work done by Stephan Schwartz, and (c) the several instances of using associative remote viewing to guide investment strategies to make money.<sup>3</sup> *I'll take it now as an established, baseline fact that remote viewing can sometimes gather, by psi, useful information about the present and future state of reality.* And, optimist that I am, I'll assume that the “sometimes” can undoubtedly be improved with further study of the phenomena.

So I'm going to present two ideas to you, which I find quite “interesting.” They are beyond what's practical for parapsychology to begin working on in detail yet, but I find them very, very interesting in their potential. *If* my resulting proposals work out, they may take the field of parapsychology, indeed the fields of psychology and science in general, a long way forward, introducing new tools and ways of understanding. Parapsychology could become a central scientific field and psi used practically in many fields of knowledge acquisition.

And if they are just intoxicating ideas, but don't really reflect reality, are they factually wrong? Well we haven't been making progress all that fast anyway, so suppose we take a gamble? I'm inviting you, as we often said in the 70s, to take a “trip” with me, to look at some possibilities for parapsychology that could make it a vitally important part of science instead of an endlessly rejected field, with the pseudo-skeptics ignoring what has been discovered and always asking for more evidence, more evidence, more evidence, none of which could possibly make them change their mind about the existence or importance of psi, with too many parapsychologists still caught up in finding more and more evidence for the reality of psi—that is going to be irrationally ignored and rejected anyway . . .

So I'm asking you, dear reader, to relax and open your mind for a while. As Henry Ford is reputed to have said, those who think they can and those who think they can't are both right . . .

As to the difficulties? The *Journal* editor Steve Braude commented on an initial presentation of this proposal that the stimulating value of the

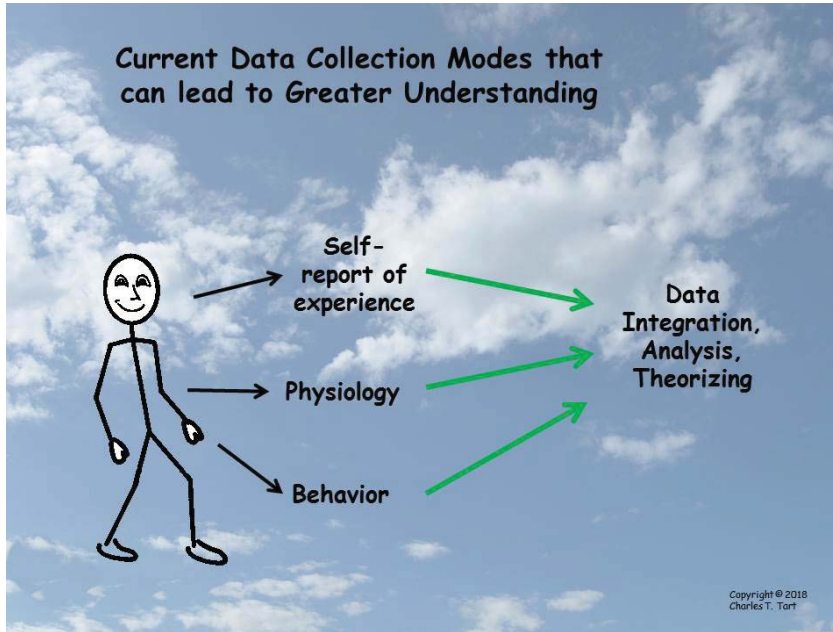
ideas might be lost if people thought that I was unaware or naïve about the difficulties involved, so I ought to briefly say something to the effect of knowing what some of the many difficulties are. Indeed, I do know of them! But I want to take you on this interesting trip, not to immediately bog you down in a swamp of endless methodological haggling. As a personal analogy, in the 1950s I taught myself much about electronics while I was still a teenager, and passed the Federal government licensing tests to qualify for and work as a Radio Engineer. I liked to actually build radio receivers and transmitters, too, not just theorize about them, and I always thought it would be neat to have my own portable transceiver, what was nicknamed a walkie-talkie in the Second World War, that would do the kind of things a cell phone routinely does now. But with the technology back then, what I or much more skilled engineers could build would weigh, even in its simplest form, way too much to be carried in anyone's pocket, and have only a very short range! I did a little work toward building one, but contemplation of the methodological difficulties stopped me from attempting to actually build anything full-featured. I was practical for the technological state of the time. Yet various people "took the trip," small step by small step, and the cell phones we have today are quite miraculous by walkie-talkie standards . . .

So I'll make a few comments about some of the more specific difficulties via the Notes scattered through this paper, but only a few, because the important goal to me is convey the interestingness of this idea. I hope this may trigger some further thinking on your part, dear reader, thinking that will expand and clarify these ideas. If you like the idea, a rereading of the paper with the Notes as they come up may be useful. And, even if you think these ideas are wrong and misleading, perhaps in the course of thinking about *why*, that may lead to some interesting thoughts too . . .

### **Toward a Science of Mind**

As I thought about the implications of what I want to focus on, a better title than the original one for the Parapsychological Association convention<sup>4</sup> would be "On the Potential Role of Psi in an Expanded Science of the Physical, Experiential, and Spiritual." The implications go far beyond specialized uses of parapsychology.

Like most ordinary people, I have always thought of psychology as the study of the mind. The progressive abandonment of mind, consciousness, awareness, experience as primary, in the belief that only physical matter was ultimately real and mind would eventually be explained (away) in physical terms, never made sense to me.<sup>5</sup> Yes, there were physical components, brain and nervous system, but how could we develop a science of mind that included consciousness fully?



**Figure 1. Current data collection modes that can lead to greater understanding.**

If we think about how psychology functions now, we can conveniently talk of three major sources of data, sketched in Figure 1. One is the self-report. A person describes what he or she is experiencing, his or her intentions, etc. When psychology was originally conceived as a science of the mind in the 1800s, this was far and away the major source of data.

A second major source of data, increasingly important as our technology developed, was a person's physiology. What was his or her body and brain doing at various times? Showing signs of arousal or relaxation? Were there physiological signs that correlated with what they might be reporting as to their experience? Or, possibly even more interesting, contradicting what they were reporting? In what ways could you argue that a certain physiological change *caused* the experiential change? And indeed, as a philosophy of total materialism became more and more dominant in the culture of science, physiological measures began to be considered to be more valid and more useful than self-report. We see this very much now in the belief that once we fully understand how the brain functions, we will be able to fully explain *everything* that a person experiences, for *experience, consciousness, is nothing but a product of physiology*, especially brain physiology.

The third major source of data was a person's behavior. An insistence that this was far and away the primary source of data for psychology led to the development of Behaviorism, which was still dominant when I was trained in graduate school half a century ago. More open-minded psychologists today would probably say that the interactions of all three of these kinds of data help produce more adequate explanations, better theoretical ideas that explain what a person reports, what his or her physiology indicates, and what his or her behavior shows. That often includes a firm belief that consciousness, mind itself, will eventually be totally explained by brain action. Once we can really measure ongoing brain activity, self-report and observed behavior will become very minor kinds of data, as they can be better explained by brain activity.

Now we must drastically expand the conventional perspective.

One of the basic findings of more than a century of parapsychological research has been the repeated finding that sometimes a human mind can find out information or do things that a brain alone cannot do, given our current understanding of the physical nature of the brain and world and straightforward extrapolations of that knowledge. In hundreds of successful experiments over the decades, you ask a person to find out some information or modify some physical process when the situation has been set up such that there are no known physical channels to convey information or energetically affect a physical process at some distant, shielded target. You, as experimenter, a mind, understand what you are requesting, the person taking the role of percipient or agent understands what you want and intends for it to happen, and objective observations reveal significant information acquisition or process modification beyond chance expectations. Therefore, understanding the mind or minds involved is a fundamental issue for a science of psychology, not covering over our ignorance about the mind and its inherent nature with the faith (known as *promissory materialism*<sup>6</sup> among philosophers) that someday brain functions will explain *all* mental functions and experience.

Thus I think that it is vitally important to get more reports of experience and more adequate reports into psychology, to put more *psyche* in psychology. By analogy, I think we should be putting a lot of emphasis into developing a psychology that is an analog of, say, the science of chemistry.

Physical chemistry progressed by discriminating basic elements, down to the atomic level, and eventually the subatomic level, and understanding the rules of reaction and interaction. Element A, for example, would react with element B under certain conditions to form compound X, element D wouldn't chemically react with any other elements, etc. In a science of mind, my long-term goal here is to recognize that *experiences are basic data*, not

things to automatically assume we will explain away as we understand the physiology better, and we go on to understand those basic experiential elements and the laws of interaction more and more precisely, refining and sharpening our theories to account for reported experiential data more and more adequately. At our present level of knowledge most experiences are probably like molecules of more fundamental mental chemistry. Deeper research may reveal the more basic atomic-like structures.<sup>7</sup>

Here I use “experiences” to include those directly known by an observer, one’s own experiences, as well as experiences reported by others. I emphasize that *I posit experience as one kind of fundamental data*. Physiology? It’s valuable to know that a certain region of the brain or body is more activated or inhibited sometimes or regularly when certain experiences are reported, but experiences should be treated as data just as fundamental as physiology or behavior. If a person reported feeling unusual warmth in their body, for example, or felt *out* of their body, as in an out-of-the-body experience (OBE), or reported that they were experiencing tremendous certainty about a specific idea, or feeling a rapid shifting of body area focus, these all are data that go toward creating a science of the psyche. We would then go on and try to find the more basic elements of experience and their rules of combination. These would include straightforward rules of combination as well as knowing about how things emerge in complex systems, systems emergents.

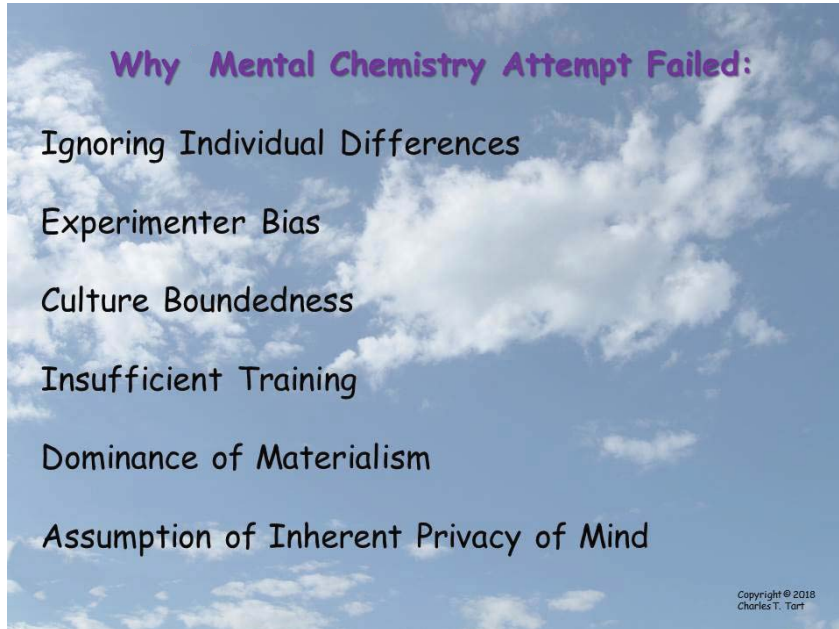
### **Historically, Wasn’t Mental Chemistry a Failure?**

But wait, you might say: Wasn’t the mental chemistry model tried in early psychology—and failed? Yes. Rather than quickly arriving at a general consensus of what the basic “atoms” and “molecules” of experience were, and the “reaction laws” governing their interaction, different laboratories reported quite differing results under supposedly similar circumstances. This quickly killed the hope of producing a scientific mental chemistry.

