Handouts for Discussion 1

Dear workshop attendees,
I have thrown together an edited (and in some places a little mangled) selection of posts from the MBT Forum (Go to www.My-Big-TOE.com and click on “MBT Forum” in the section “Connect”) that I think you may find interesting.

The first two:

An Orientation To Virtual Realities
http://www.my-big-toe.com/forums/viewtopic.php?f=9&t=3043&start=0

An Orientation to Nonphysical Experience
http://www.my-big-toe.com/forums/viewtopic.php?f=9&t=2915&start=0

contain some basic information about the nature of NPMR that I would like to discuss in the Ashville workshop. Since these first two consume almost 11 pages by themselves and since workshop time is very limited, I am hoping that as many attendees as possible will read at least these first two before they arrive at the workshop. During Session 2, after a very short intro, I will answer your questions or expand on any of the material you find in this handout.

Tom

1 An orientation to nonphysical Experience and Communication.
To make rational sense out of (and to be able to communicate) your personal NPMR experience you turn that experience into metaphors and symbols that have specific meaning to you (relate to your experience database). So, much of what you see, hear, smell, feel and taste while in NPMR (interpretations in terms of PMR physical senses that have no applicability in NPMR) is created by yourself as the closest pattern match you can make, to bridge between what you experience and what is in your personal experiential database. The more you probe, explore, make connections, and gain understanding, the greater and more capable that personal experiential database becomes in its ability to interpret NPMR experience with a minimum of distortion.

It should be clear why skepticism is so critical, why you must learn to live with uncertainty (reality anywhere is more probable than certain) and why just zipping around experiencing whatever, is not very productive compared to a systematic probing and collecting of data in order to assess what is fundamental and outside of you from what is not. It should also be clear why those who do just zip around experiencing whatever without skepticism or deliberate logical probing, come back with lots of exciting fanticiful tales to tell that, for the most part, mean nothing in a literal-detail sense and typically agree only with the observations of others who share similar cultural beliefs. While the details are different, these stories are most similar in terms of the generalities that carry the actual significance of the NPMR experience in terms of shared metaphors and symbols. Also there is agreement when shared beliefs and expectations lead to using similar metaphors and symbols to interpret one’s experience (unintentional leading the witness toward a specific generally acceptable conclusion). All these stories only fuel the expectations and beliefs of their listeners and make real understanding that much more difficult. Now we must drag ourselves out of the jaws of a deeply ingrained belief trap before getting a glimpse of the bigger picture that Is not severely warped by the limitations of a host of explorers who mean well and are doing the very best they can to interpret accurately but who do not understand the nature of reality and are content to believe that what you see is what is out there.

This is the most difficult concept for people to get. Almost no one actually gets it at a fundamental level. That is why we talk of NPMR as a “place” with dimension where we have bodies and use our physical senses to describe what we see, hear, etc. Of course that is all oxymoronic – you don’t have a body or physical senses in NPMR, but we speak that way and use additional metaphors (like “the mind’s eye” or OOBE) to cover the inconsistencies that such assumptions generate in order to communicate to people who cannot conceive of any other way of interacting. ---- A simplistic way of speaking in order to communicate anything at all. Sort of like atoms being basket balls with BBs flying around them in circular orbits. A Complete fiction but far more understandable than the truth.

For these reason, the Hindus see 7 very specific chakras, while the Zen Buddhists and shaman do not. Why? chakras, are only metaphors and not fundamental. The beams of intense white light that light-workers