I would argue that these attempts failed because of some major limiting and biasing methodological problems that were not adequately recognized. I believe that if we recognized and dealt with these problems constructively, we might make enormous progress. I’m not a historian of psychology, so I’m going to give overall impressions here, not details, about these methodological challenges,<sup>8</sup> about why the mental chemistry attempt failed. Other reasons than those I highlight here undoubtedly also exist. I’m not so interested in trying to be absolutely accurate on the history as I am in inspiring people to learn to deal with these methodological problems.

I would stress that much of the power of these limiting and biasing issues, summarized in Figure 2, came from the fact that, by and large, they





**Figure 2. Why mental chemistry effects failed.**

were not recognized. When you don't know that something is limiting and biasing you, there's little you can attempt to do about it . . .

### ***Limiting and Biasing Issues***

**Individual Differences:** A major problem that led to the failure of mental chemistry was ignoring individual differences. There was often an assumption, largely implicit, that any person<sup>9</sup> you brought into the laboratory to ask about their experience had what I'd call a "Standard Mind," that our minds all basically worked the same way. The more I learn about how different "normal" people think, sense, and feel, the more misleading this assumption is! Those of us who've been in long-term relationships with loved ones, for example, have learned, often the hard way, that this is not true. The way this loved one, this otherwise clearly intelligent person, senses and thinks and reacts about some things can be drastically different from your own, even if your own seems like the *obvious* and *correct* way to understand and react! How odd . . .

Not only were individual differences largely ignored, but of course it's difficult to describe experience.<sup>10</sup> The reality of individual differences

coupled with our social nature (we want to fit in and be “normal” for our tribe) was even more problematical as a common “laboratory language” evolved so observers and experiments could feel like a part of the particular laboratory grouping. So in addition to what may be basic differences in how different minds function, there are differences in ability to observe and describe that functioning, and social biases slanting descriptions and observations per se.

**Experimenter Bias:** A second basic reason why mental chemistry failed was the problem of experimenter (E) bias. I’ll deliberately begin using E for the Experimenter from this point on<sup>11</sup> to remind us of the usually implicit special laboratory languages, which can affect our thinking . . .

This is a problem that is still very much with us, and that scientists are socially and personally biased not to recognize—except, perhaps, in other scientists’ work. We are objective Authorities, we are Es, not biased people!

I became practically aware of the importance of E bias in a 1964 study of hypnotic suggestibility during my postdoctoral training at Stanford. My co-Es in the study couldn’t seriously consider that we might be doing (and effectively invalidating) the study in a biased way—although it turned out we were (Troffer & Tart 1964). I could argue that many, if not *most*, apparently factual findings in psychology may well be due to E bias, rather than the discovery of basic rules of behavior or physiology or self-report. Arguing this does not make me popular with most colleagues! The introspectors, those who observed their mental processes and reported on them, the basic data collectors in the historical attempt to establish a mental chemistry, were employees or students of Herr Doktor Professor X, who had theories to prove, was their employer, was an Authority way above them in social and scientific and academic status. Again, in spite of our commitment as scientists to “objectivity,” we humans are also social animals and much want to fit in with and be accepted by the culture around us, especially with the powerful people in it, so the assumption that we can easily get unbiased reports from standard minds ignored a lot of psychological and social reality.

**Culture Boundedness:** I would stress culture boundedness as a third major reason why the mental chemistry attempt failed. Some cultural differences are subtle and some are very obvious, such as the difference between authoritarian and egalitarian cultures. Our culture has shaped our mental processes, our perception, thinking, emoting, and behaving, so that, with our desire to be “normal,” we may indeed be “normal” for our culture, but not so for the culture background of the introspectors reporting in other researchers’ laboratories. Ordinarily we are not even consciously aware that we are members of a particular culture instead of just intelligent human beings, much less aware that we are biased by our culture.

**Insufficient Training:** Another major reason why I think the mental chemistry attempt failed was grossly insufficient training of the introspectors. My memory of the history is that a “trained” introspector was someone who had had perhaps 10 to 20 hours of training in how to report aspects of ongoing mental experience in a way that was, hopefully, accurate. While I’ve been very interested in observing my own mental experience as accurately as possible all of my life, as well as trying to be able to communicate it, I still find both tasks quite difficult. By contrast with “normal” culture, I have talked with a number of meditation teachers, especially those who teach variations of the basic Buddhist practice of vipassana (insight) meditation (Young 2016), where one tries to learn to observe ongoing mental experience without biasing, without trying to push it toward desirable forms or prevent it from going in undesirable directions. The several teachers I’ve spoken with about accurate observation and reporting think that in Buddhist tradition, derived from 2,500 years of meditation practices, generally it takes 5,000 to 10,000 hours of training in vipassana meditation for a person to get really skilled at it! This is in cultures that value meditation. I certainly know it took me many years of practicing various forms of vipassana to observe my mind with *less* interfering and biasing, and I’m not sure I’m actually able to observe anything in my own mind without some biasing to push things in desired directions. Sometimes my most productive meditation sessions are continual insights that in spite of my attempts to just observe mental events that happen on their own, as objectively as possible, I’m actually habitually pushing and pulling on my mental processes all the time. I don’t like to frequently find out how biased I am, but I believe knowing I’m biased makes me more likely to be able to reduce the effects of bias in my work.

**Materialistic Substrating of Experience:** A fifth reason why the mental chemistry attempt failed strikes me as the dominance, increasing through this historical period, of an absolute and *dismissive* materialism, the belief that *everything* will be explained by the physical processes of matter, particularly of the brain and nervous system. This includes all aspects of experience, of mind. Mind will be *explained away* by a reduction to a causal physical substrate. This also tends to produce a bias to try to describe mental experience in terms that sound like those of the physical sciences, giving the comforting illusion of scientific precision.<sup>12</sup> Also there’s an underlying bias that a mental chemistry must be inherently inferior in terms of precision and reliability to any physical science. Reporting, for example, that “This object in front of me produces nervousness” is far inferior to the standard (still a theory, not a fact) that a *real* explanation would be something like “When neurons numbers so-and-so are stimulated

by such-and-such neurochemicals in a certain temporal pattern, the person will (through fully explicable neural pathways) use the word nervousness.” This materialistic subrating of experience means it is inherently inferior data compared with material, physical data. It undercuts attempts to build a science if you believe, a priori, it’s going to be inherently inferior.

**Assuming You Can’t Do Well, It’s Inherently Private:** A sixth major reason I think the attempt at mental chemistry failed was the widespread assumption that what goes on in your own mind is *inherently private*. If you don’t report it, or if you can’t report it adequately, nobody but you will know what went on, and even you may not know it very well. This immediately implies that there are many aspects of consciousness it is basically impossible to adequately report, so your attempt to create a science of mental functioning is further bound to be of an inferior and incomplete sort at best. It would be analogous to want to study how an automobile functions, but you know you will never successfully look under the hood, although something basic seems to be happening there.

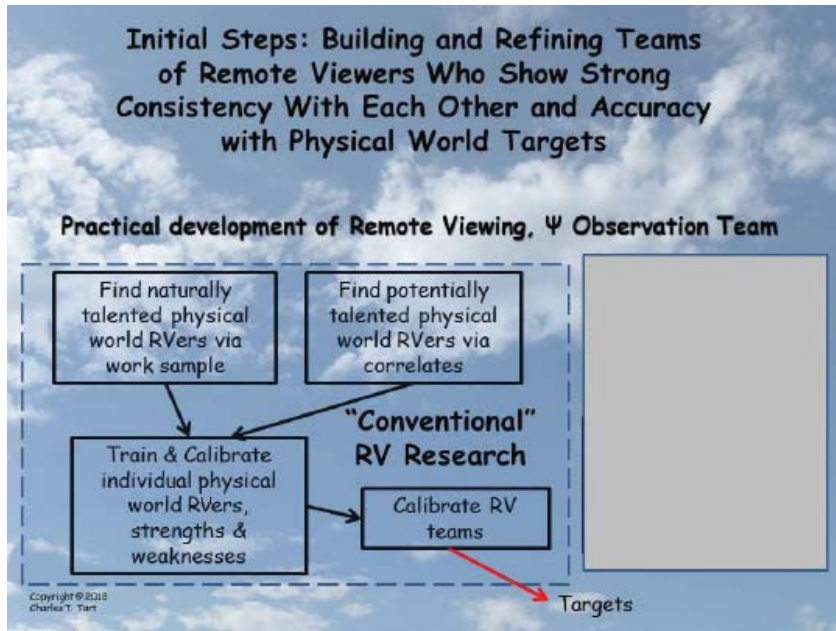
Again, as Henry Ford is reputed to have said, “Those who think they can and those who think they can’t are both right.”

### **Toward an Expanded Science of Mind: Developing and Using $\Psi$ as a Reliable and Accurate Observational Method**

Without being concerned at this point as to what the ultimate nature of the psi involved in the remote viewing procedure is, whether it’s what we conventionally call clairvoyance, telepathy, or precognition, or something else altogether, the fact remains that it has been one of the most successful parapsychological achievements in my lifetime. Developed originally at SRI and funded by various government intelligence agencies, as well as independently by Stephan Schwartz and his Mobius group for archaeological applications,<sup>13</sup> it’s proved to be not only a statistically significant way of gathering information, but a highly *practical* one.

We will take the remote viewing procedure and expected improvements in it as a basis for the vision I am sharing.

These practical applications, especially the archaeological ones, often involve cross-validating teamwork, several remote viewers working independently, and then having their viewings selectively combined. This involves assuming (realistically) that no one remote viewer, no matter how good, is absolutely correct all of the time. Every viewing is a mixture of signal, information obtained by psi, and noise. Noise may be imaginative elaborations from the remote viewers’ minds and other irrelevant associations incorrectly inferred about the target, or even displaced psi perceptions. Learning to usefully combine the material from different viewers,



**Figure 3. Initial steps: Building and refining teams of remote viewers who show strong consistency with each other and accuracy with physical world targets.**

and knowing viewers' individual strengths and weaknesses, can make the procedure more accurate.

### **Basic Remote Viewing Procedure**

Here's how we would go about using the basic remote viewing procedure to psychically acquire information on some distant physical target that the viewers and the interviewers of the viewers know nothing about. The basic steps are diagrammed in Figure 3.

To begin, you find some people who can, not always but often, successfully remote view. These may be people who have a reputation for being psychic, or previous specific remote viewing successes, or have certain correlated qualities that promise successful remote viewing.<sup>14</sup> But whether such prior reputation or correlation exists or not, basically you test someone in a remote viewing procedure,<sup>15</sup> and if you find good results they may become a long-term viewer. You then train them as well as we know how to at this point. This training would primarily include helping them to minimize *analytical overlay*, the non-psychic, ordinary type associations of images and ideas that would constitute noise that might drown out any psi signal.

Then if you can assess and “calibrate” their individual strengths and weaknesses (this viewer is good on colors, for example, or this one is usually wrong about building size), you can figure out how to combine several remote viewers’ activities for teamwork, to increase the signal-to-noise ratio.

It’s possible there may be some people who can do very well on remote viewing the content and processes of a subject’s mind, experiential content, but not do well on physical targets, but for beginning investigation, it seems likely those successful on physical world targets will be more likely to be successful on experiential targets.

I’ll illustrate possibilities with an example from Schwartz’s archaeological work. He once had a specific kind of archaeological target to find, in Egypt (Schwartz 1978, 1983). But an archaeological dig is very expensive,<sup>16</sup> so you need to narrow down your possible areas enormously. He proceeded by sending to several talented remote viewers large-scale maps covering much of Egypt, along with specifications of the type of archaeological target he wanted found, and asked each viewer, working independently, to draw circles around areas on the map where they thought the target was located. The maps were then mailed back to Schwartz, he lay them on a light table, one on top of the other, to see where the different viewers’ circles overlapped. He then sent more detailed, smaller-scale maps of the overlapping areas back to the viewers, still working independently, and iterated this process until he had a consensus over a small enough area that it was worthwhile to invest in a serious archaeological dig.

I believe there was a selectivity factor of sorts in the early work. When I first began consulting on the SRI remote viewing project, for example, I believe for some, if not many years after that, the primary researchers were happy to ask viewers to try to find out information about the *physical world* for intelligence agencies, but did not want to try to psychically pick up information about the internal states of people, for both methodological and ethical reasons. That is, the targets were all external things. The request was on the order of “Tell me what the outbound experimenter<sup>17</sup> at the target (or an observer who could be at the target, if the outbound experimenter method was not used) sees and senses.” This was also a needed methodological restriction to be sure the outbinder’s mental state, if it were part of the specification of the desired target, did not inadvertently act as a sensory cue for judges to correctly match targets and descriptions. But suppose remote viewing can be practically useful in revealing mental experiences and processes, and you use it with people who are suffering because of malfunctioning of their mind, would like to be cured, *and have given permission for their experiential content and processes to be remote viewed as part of the therapy?*

To begin at a practical level, we need to ascertain that selected remote

viewers<sup>18</sup> can usefully detect and report internal events and processes in designated experimental subjects or therapy clients.<sup>19</sup> I'm tempted to say we need to see if the RV paradigm is good at "telepathy," but most, if not all, past "telepathy" tests involved the procedure of a person, an "agent" or "sender" *actively* trying to "send" selected target information to a percipient or receiver. Whether "telepathy" is an actual mind-to-mind information transfer process (a currently unfashionable view for some parapsychologists), it is an accurate procedural descriptor for one person making efforts, trying to "send" information, while a sensorially shielded percipient tries to ascertain it by some kind of psi. For applying RV to psychotherapy to see if we can at least partially overcome the "inherently private" quality of experience, we can start by seeing how well the remote viewing procedure works with this kind of deliberate intention to "send" information via psi, but our deeper interest is how well a remote viewing team can accurately detect both emotionally neutral and psychodynamically potent information (thoughts, feeling, defense mechanism operations, etc.) that the client doesn't consciously understand or know of, and so doesn't or can't "deliberately" attempt to "send" or normally communicate to his or her therapist via actions or words.

We already have observational information from many case reports that allows us to infer that psi may operate between therapist and client in psychotherapy, reported by psychiatrists such as Ehrenwald and Eisenbud.<sup>20</sup> I say infer, for of course there is so much sensorially mediated information between therapist and client that it is often difficult to be certain that apparently psi-acquired information was not sensorially communicated or inferred from sensory contact, in contrast to laboratory studies where you can be almost<sup>21</sup> certain there was no ordinary, sensory way of knowing the target information.

We could expand Figure 3 to Figure 4. Here we start from having already created a remote viewing team that's good at RVing external target objects or locations, so I've blanked that part of the diagram. Now we want to add in remote viewing of experiential contents and processes.

I'm suggesting here that we find talented *introspectionists*, people who can not only report on qualities of their ongoing experience in detail (hopefully accurately), but who naturally, or as a result of training, can create and stably hold particular kinds of mental experiences.<sup>22</sup> People skilled in certain meditation techniques (pick the appropriate kind, there are many forms of "meditation," a word used very loosely by many), would probably be a good place to start. Then ask such an introspectionist, for example, to visualize target material that has been randomly selected, for example experiencing themselves being in a triangular room with a wild animal, a

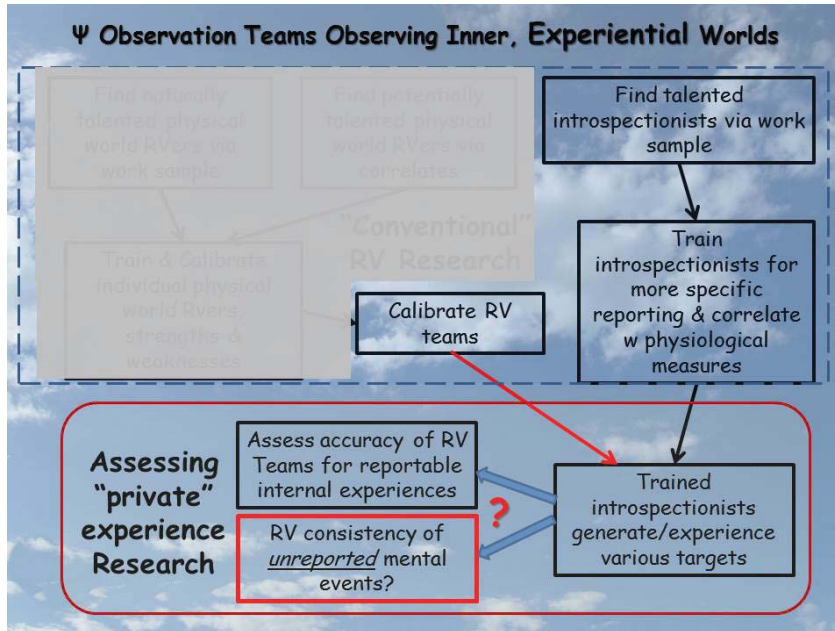


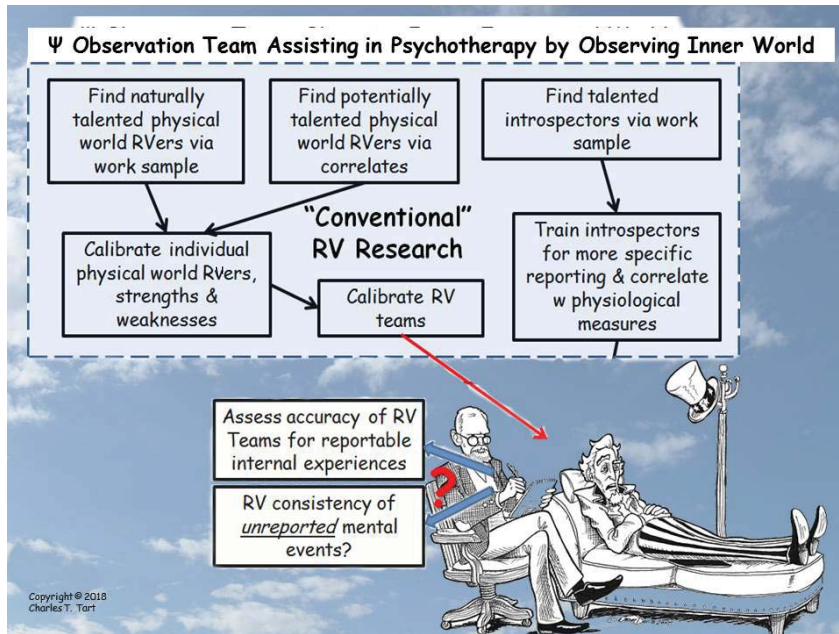
Figure 4. Ψ observation teams observing inner, experiential worlds.

lion for example pacing about, and hold that image stably for N minutes. At the end of that designated target period, have them report how well they accomplished this and what, if anything, interfered with or modified the target image, intrusions, etc. Although it is conceptually difficult to create a “purely mental, internal” event if a record of it is required for later analysis,<sup>23</sup> the introspectionist creating the target experience should not speak aloud about the target or draw a sketch of it.<sup>24</sup> If such image targets varied in emotional tone, you might measure physiological correlates during the imaging period: Agitated physiology, for example, would help verify an introspectionist’s success in holding a fearful image as opposed, for example, to a very relaxing one.

Meanwhile, your remote viewing team, who, of course, has had no sensory or other contact with the imager, tries to remote view the target experience at the imaging time, and degree of success is assessed the usual blind judging way.<sup>25</sup>

What’s accomplished so far is seeing how well the classical remote viewing paradigm works in a task like a classical “telepathy” test. This is generally of little use yet for psychotherapeutic application,<sup>26</sup> as this is the sort of content a client can simply tell their therapist. Except that it would be





**Figure 5. Ψ observation team assisting in psychotherapy by observing inner world.**

very interesting if the client reported experiencing A, but a remote viewing team, already known to be generally accurate, reported that the client was mostly or exclusively experiencing B at that time. A hint that strong defense mechanisms were operating? Or non-reported experiential material might be reported by the viewing team which, skillfully combined by the therapist with what the client is consciously reporting, may give hints to psychodynamic processes. This general kind of potential therapeutic application is sketched in Figure 5.

What could be even more interesting in terms of insight therapies, though, is the possibility of the remote viewing team accurately reporting experiential content and process that the client does not or cannot report. One way to assess this is sketched in Figure 5. It does not produce “direct” validation of the remote viewing of unreported experiential content but rather proceeds by having the remote viewing reports given to the therapist, who then, in a manner skillful for the form of psychotherapy being used and the client’s dynamics, incorporates them into his or her therapeutic work with the client. Does the client then progress substantially quicker than the therapist would usually expect with this kind of client with these kinds of

problems? A slow approach, but potentially very useful in therapeutic situations that are not progressing well.

A very interesting question is whether the remote viewing team can pick up important psychodynamic content that is “repressed,” or otherwise unreportable because of psychological defense mechanisms. A rich approach here could involve the largely forgotten<sup>27</sup> work of Gerald Blum (Blum 1961), who modeled aspects of psychoanalytic theory using talented hypnotic subjects. Among other things, Blum would suggest to the hypnotized subject, for example, that they had gone through a somewhat traumatic experience while a child, such as having found a purse in a store while shopping with her mother, and rather than telling her mother, so it could be returned to the purse’s owner, had kept it or the money in the purse, but later felt so bad about it that they forgot, indeed repressed, all memory of this incident. Suggestions for amnesia for the hypnotic state were then given and the subject dehypnotized. Later psychological testing in the waking state, such as Rorschach or word association tests, showed reactions to shapes or words associated with something like a stolen purse even though the subject reported no conscious memory of this, in line with Freudian theories.

### **Ethics Note**

A note on ethics is called for here. I want to stress that this proposal is about remote viewing of people *who have given permission* for this to happen. A person with psychological issues, for example a client or patient in the usual terminology, contracts with a professional to help herself or himself understand their psychological situation more clearly in order to relieve suffering or otherwise psychologically grow. The client understands that means the professional will use “normal” (but sometimes non-obvious) means to learn more about unclear psychological aspects of their self. This is done for the client’s benefit, of course, and with a doctor–patient restrictions commitment to confidentiality.

Using a remote viewer or a team of such viewers (who the client will never have any sensory contact with, and who are likewise bound by professional ethics of working to help the client and to maintain confidentiality) is similar to bringing in any ancillary personnel to help the therapist work more effectively with the client. The unusual nature of this ancillary help, though, should be explained to the patient/client and permission received. Indeed the unusualness may stimulate reactions that a skilled therapist could explore quite profitably with a patient/client. “You may have some people I don’t know read my mind at times and tell you about it? Whew, I don’t know . . .” I believe this would be an acceptably ethical way of working. Whether it would stimulate nastily intentioned persons to use a similar pro-

cedure to take advantage of others, and whether such attempts would be effective (I hope not!) is an issue beyond the scope of this current discussion.

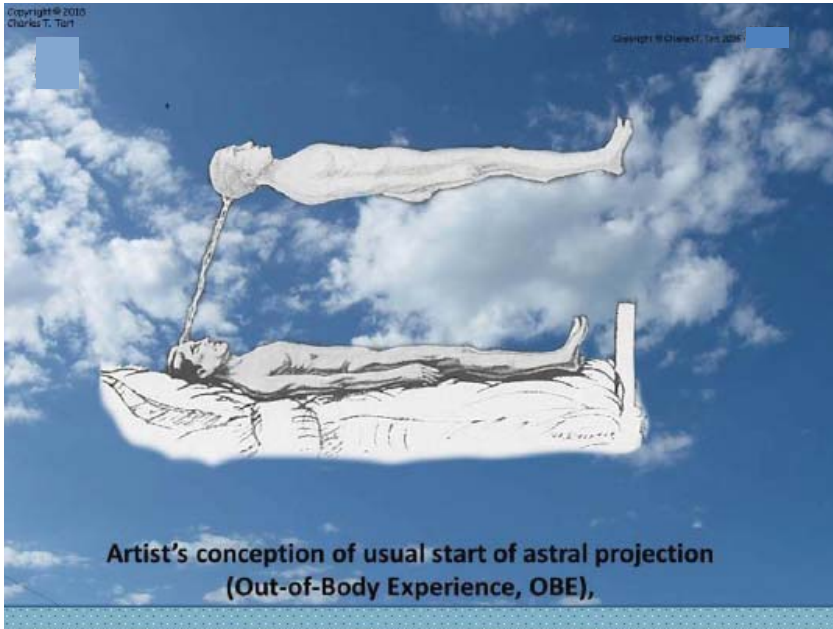
### **“Onward” and “Outward,” “Backward” and “Inward?”**

Okay, I’ve taken us, in our thinking, in an “interesting” direction, but one that’s really not too far from ordinary reality, and which might have practical therapeutic applications. Once you can pick up relatively inaccessible experiential and psychological data from others through some kind of remote viewing, of course, it reminds us that there may be many other kinds of data, including data of relevance to physics, chemistry, etc., accessible via remote viewing, but that one example has been enough to show possibilities. Now I’m going to ask you to take a trip that is really “out” there! Or perhaps really “in” there . . . I leave the words “out” and “in” poorly defined, as that takes us into deeper philosophical (and perhaps “spiritual”) waters than I will discuss here.

We might talk about this extension as a psychology beyond, as well as useful within, the ordinary physical world, extending into the “spiritual” world, both checking whether there is any independent reality to a spiritual world and, if so, what its nature is. And/or probably finding that some things considered “spiritual” are delusional.

In the first section of this paper, I’ve focused on the creation of a kind of mental chemistry, to be created by developing the remote viewing paradigm and advanced information synthesis and analysis methods, to look at deeper parts of the mind than what we can normally access. The practical example I proposed was overcoming, at least partially, the assumed inherent privacy of experience, especially when there might be psychodynamic defenses against it becoming conscious. There are major methodological problems, of course, and, as I said earlier, I have been briefly mentioning some of those in the various Notes. Meanwhile, I hope I can persuade you to remain open-minded, not get lost in the more proof, more proof, more proof endless loop of the very existence of psychic ability issues, but to treat psi as an interesting possibility, and see where we might go.

Now let’s move toward a realm of experience we vaguely call “spirit.” My goal is not to naïvely accept spiritual realities as powerful forces beyond our understanding nor to explain spirit<sup>28</sup> away as nothing but neurophysiological illusions, but to explore spirit more deeply with the essence of scientific method, namely (a) curiosity about what really happens in that vague but important area, (b) learning to observe it more closely, (c) creating theoretical explanations for what we see that (d) can be tested by further observation and experiment, thus hopefully moving toward a more effective and practically applicable understanding of the spiritual. I’ve discussed this



**Figure 6. Artist's conception of usual start of astral projection (out-of-body experience, OBE).**

methodology as *essential science* in various writings.<sup>29</sup> I make no claims, of course, that an essentially scientific approach is the only useful approach to study or validate the spiritual, the transpersonal.

To make this a little more concrete, although “concrete” is a strange word to use here, I’m going to focus on out-of-the-body experiences (OBEs).

My own interest in OBEs was stimulated by reading a book by Silvan Muldoon and Hereward Carrington, *The Projection of the Astral Body* (Muldoon & Carrington 1929). In 1915, Muldoon, then a young man of 12, living in the American Midwest, went to a spiritualist camp meeting with his mother, and spontaneously had an OBE. Figure 6 is an artist’s conception of the way he usually experienced leaving his body. Muldoon usually started an OBE with feelings of paralysis in his physical body, then a feeling of rising up and floating while still paralyzed, then in his “second body” moving away from his physical body until the paralysis disappeared. Then he could go places and do many things just by willing it. Muldoon referred to it as an *astral projection*, a term common in spiritualist literature of the time, but I’ll stick with OBE to make it sound more scientific, as well as OBE being basically descriptive, an *out of the body experience*.

Since I popularized the acronym OBE in parapsychological literature,<sup>30</sup> it has often been used rather vaguely and sloppily in much literature, so I'll define what I mean when I use it. You start recognizing an OBE by wondering where you are, and, by some combination of feeling and sensing what's around you, you find you are located outside where you know your physical body "really" is in the ordinary, physical world. To put it another way, the concept of location in the physical world makes sense to you but your perceptual input does not fit your memory of where you believe your physical body to be. It's quite common, for example, for an OBE to begin with the OBEr suddenly finding themselves floating near the ceiling, looking down, and often seeing a body on the bed, which they then identify as their own physical body. Seeing your own physical body from outside is not invariant for OBEs: Some people may sometimes find themselves out of their body at some distance from their physical body. Usually there are no tactual sensations of the sort that ordinarily accompany sensing one's body.

A second, crucial part of my definition of OBE though, comes from the fact that our culture does not, to put it mildly, accept or welcome this kind of experience, judging it impossible and/or crazy. So one of the first things that typically happens in OBEs is that the experiencer wonders whether she is having a dream, or in some kind of insane state? This may involve reasoning about specific qualities of the experience, but usually it is a much more immediate judgment which you, dear reader, can make right now, and make instantly. Are you awake?

Right now you *could* be dreaming about reading a journal article, but I believe that you wouldn't want to bet money on that being the case. So are you dreaming?<sup>31</sup> Almost everyone I've asked this kind of question says they instantly perceive that the gestalt feeling of their mind is that of waking.

Could this instant's experience be a lucid dream?<sup>32</sup> People who have had repeated OBE experiences usually distinguish OBEs from ordinary or lucid dreams, although brief lucid dreams and brief OBEs may be so similar as to be indistinguishable. Robert Monroe, for example (personal communication 1970s), told me that in a lucid dream he could change the setting or action by an act of will, but in many OBE "realms" he could not, they had laws of their own.

It could be interesting to pause a minute or two and ask yourself how you answer the question, "Are you 'in' your physical body?"

If an OBE is some kind of "dream," then it's certainly not like an ordinary dream. You can reflect on the qualities of your mind and experience during the OBE, including reflecting on the fact that you think it must be impossible, but it's happening in spite of your reasoning, and the experience seems perfectly real to you. Indeed, a lot of times the OBE experience is

described as “more real than ordinary reality.” If you reason about particular aspects of the experience, your ability to reason seems as clear as in ordinary waking, especially when contrasted to the rather fuzzy and sloppy reasoning that occurs in many dreams.<sup>33</sup> The conviction that you were in pretty much your ordinary state of consciousness, even though not “in” your physical body, and that your OBE seemed real, almost always remains for the rest of your life, as contrasted with the fading sense of reality of ordinary dreams.

### ***OBEs and the Soul***

Why are OBEs so interesting? Most if not all religions have some kind of concept of a nonphysical part of the self, a “soul,”<sup>34</sup> which is separable from the physical body. To a person having an OBE, the *idea* of or *belief* in a “soul” moves from some kind of *belief* or intellectual *concept* to a direct experience. You are outside your physical body, you are quite conscious, your experience feels quite real, and sometimes “realer than ordinary real”;<sup>35</sup> you understand what soul is far better than those who merely believe in it.

If this is the first OBE for a person, then, as often happens the first time a person experiences a dramatic altered state of consciousness (ASC) with major changes in perception and thinking, it’s easy to think you are now seeing Truth for the first time, that your perceptions of reality are now far more accurate, perhaps fully accurate, a Revelation of Reality. With repeated experiences, either with OBEs or ASCs, there may be a broader perspective developed that you are experiencing things in a *different* way, and that way may include other aspects of truth, but you are still human, and your human qualities may be affecting the experience.

A common consequence of the realness of an OBE may be a desire to share the good news of the reality of the soul, explain the Truths you’ve seen, perhaps to start or revitalize a religion: I’m sure the founders of some religions had OBEs.<sup>36</sup> The NDE, and often a simpler OBE, also often results in a powerful conviction, expressed later in a phrase on the order of “I no longer *believe* that I will survive death: I *know* I’ll survive death! I’ve been alive and conscious outside my physical body, it’s a direct experience of reality for me.” As an outsider, hearing someone else’s account of an OBE, you might argue with this, but this is the impact an OBE or NDE usually has on concepts about death and survival.

### ***How Do We Explain the OBE?***

For those wedded to a totally materialist view, where consciousness is *totally reducible*, in principle (but certainly not yet in fact) to the physical

activity of the brain, the OBE is a purely subjective, internal brain construction, like a dream. A computer may be producing a visual image on a screen to a viewer, but that picture is totally and ultimately reducible to particular electron movements in silicon transistors. The image has no existence without the action of the computer.

In my developing MINDS (Mutually Interacting Neuro-Dualistic Systems) approach,<sup>37</sup> which includes material realities as well as possible mental or spiritual ones interacting with the material ones, an OBE can be pictured as one kind of world simulation process,<sup>38</sup> a biological psychological virtual reality (BPVR). In this approach ordinary consciousness is envisioned as a BPVR, but one constantly modified by incoming sensory information, so the virtual world you experience (and take for “reality”) adequately mirrors the physical world around you. Ordinary dreams can be seen as a BPVR where the world simulation process is almost totally “free running,” it has little or no sensory input to modify or limit its construction of an apparent reality. From a totally materialistic perspective (not the same as the MINDS approach), the OBE may be associated with more cortical arousal, so it feels more real, but it’s misidentified as being actually real by the experiencer. I believe any completely materialistic theory is incorrect when thought of as a complete explanation, but it’s useful to guide research on mind–body interaction. And my opinion is subject to eventual empirical testing, of course.

As noted above though, in the MINDS approach material reality is not necessarily considered as the only basis which experience can be reduced to or constructed from, there may be mental or spiritual realities (psi, for example) which are also part of the fundamentals from which the systems emergents, various states of consciousness, emerge. Consciousness at any time, in any state, can be usefully seen as the gestalt emergent of various interacting “basics.”

A second theoretical approach is that the OBE is pretty much what it seems to be; in ordinary physical space–time terms, some aspect of your consciousness is indeed temporarily “located” “outside” your body. I use “outside” here to describe important characteristics calling for investigation on their own terms, not necessarily to ultimately imply ordinary physical “spatial” separation. My study of the feasibility of studying OBEs under laboratory conditions with a Miss Z years ago<sup>39</sup> centered around this very question for her: Were her OBEs just special dream-like states, but basically imaginary, or was she, her mind, really floating above her physical body? Note that I only claimed this study demonstrated the feasibility of more precise laboratory studies of OBEs rather than a total dependence on reports of spontaneous experiences, and reported some interesting and suggestive

observations, but for Miss Z, correctly identifying a 5-digit number up on a shelf showed her that she was “really” up and out in some real spatial sense.<sup>40</sup>

You can see then that the experience of OBE, of *being* something like a soul, will be far more supportive of religious beliefs than if it’s merely an abstract concept. I believe a phenomenon like OBEs (or NDEs) that seems to support many religious and spiritual beliefs deserves intensive investigation, not a prejudicial dismissal.

For many years my ideas about OBEs remained intellectual, derived from reading many spontaneous case reports as well as the classic Muldoon and Carrington book (Muldoon & Carrington 1929). I’ve never had an OBE myself, although I once had what I considered a vivid simulation of an OBE as a result of a psychedelic drug experience.

My early interest in OBEs and related phenomena led me to conduct an experiment in trying to use hypnosis to teach some other students to have an OBE in hypnosis, while I was still an engineering student at MIT.<sup>41</sup> They reported interesting subjective experiences, but the psi test part of the study did not clearly indicate the appearance of psi. In retrospect, I saw that the experimental design wouldn’t have been sensitive to a qualitative analysis for psi anyway unless it had been massive in size.

Some years later, when I spent a year as a researcher at the University of Virginia in Charlottesville, I met and befriended Robert A. Monroe, who was to become, a year or so later, the author of the now classic book *Journeys Out of the Body* (Monroe 1971). For the benefit of younger researchers who may not be familiar with Monroe’s writings, let me briefly describe his experiences, and then introduce a specific type of his OBEs that could serve as a model for using remote viewing as a tool to explore the “spiritual” side of human nature in a more scientific (and possibly more effective in improving people’s lives) manner than simple belief or disbelief.

### **Robert Monroe**

Monroe (1915–1995) was a son of a college professor father and a doctor mother, and lived as a normal person for most of his life. He became a successful producer of radio shows in New York City, and later a successful businessman, operating a cable television network when he moved to Charlottesville, where I met him in the fall of 1965. I was probably the first scientist who knew anything about OBEs who had befriended Monroe. I quickly recognized him as a sensible, honest person, and our friendship continued up through the time of his death. I found his reports of his OBEs especially valuable, as they just started happening to him for no reason that he understood, and he had no previous background knowledge of OBEs,



thus no strong expectations as to what an OBE was supposed to be like. Given our abilities as humans to shape our experienced world, constructed in the BPVR process, I give more credence to reports of unusual experiences where there is not an expectational background than from people who have been schooled or indoctrinated in what they are supposed to experience.

Late in his life Monroe founded an Institute (<https://www.monroeinstitute.org/>) that offers classes on how to have all sorts of ASCs and similar experiences, possibly including OBEs. I visited him several times when such classes were in session, when he spoke informally with students. It was interesting to see the students often trying to put him in the position of some kind of spiritual guru, a man full of occult wisdom, and I was impressed by Monroe's denial and defenses, usually carried out with pleasant humor, against allowing this kind of projection. He was describing as honestly and accurately as he could what had happened to him in his OBEs and sharing some techniques he thought might help others to have them so they could check for themselves whether there was anything to OBEs, but not dispensing transcendental wisdom.

Monroe was quite puzzled by his OBEs from their beginning, and very much wanted to understand them. I treated him as talented, not crazy, and our long-term friendship included many common interests. Monroe felt isolated in having OBEs, as, for most of his life, he didn't know anyone else who had experienced anything like that. He was socially normal, active in his community, running his business, playing poker regularly, and the like, but wondering about the meaning of his OBEs continually. What was happening, what did it mean? One version of his questioning was a "Why me?" Why had this strange stuff started happening to him?

For a long time Monroe was loath to publish any accounts of his OBEs or to talk to other people about them, as he suspected he would be ostracized in the conservative Virginia community he lived in, and, indeed, that happened at times, and may have been one of the reasons for the breakup of his first marriage, as his first wife was greatly bothered by his experiences.

As I noted above, Monroe attempted to describe what happened in his OBEs as accurately as possible. Some of it, though, was what I long ago named *state-specific knowledge*, it was something that made sense to him when he was in a particular OBE condition, but it simply didn't make sense later in his ordinary state of constant consciousness (Tart 1972b).

By 1964 Monroe had finally written a book-length description of his experiences, later published as *Journeys Out of the Body* (Monroe 1971). He'd placed the manuscript with a literary agent in New York, but when I met him 1965 he hadn't heard a single thing from that agent after a whole

year. We guessed that his agent was too disturbed by or unbelieving of the material in the manuscript to try to market it! I asked Monroe for a copy of the manuscript and sent it to the editor who had overseen the paperback edition of my *Altered States of Consciousness* book (Tart 1969), Bill Whitehead. Whitehead was not very interested in weird stuff, but he took my word that *Journeys* would be interesting to some people, so he took the manuscript home to read.

He later told me that he started reading it after dinner and, fascinated, couldn't put the manuscript down until after 3 o'clock in the morning, when he came to the "how to do it" chapter. Afraid he might have an OBE, he managed to put down the manuscript! I later wrote an introduction to the *Journeys* book. Monroe later wrote two other books on aspects of his OBEs (Monroe 1994, 1985), and hundreds of thousands of copies have been sold worldwide. There are translations in 25 countries, and still 7,000 to 10,000 annual sales almost 50 years after the original book was published.

From my primary perspective as a transpersonal psychologist, concerned with people's welfare as well as research, I think Monroe's books, especially the original *Journeys* book, were a great gift to thousands of people who have had their own OBEs but worried that they were crazy, and who couldn't talk to anyone about them. After reading Monroe's sensible accounts of his own experiences, they felt much better about themselves! They weren't crazy!

### **Monroe's First OBE**

Monroe's first OBE occurred in the spring of 1958. He had fallen asleep normally, thinking about going gliding the next day, a long-time hobby of his. He woke up with a feeling that something was poking him in his back. As he was not a sleepwalker, he assumed that he must have sleepwalked, and he was now standing with his back pressing against something on the wall. He opened his eyes and looked around and found that he was looking at a light fixture—in the middle of a wall! "Who in the world would put a light fixture in the middle of a wall?" he thought, for a moment . . . until he realized he was looking at the light fixture on his bedroom ceiling, as he floated in the air! Turning around and looking down, he saw his wife sleeping in bed, and a strange man beside her! As he looked more closely, he realized the strange man was himself . . .

This kind of thing—he had no name like OBE for it—happened several more times in the following months, so he did the "normal" thing for our culture: He saw his doctor to see what was wrong with him. His doctor did a physical and told Monroe there was nothing physically wrong with him. Eventually a friend told him that he might be having something called

an “astral projection,” which yogis in India were supposed to have, and it might be interesting if he took notes on them if he was going to continue to have them.

As with most people who have an OBE, one of Monroe’s major concerns was whether they were *real*. Were they what they seemed to be, where he was actually out of his body? Or something else? Finally he had several OBEs over a course of months in which he went to distant places and correctly perceived what was happening there, things that he couldn’t have inferred, and he became convinced that he wasn’t crazy or just imagining things, he did indeed seem to be leaving his body. Several OBEs with verification are reported in *Journeys*.

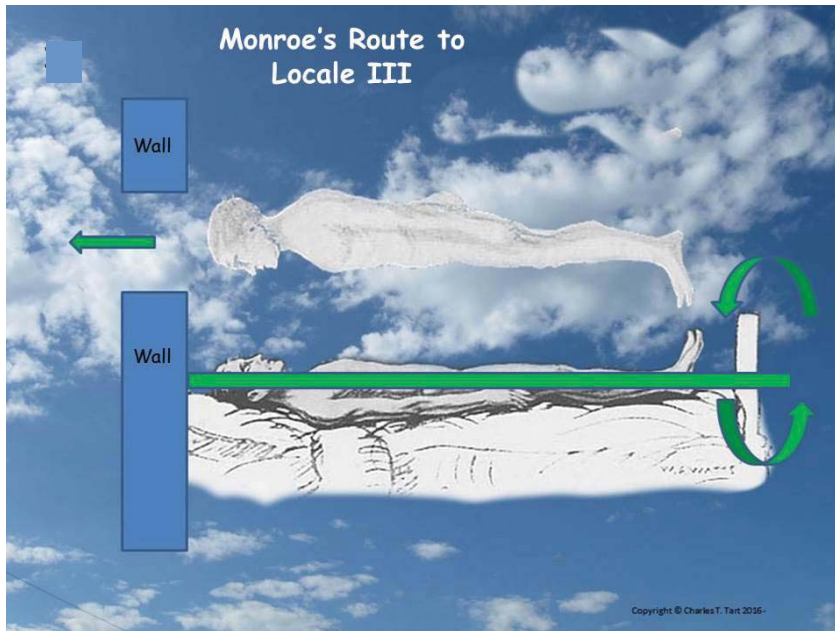
Somewhat differently from Sylvan Muldoon’s classic account of his OBEs (Muldoon & Carrington 1929), which began with a feeling of paralysis, the initial experience that would lead to a full OBE for Monroe was a feeling of vibrations in his body. There was some variety in the way he experienced getting out of his body, sometimes floating up and out as Muldoon reported, sometimes rolling over, sometimes he wasn’t quite sure what the process was. He did not experience a “silver cord” that some people who have OBEs have reported, so it may be that the silver cord is a psychological construct as mentioned in the Bible.

Over the years Monroe had hundreds of OBEs. Where did he go? He roughly divided the descriptions of his OBE journeys into three locales.

**Locale I:** Locale I was in various places on Earth. Sometimes these were places he recognized, but seldom was something unusual enough happening that if he later checked on it he could convince himself there was a sense in which he had *really* been there. He once remarked to me that most of his experiences of visits to Locale I were basically finding himself on some unknown street corner in an identified city at four in the morning, with nobody around, and after half a minute the experience was over. No kind of verification was possible, but, as I mentioned above, there were enough cases over the years in which he did acquire information that was verifiable about distant events to convince him that at least some of his OBEs were real, he was really perceiving the world from a different physical place than where his physical body was located.

**Locale II:** This range of places was what Monroe would later call “heaven realms,” belief realms, or “spiritual realms,” where he might encounter the deceased, unusual and non-human beings, etc. Much of his experience there was state-specific and I’m going to skip Locale II experiences entirely to keep things simpler in this paper.

**Locale III:** He also visited a place several times that he called Locale III. It looked enough like our physical world to make him wonder whether



**Figure 7. Monroe's route to Locale III.**

it was a physical world somewhere in our universe. He described it in some detail before saying much about the Locale II areas in his *Journeys* book, in order to pique people's curiosity as something "far out," but not unimaginably different. If he was going to other places in the physical universe that were real, that could potentially be verified, we would have to develop, to use the common science fiction term, an FTL, Faster Than Light drive, for our spaceships.

His first visit to Locale III occurred one night when Monroe was having difficulty getting out of his body. The vibrations had come but gone and he didn't seem to be able to move out, so he tried something different. He did things that increased the vibration feeling, and then rotated 180° along the long axis of his physical body, so that his "second body" was in a prone position.<sup>42</sup> This had never happened before. He then reached out with his hands over his head, just curious, and felt like there was a solid wall there, except there was a hole in the wall, just big enough for him to go through, so he pulled himself through. This is symbolically sketched in Figure 7.

What was Locale III like? Or, if it has an independent reality as Monroe was tempted to postulate, what *is* it like? First, it was not like an ordinary dream or like his occasional lucid dreams (van Eden 1913, reprinted

in Tart 1969:145–158). Monroe makes this distinction of OBEs from his lucid dreams because although his mind feels very much like it's functioning in ordinary consciousness in lucid dreams, as in most of his OBEs, he, like most lucid dreamers, can will dream objects or processes to change and generally have success in a lucid dream. But in Locale III he could not make any changes in Locale III by simple willing it. He had to discover what the inherent rules for action were there, and abide by them.

Locale III was like our ordinary physical world in most ways. There were trees, houses, cities, artifacts, machinery. People looked like ordinary people, seemed to live in homes and have families, went to work, and ran businesses. There were roads and vehicles to travel on them, and it was so similar that Monroe was at first tempted to think he was having an OBE to some relatively unknown part of our earth. But, Locale III was not like our physical world in quite significant ways.

There were no electrical devices at all, for example, no lights, telephones, radios, TV, or any other examples of electrical power. There were devices using mechanical power, but they didn't look like internal combustion engines. Locale III had railroads, and once he got to inspect a train locomotive that was being refueled. It looked like it was powered by some kind of steam engine, and it was sitting on a track with a width that look significantly smaller than even our narrow-gauge railways. The refueling processing seemed to be a matter of taking vat-like containers from under the locomotive's boiler, putting them on hand trucks and taking them into a heavily walled building, then taking similar containers, presumably fresh "fuel," out from the building and putting them back under the locomotive's boiler. The people doing this seemed to be taking considerable precautions in the way they handled these containers, as if either they were thermally very hot or as if they were radioactive. From what little I know of physics, I think it's actually technically feasible to have relatively portable heat sources made from radioactive materials that would work to power a boiler, although it would take some advances in shielding technology to make them practical and safe.

They had roads in Locale III, and the roads were twice as wide as ours are, because the automobile-like vehicles were much wider. Even the smallest one had a bench seat that could seat five people abreast. Only the driver's seat was fixed, and the other seats were movable within a roughly rectangular space. The vehicles seemed to move at a relatively slow speed, Monroe estimated at 15 to 20 mph (Monroe had raced cars when he was younger, so was knowledgeable on mechanical things). There were no traffic lights, no inflated tires, and steering seemed to be done with a horizontal bar rather than a steering wheel.

As I said, Monroe had been a racecar driver and an airplane pilot, and he knew that this extra wide design was a stupid thing to do in engineering terms. You've got more air resistance, you needed roads that were much wider, such vehicles would have problems in differential gearing allowing the outside wheel to turn faster than the inside wheels, etc.

The "people" Monroe encountered in Locale III did not seem aware of Monroe in his initial OBEs there until he started, as he tries to describe it, "merging" with a particular person there. After several merged visits, though, he realized that while he could sense things through that person, he was creating trouble for that person, his friends wondering at his occasional ignorant and stupid behavior and inappropriate responses, so he stopped OBEing to Locale III.

It's hard to seriously consider that what Monroe was experiencing was literally true, that he was visiting in an independent reality. Hard because of the success of our dominant physical belief systems and extrapolations from them: We haven't explored any planet much but Earth. But, it's *interesting* to wonder, suppose Monroe was "there?" Perhaps there is an independently real Locale III?

I'm going to now describe a proposed hypothetical study to check the "reality" of Locale III and to pilot extending our use of the remote viewing procedure considerably further toward investigating the "non-physical," or perhaps the "spiritual."

### ***Is Locale III "Real?"***

Over the years in my studies of ordinary, "normal," as well as obviously altered states of consciousness, ASCs, the model that has gradually become most generally useful to me is that we live in a Biological Psychological Virtual Reality (BPVR), analogous to Computer Generated Virtual Realities (CGVRs).<sup>43</sup> We may implicitly or explicitly believe we are perceiving the world around us and ourselves as directly as possible, but we now believe our apparently "direct" perception is of a semi-arbitrary, neural/mental construction.<sup>44</sup> The clearest example of the BPVR process constructing an experienced reality, known to almost everyone, is nocturnal dreaming, when various aspects of our minds and brains (you can collapse that to a monistic basis for reality if you're not happy with any kind of dualism) create a world model with space and time in it, and add scenery, characters, and storylines as well as a sense of self. During the time we are "in" a dream, we almost never (with the exception of lucid dreams) question the reality of what's happening to us at the moment, we don't know we're dreaming. When we shift our state and return to our ordinary waking state, we may talk about the strangeness of the dream story or find detailed differences from ordinary

consciousness—I've noticed, for example, that the experienced "visual" detail in my dreams is generally not as great as it is in waking—and then, as is normal for our culture, we tend to subrate and dismiss our experience as *just a dream*, and make no effort to remember it, so it's gone.

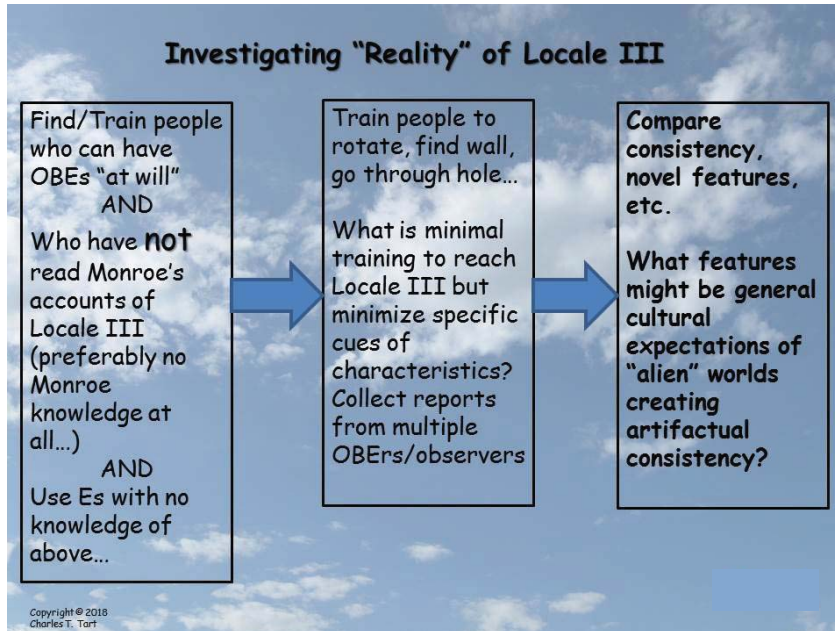
I model ordinary, "normal" waking consciousness as basically the same sort of BPVR as a nocturnal dream, probably with many specific creation mechanisms and processes in common with the two states of consciousness, but while awake there is a massive amount of sensory information coming in. Much of it is about our bodies, what they feel like, position and movement of our limbs, etc., and often even more as to what is sensed by our exteroceptors that tell us about the physical reality around us at any time. Thus the BPVR process in waking has to constantly and rapidly adapt its creations to be consistent with sensory, interoceptive, and exteroceptive information coming in, otherwise we will walk into walls or off the edges of cliffs, etc., and not survive.

### ***We Live in Virtual Reality***

From my MINDS theoretical perspective, *we exist in a virtual reality all of the time*.<sup>45</sup> The difference between different virtual realities, different states of consciousness, then, has a lot to do with what kind of "external" reality we are in and how well information about that environment is integrated into the ongoing BPVR world simulation—the virtual world that we are existing in and taking for real at the time it's happening, as well as culturally and personally learned and conditioned (and almost always implicit) rules for reality construction, and the condition of our body.

Insofar as you believe in a total materialism, then only our BPVR of the physical world is a simulation of a *real* world, and while other simulations may *feel* real as we experience them, they're basically all fantasies, subrated like dreams. This leads us to an immediate question with regard to Monroe's Locale III: Although it *feels* like an external "physical" reality to him, and passes his own test for whether a reality is independently real or more a matter of thoughts and beliefs, is it one? Or is it just a fantasy that is more stable than typical dreams? Or, to avoid an implicit assumption that Locale III can only be real if it duplicates everything in our physical reality, does Locale III have an independent reality in that it exists "somewhere/sometime" regardless of whether Monroe or anyone else is experiencing it, and it has a lawful structure?

Perhaps another way of thinking about the degree of reality of Locale III is that it might be experientially real for Monroe (and perhaps some other people) in the sense that it's a set of genetically coded instructions in the human brain, and, under appropriate conditions, an experience of being in



**Figure 8. Investigating the reality of Locale III.**

Locale III, with its inherent characteristics, will be created. But if all human beings who have that particular inborn genetic program have died before passing on their appropriate genes, Locale III will never exist again. I will not pursue this particular line further here, but it's an interesting one.<sup>46</sup>

A further puzzling question is why genes to create a Locale III should evolve from evolutionary processes at all. What kind of survival advantage would they produce? In my early career doing hypnosis research, for example, two highly talented hypnotic subjects, who were experiencing what I called *mutual hypnosis*, jointly created a very real and psychologically potent reality as they verbally suggested things to each other,<sup>47</sup> but my bias was certainly to call it a transitory fantasy . . . but perhaps somewhere there is a "non-physical" realm like what they experienced?<sup>48</sup>

### ***Hypothetical Study on the "Reality" of Locale III***

As shown in Figure 8, to begin investigating the degree of "independent reality" of a place/experience like Locale III, you could start by finding people who are naturally talented at having OBEs, or people who have characteristics such that they can be trained to have OBEs pretty much at will.



I say “pretty much,” as experimental time is costly, and someone who can have an OBE more than once a month is not likely to have it at the time and in the manner you desire. But, even more importantly, the selection process must work to assure that these are people who have *not* read Monroe’s books, and otherwise do not know anything about Monroe’s accounts of his visits to Locale III. Ideally they should have no knowledge of Monroe’s experiences at all, thus allowing a wider variety of OBE experience qualities to be checked than just the details of Locale III. Sadly for fans of Robert Monroe’s books, or for people who have taken courses at his Monroe Institute, this pretty much excludes anyone who is trained in Monroe’s methods. Further, since I’m very sensitive to the problem of experimenter bias, you should use experimenters and laboratory staff who also have no knowledge of the qualities of Locale III. The basic investigation parameter is sketched out in Figure 8.

Having found some people who can have OBEs reasonably at will, you then train them to have an OBE like Monroe reported, starting by feeling “vibrations” in the body. Specifically, for Locale III, once an individual’s vibrations have started, they should learn how to mentally rotate along the long axis of their body, find a wall just above their head with a hole in it, and go through the hole. This raises interesting questions: If Locale III is independently real, what’s the minimal training required to have someone experience Locale III, but a training that minimizes and ideally eliminates any specific suggestions of the expected characteristics of the locale once the OBEr is there?

Some aspects of such a non-biasing training are straightforward. I can’t imagine, for example, why feeling out of your body and going through a hole in a wall would suggest a world in which the cars were twice as wide as cars in our world! So that part of the “travel instructions” doesn’t seem biasing. But after self-initiated reports of OBEs in this attempt are gotten, investigators would have to be very careful about the kinds of followup questions they asked, as the wording of the questions might suggest the features whose independent reality we are trying to ascertain. And with experimenters who are also blind to Monroe’s experiences, how would you train them not to suggest things that produced artifactual similarities?

It’s relevant to note the finding among experimenters and taskers who’ve used remote viewing in intelligence missions that, in general, the less leading information given about the target in a given session, the more likely you are to get relevant, psi-acquired information. Specifying a target by arbitrary spatial coordinates, for example,<sup>49</sup> is unlikely to lead to artifactual specificity with almost anyone, other than gross features; like with a certain range of latitude and longitude coordinates, that coordinate must

be in an ocean, so water or an island is likely. In many successful intelligence applications of remote viewing, a quite non-specific request, such as "Describe today's target please" works quite well. How the remote viewer knows what target is desired is an interesting question.

You then go on to collect reports from multiple OBE years/observers reporting that they go through a hole in a wall, and see how much they parallel what Monroe has reported about Locale III.

### ***Possible Outcomes of Locale III Studies***

Suppose we had had a reasonable number of trained OBEs or remote viewers who reported they had experienced going through the "hole in the wall," and who gave us detailed reports of ensuing experiences. What might some of our findings be?

Perhaps the most interesting and startling outcome would be to find that independent OBEs/remote viewers/explorers showed strong consistency with what Monroe reported for Locale III, and we could not reasonably attribute it to common cultural expectations. What kind of interesting research would be stimulated with a working hypothesis that Locale III seemed to be independently real? Is it a physically real place somewhere in the physical galaxy? Or "independently real," but not a part of any practically knowable physical reality? Or perhaps showing apparently physical characteristics, but of values that our general picture of the physical world deemed impossible? What would "independently real" mean in that case? Perhaps a part of a real "spiritual" or "psychic" or "non-physical reality?" How would you tell the differences among these three categories? Admittedly those three terms are vague and associated with much noise, emotional as well as intellectual, at this stage of our knowledge, but interesting to think about . . .

A relatively contrary outcome to the above might be that none of our explorers describe anything that shows particular consistency with what Monroe reported, especially the notably unique features he attributed to Locale III. We then would probably conclude, at least within the limits of the number and talents of the explorers we used and the adequacy of our induction procedure for getting to Locale III, that it existed in some form, perhaps only in imagination, only as a BPVR, only for Robert Monroe. Why his mind or brain created Locale III would be a fascinating psychological problem, but one not likely to yield to investigation, since Monroe is long deceased. But other people might have similar creations, and understanding them would advance general psychological knowledge.

We might also find significant relative consistency among our explorers, in spite of our minimizing expectational cues in the OBE induction process, and would want to ask how much of this might be due to gen-

eral cultural expectations about what alien worlds would be like. If reports of people having NDEs in American culture were very much in line with Biblical ideas (they aren't), for example, we might be inclined to attribute this to the widespread knowledge of Jewish and Christian ideas in our culture, even in people who were not formally religious. For NDEs, the fact that NDErs with highly different beliefs and cultural backgrounds reported striking similarities is what made NDEs much more interesting to study and in their implications than if we could easily dismiss them as just fantasies of a dying brain.

Another noise and biasing problem, common to many psychological studies, is that simply putting people through the training and collecting of their OBE or remote viewing reports constitutes a suggestion that we at least expect them to find *something* interesting, and probably more interesting and surprisingly different from just descriptions that would apply to the ordinary world.<sup>50</sup> To investigate this further, we have to carry out extensive studies into what cultural expectations our explorers have and the degree to which they could shape the particular state(s?) of consciousness necessary for experiencing something like Locale III.

Then there might also be interesting investigations of what the evolutionary significance of phenomena like non-physical locales were. If, for example, you theorized that OBEs and NDEs were merely wish-fulfillment fantasies of some sort, a kind of psychological reassurance that even though we're going to physically die, we might go to some kind of heaven, why has OBE and NDE content evolved that way? I've always been puzzled, for example, by the fact that most NDEs, which usually have an OBE component, are *extremely* positive to experiencers! Insofar as evolution "advances" by having survival-enhancing traits passed on, from an evolution theory perspective you would expect NDEs to have evolved to be horrible in order to make near-death survivors much more careful about not risking their lives and so being able to pass on their genes, not a wonderful experience that can make dying a wonderful idea, encouraging more risky behaviors . . .

And, coming back to Locale III specifically, why odd features like cars that are twice as wide as known cars, or no electrical devices?

Or we might find enough inconsistency to doubt that Locale III has any kind of independent reality, but the results are interesting enough, and a useful pilot on how to investigate other "non-physical" realities. These would especially include ones people have talked about that have religious and spiritual significance for people, such as heaven realms and hell realms, bardos, and afterlife states. Monroe, for example, reports visiting a variety of sort-of-seemingly-solid-and-real *belief realms*, which he called Locale IIs. He thought these were created and maintained because the surviving

souls of believers in some particular religion gather together and reinforce each others' and their own faith in the correctness of their religious beliefs. There's a kind of semi-independent reality to them, yet they are also strongly shaped by the entities there. Given the motivating power of belief in such spiritual realities, I don't think it's sufficient to simply be totally materialistic and say it's all nonsense and let's ignore it or call it pathology, and try to make people more rational. These kinds of experiences keep happening to people, and we need to investigate their qualities to find out more about what their nature is.

## Conclusions/Summary

### Obstacles

I've sketched a number of ideas for creating a relatively scientific psychology of the mind, which could also put the *psyche*, the mind, back into a central position in psychology (and perhaps other fields of science). I've touched lightly on methodological challenges, mainly mentioning them in Notes, not wanting to overly interrupt a flow that I hope will inspire others to push our knowledge forward.

Basically, I think most of the problems that undermined an earlier attempt to create a science of *mind*, a mental chemistry in the past,<sup>51</sup> can be significantly *reduced* in power. I'm tempted to say overcome, but I accept the fact that we are human and our nature means we undoubtedly have certain kinds of biases built in.<sup>52</sup> I do think we can understand those biases more and reduce their distorting effects as we try to get a clearer view of the ultimate nature of reality, but it may only be a more probabilistically true view of reality, rather than a certainty. And, of course, we need all the help we can get from various other kinds of disciplines to help us in this quest!

### Notes

<sup>1</sup> I use Notes to insert references to more detail, methodological points, and suggestions for deeper exploration, but, as I explain later in the text, the important overall message of this essay can best be grasped, with, I hope, enthusiasm, by saving these Notes for more detailed reading later. At this specific point, I simply refer to my most recent and comprehensive book on psi and consciousness (*The End of Materialism: How Evidence of the Paranormal Is Bringing Science and Spirit Together*) (Tart 2009) where I have indicated a number of reasons psi is important for any intelligent person's worldview. The hardcover version is now out of print, but it's available in paperback as *The Secret Science of the Soul: How Evidence of the Paranormal Is Bringing Science and Spirit Together* (Tart 2017). I

- expect the High Priests of the Church of Absolute Materialism to show up any day to take my white lab coat back for daring to use a word like soul . . . ;-)
- <sup>2</sup> Compulsive scholars like me will find it hard not to read these references, but remember, it's just an attempt at humor here . . .
  - <sup>3</sup> (Bierman & Rayberon 2013).
  - <sup>4</sup> The title of the Parapsychological Association talk was Parapsychology as an Essential Component of an Expanded Science of Mind: Promises and Challenges.  
[https://www.parapsych.org/media/player.ashx?id=xY\\_g8UBiu0E](https://www.parapsych.org/media/player.ashx?id=xY_g8UBiu0E) and  
<https://www.parapsych.org/media/player.ashx?id=6e1lddiFT4E>
  - <sup>5</sup> I've discussed the shortcomings of this position, and, indeed, of any absolutist "Everything will completely reduce to X," in many articles over the years (Tart 1972a, 1975a,b, 1976, 1977a, 1978, 1979, 1981, 1987, 1990, 1992, 1993, 1996, 1997, 1998a,c, 2002, 2004 ).
  - <sup>6</sup> Promissory materialism is not science, for it does not meet a most basic criterion of what constitutes science, namely that theoretical explanations can be falsified by data. There is no way you can ever disprove the premise that "Someday" your theory of the efficacy of (fill in your favorite explanatory mechanism here) can be tested if it does not make observable predictions about data.
  - <sup>7</sup> I am not a very skilled meditator or introspector, but even my basic level of practice often demonstrates that as one learns to observe ongoing mental experience with gentle concentration, non-interfering, and equanimity, an experience such as an emotional feeling often reveals itself as a compound of two or more emotions. My own writings (Tart 1986, 1994, 2001) give useful instructions for a basic level of vipassana (insight meditation), and more advanced but highly practical instructions can be found from sources like Shinzen Young's writings (Young 2005, 2016).
  - <sup>8</sup> I've written about these problems with the mental chemistry attempt elsewhere (primarily Tart 2005).
  - <sup>9</sup> At least the kind of person who was associated with an institution of higher learning, as they have class and status differences, too.
  - <sup>10</sup> Sometimes I've tried to describe my own experience when something interesting happens and I see the many difficulties. To begin with, it's flowing and changing rapidly, I can't possibly talk or write fast enough to accurately and comprehensively describe it, and many aspects don't have words that are accurate in the first place. How about sampling, I wonder, suppose I tried to be more thorough with every fifth or tenth experience? Get enough of those and you would get a reasonable sample of what the flow of experience is like? Develop a special language to describe experi-

ence? Some of the meditative traditions have tried. But language is tricky, I notice at times that in my desire to adequately voice an experience I'm letting the meaning of the words I'm using predominate and that's not quite what the experience is, etc. But many fields of science have become quite good at data description, and what would happen if we gave a lot of attention to it instead of blocking ourselves in advance by believing that experience is inherently difficult to describe? One of my favorite sayings, attributed to Henry Ford, is that those who think they can and those who think they can't are both right . . . I suspect there are actually a lot of specialized vocabularies to describe aspects of experience if we began looking for them . . .

- <sup>11</sup> Even though I've argued that the apparent objectification of laboratory procedure is often misleading, the human relationships between Experimenter and "subjects" can be vitally important (Tart 1964, 1977b, 1980, 1984, 2010, Troffer & Tart 1964, Hilgard & Tart 1966).
- <sup>12</sup> As an example, one of the reasons that, by parapsychological standards, an enormous amount of money was spent on *remote viewing* over twenty some years (May & Marwaha 2018) was that *remote sensing* was a widely used and fashionable engineering research area during that time, making what was done as remote viewing much more scientific and acceptable sounding than if it had been called *telepathy* or *clairvoyance*.
- <sup>13</sup> One of the chief investigators of remote viewing, Edwin May (May, personal communication, 2018), pointed out that from 1973 (the Stanford Research Institute program's beginning) through 1995 (22 years) there were 504 intelligence gathering missions requested by 19 different USA intelligence and military organizations. Of these 19 agencies, 17 were satisfied enough with initial results that they returned with new missions. One joint task force came back 172 times alone. There would have been much more use of remote viewing for intelligence operations except for political factors, powerful government people mindlessly dismissing it or calling it the work of the devil and trying to stop it. As to archaeological applications, I highly recommend Schwartz's reports (Schwartz 1978, 1983, Schwartz & De Mattei 1988, 1989). Having hiked various deserts that, to me, were featureless, I've always wondered how in the world archaeologists knew where to dig when there are no surface ruins or other signs. Fascinating as they are, it would take up too much space here to give examples of how remote viewers in Schwartz's studies found buried ruins that had been lost for hundreds, if not thousands, of years.
- <sup>14</sup> Various factors that may correlate with remote viewing skill have been tested—for extensive documentation see May and Marwaha (2018)—but my impression is that previous success at remote viewing is still the best

screening procedure. Correlations that may be statistically significant in testing groups of people may not be practically useful in smaller studies. A parallel was in the research on the nature and uses of hypnosis that I was involved in early in my career. The best predictor of hypnotizability was a work sample: Try a hypnosis induction and suggestibility test procedures on a person and see how well they did. Hypnotizability turned out to be a relatively stable personality characteristic, although it could be increased under some conditions (Tart 1970). I don't know if that is true for remote viewing ability. Certainly it would be useful to find correlates with a strong enough relationship for practical screening if projects involving training large numbers of remote viewers were undertaken.

- <sup>15</sup> The procedures developed in the SRI work and Schwartz's work are state-of-the-art. Many variations developed by others as remote viewing became fashionable in popular culture are untested or questionable.
- <sup>16</sup> There can be a kind of dark humor here, as Schwartz reports that sometimes the bureaucratic hurdles needed to be able to dig seemed far worse to overcome than the actual cost of digging.
- <sup>17</sup> An experimenter, the "outbound experimenter" or "outbounder," went to the target site in the early experiments, as it seemed common sense that having someone the viewer knew at a target site would make it easier to access psychically. Sometimes the outbounder was referred to as the *beacon* person. Later studies without outbounders generally seemed just as successful though, although I'm not sure there's been a formal comparison of this.
- <sup>18</sup> Here and throughout the paper I remind the reader that when I write "remote viewer" I usually mean a person using the procedures developed at SRI and by Schwartz, containing such essential elements as (a) all of the research team accepting that remote viewing can work well and hoping it does so, (b) the viewer being completely blind to the target, (c) a skilled interviewer to help the viewer elaborate and clarify his or her impressions, and (d) blind judging by otherwise skilled judges to detect matches. Whether other procedures to elicit psi information will be useful is a question for other empirical research.
- <sup>19</sup> We could talk about the *target* person's mind, but I don't like the associations of a person being a target, especially in a therapy context.
- <sup>20</sup> Some examples of the interaction of psi and psychotherapy can be found in the writings of two of the pioneers, Jan Ehrenwald and Jule Eisenbud (Ehrenwald 1971, 1977, 1986, Eisenbud 1970, 1983).
- <sup>21</sup> Given the usual rigor of formal parapsychological experiments, why would I preface "almost" to "certain?" It's my temperament—I distrust absolute ideas like "certain." As my colleague David Hufford observed,

“What I have always told my graduate students is that *certainty* is a great direction in which to head, but it is a disastrous place to believe you have arrived” (2014 personal communication),

<sup>22</sup> Classical “telepathy” procedure experiments instructed a person, designated the “sender” or “agent,” to try to send the target information, but usually we have no idea of what the ostensible sender actually did, whether they did it in a strong and/or stable fashion or with great variability, etc. Knowledge of the possibilities of various meditation trainings creates the possibility of deliberately creating strong, stable experiential content, while the success of clairvoyance experiments suggests that a sender may not usually be of much value. I make that last statement from knowledge that the bulk of older card-guessing experiments showed no significant differences in level of psi, even though the initial expectations of experimenters was that someone “sending” would enhance results (Rhine 1947, 1953, Rhine & Pratt 1957, Wolman, Dale, Schmeidler, & Ullman 1977). I’m not sure if general unimportance of a “sender” would apply to remote viewing procedures.

<sup>23</sup> See comments on “pure telepathy” tests elsewhere in this article.

<sup>24</sup> This procedure will not meet the criteria used in the old card-guessing era for a test of “pure” telepathy, i.e. where a percipient successfully describes the content of a sender’s mind, but this success cannot be ascribed to clairvoyance or precognition because no physical representation of the target exists at the time of the test or is created in the future. The difficulties of “objectively” checking the correctness of scoring when there is no objective record produced some ingenious but laborious experimental procedures, the best of which was McMahan’s study (McMahan 1946).

<sup>25</sup> Other methods than blind human judging for assessing the amount of psi-acquired information in a remote viewing trial have been tried, but there are inherent problems. If the system gets too fine-grained, for example, useful gestalts of perception may get lost. At the other extreme, using mainly the overall match of the gestalt of the attempted remote viewing may lose details. Thus I just mention the original style of blind judging here for simplicity.

<sup>26</sup> Success in this might be useful in some therapy cases, as informing the patient about it might reassure them that a new source of potential assistance is being developed to use with them.

<sup>27</sup> Interest in and investigation of psychoanalytically based ideas began waning in the 1960s and is still largely neglected in psychology and psychotherapy, although interest is growing again.

<sup>28</sup> The variations and inconsistencies as to what people mean when they use the term *spirit* call for putting it in quotes every time I use it, but it looks



awkward, so I'll skip using quotation marks unless there's an especially vague usage being considered.

- <sup>29</sup> An early discussion of what constitutes the essence of science, "pure science" as I usually call it, was in 1972 (Tart 1972b), while my most recent elaborations are in my book *The End of Materialism: How Evidence of the Paranormal Is Bringing Science and Spirit Together* (Tart 2009), now retitled and available in paperback (Tart 2017).
- <sup>30</sup> Note that in my first article on OBEs (Tart 1967b), I used the acronym OOBE. John Beloff, then editor of the *Journal of the Society for Psychical Research*, reacted by reminding me that the "o" in "of" was not to be capitalized in acronyms (I think anything goes now), so I shortened it to OBE in future work. How could I not respect the linguistic opinion of a distinguished British professor? I was also motivated to drop OOBE for OBE by an unexpected consequence. People who had read my first article started to come up to me after lectures to tell me about their personal ooh bees; I had never thought anyone would pronounce it. ;-)
- <sup>31</sup> In the altered states of consciousness class I taught at UC Davis for two decades, when I lectured about dreaming I often asked the hundreds of students in the course whether anyone wanted to argue that they *could* be dreaming, *right then*, about being in a lecture rather than awake and really here. No one ever argued that such a dream couldn't occur. Someone always had some clever intellectual argument that they could be dreaming this then, but when I asked if anyone wanted to bet me fifty dollars that they could wake up and find themselves in bed at home in a minute, nobody ever took up the bet.
- <sup>32</sup> Lucid dreams, where you know you are dreaming but the quality of your consciousness during the lucid dream seems as clear as your ordinary waking consciousness, were something that had happened to me as a child, but were brought to my scholarly attention by a now classic article by Frederick van Eeden (van Eeden 1913), which I reprinted in my *Altered States of Consciousness* anthology (Tart 1969). This had the salubrious effect of alerting many who had occasionally experienced lucid dreaming, but worried that it was abnormal or a sign of mental illness, to accept lucid dreams as an interesting experience instead of something to worry about. Subsequently, researchers such as Stephen LaBerge greatly added to our knowledge of lucid dreams (LaBerge 1985).
- <sup>33</sup> Of course if you think about whether you're dreaming while in an ordinary dream, you may reason that you're not dreaming, but on waking recall that the state of your consciousness was much less clear and logical than in waking. But memories of the quality of consciousness in OBEs are that it was clear, perhaps sometimes clearer, than in ordinary consciousness.

- <sup>34</sup> I know the term *soul* is objectionable to some people, but attempts by various writers over the years to replace it with a more emotionally neutral term that would facilitate scientific study have not found general acceptance. I keep the term in this paper, without awkward quotes from this point on, in two ways, usually clear from the context. The first is as a shorthand way to characterize certain kinds of experiential *data*, such as the feeling of having been out of body but still conscious and existing, and usually with an emotional feeling that the existence of such a soul is very important. The second is as a theoretical term about the absolute reality of such an “entity” or “process” quite aside from its psychological consequences. Absolute reality would here mean that if all human beings ceased to exist, souls would continue to be real. Strong emotional beliefs and reactions would also be associated with this second meaning of the term *soul*. As scientists we are interested in both the psychological aspects of soul, irregardless of its absolute reality, and the degree to which we can study its absolute reality or lack of it within the framework of essential science.
- <sup>35</sup> I’ve been a student of Buddhism, but not a “Buddhist,” for some years, and although Buddhism claims there is not some permanent, immortal soul, I suspect this insistence is a teaching device to help students lessen habits of over-attachment to concepts. As an example of why I don’t take the no-soul idea literally in Buddhism, it is hard for me to picture how a person’s personal karma could follow them from life to life without a “something” or “some-process” to carry the information. And Buddhists report OBEs.
- <sup>36</sup> The Apostle Paul being taken up to heaven sounds like an NDE, as an example.
- <sup>37</sup> Elements of this MINDS approach are scattered through many of my writings, but I have not yet consolidated this approach in a formal way. Some introduction to major elements can be found in Tart (1993, 2008).
- <sup>38</sup> I speak of kinds of world simulation processes here, in spite of the fact that experiencers often feel as if, analogously, social, psychological, and biological blinders have fallen from their eyes, and they now perceive the ultimate level of reality directly. How much is this correct and how much of it is mainly a contrast effect? Since there is so much processing and creation of apparent, perceived “reality” in ordinary waking, it seems cautiously conservative to assume some similar processes are going on in ASCs, OBEs, and NDEs. Some aspects of reality may be being perceived more directly, some perhaps with more semi-arbitrary processing. I’ll assume that research will someday be able to specify the degrees of “true” perception versus semi-arbitrary construction.

<sup>39</sup> (Tart 1968).

<sup>40</sup> I emphasize the caution I showed in drawing conclusions from that study, as half a century later I am still being erroneously accused, clearly by people who have not actually read the original report, of claiming to have *proven* that OBEs mean a soul is really “out.”

<sup>41</sup> (Tart 1998b).

<sup>42</sup> I don’t recall for sure whether he was still “inside” his physical body after rotation or had floated a little above it. The latter is shown in my figure, but I think he told me he was still “inside” the boundaries of his physical body, which was lying on its back.

<sup>43</sup> (Tart 1991, 1993).

<sup>44</sup> The degree to which the BPVR we experience is constructed in the brain and nervous system, as well as in a different “mind” reality, is a question to be researched one day, rather than holding firm a priori beliefs about it with no reference to observable data such as psi.

<sup>45</sup> One experiential exception is the feeling, sometimes occurring in various ASCs, that we are now really perceiving reality *directly*. This *feeling* is data, to be studied. Like any theory in science, though, we must test its actual applicability to observable realities. The possibility that such experiences may actually be truer understandings and perceptions of reality is exciting. I think it happens that way sometimes and other times is illusory and calls for much investigation.

<sup>46</sup> The possibility of unconscious mind-to-mind communication, implicit telepathy, creates another interesting possibility that even if all people having the genetic heritage to create a close version of Locale III in their BPVR processing die, so it ceases to “independently” exist, it could spring back into existence the next time it is genetically possible even though not specifically created by certain genes in a new person. Then unconscious telepathic processes could fine-tune details for more agreement across persons. And, to point in the direction of really difficult methodological problems that could hamper study, suppose the appropriate information for creating Locale III or the like is stored “somewhere” even if not in living human memory? I’m not suggesting that essential science cannot cast any light on this, but it does get complicated!

<sup>47</sup> (Tart 1967a, reprinted in Tart 1969:291–308).

<sup>48</sup> I have deliberately made this statement in a strong form to make the reader wonder if I have abandoned my scientific objectivity. I haven’t abandoned my *attempts* at using scientific objectivity—my studies of my own mind over the years have shown me I’m very biased on many things, but knowing what these biases are gives me more of a chance to be more

objective—but we’ve been discussing a lot of far-out stuff, and I don’t want the reader to get too accepting . . .

<sup>49</sup> At SRI we did one remote viewing experiment where we built a square, open-front display cabinet with 16 discrete cubbyholes in it, and an independent experimenter randomly arranged 16 different objects in them. The display cabinet was then kept in a secure vault. Then instruction to a remote viewer in a distant room would ask her or him for a description of one of the items by specifying the coordinates of that object, such as B3, (second shelf down from the top, third compartment from the left). The results were significant for psi (Puthoff, Targ, & Tart 1980).

<sup>50</sup> When the first reports of demonstrations of Experimenter bias appeared back in the 1960s (Orne 1962, Rosenthal 1963, 1966), I envisaged a major shakeup in psychology and related fields as we realized how biased many of our studies could be, as well as expecting strong resistance to accepting the reality of E bias. My own and Suzanne Troffer’s study of E bias in sophisticated Es, *who knew they were going to be tested for bias, but showed it anyway* (Troffer & Tart 1964) demonstrated how strong such bias could be, as well as the resistance to accepting it. We were *scientists*, highly educated, superior beings dedicated to discovering truth, we couldn’t be biased!

To my amazement, studies of E bias seemed to rapidly fade away, as if the problem had been solved by straightforward means such as having research assistants act as the Es who actually ran Ss, rather than the principal investigator, who we would expect to be the most invested in particular study outcomes. A simple matter of eliminating possible bias by using intermediaries?

The problem of E bias is made even stronger once the existence of psi is recognized: How do you stop bias being transmitted over an information “channel” of almost entirely unknown characteristics, such that we do not know how to lessen or eliminate it? I’ve long suspected that the intense and irrational resistance to accepting research involving the reality of psi is strongly motivated, at some level, by the realization that psi may make it very difficult if not impossible to control bias.

<sup>51</sup> Ignoring individual differences; experimenter bias; culture boundedness; insufficient training and lack of method; the dominance of materialism; and the stubborn assumption that the mind is inherently private, a priori we believe we can’t really do well in studying mind, so we don’t try that hard, and, sure enough, we don’t do very well.

<sup>52</sup> It’s very important not to get carried away with the idea that we have built-in biases as humans and so don’t try hard enough to overcome them!

My colleague David Hufford observed (personal communication, 2014):

*What I have always told my graduate students  
is that certainty is a great direction in which to head,  
but it is a disastrous place to believe you have arrived.*

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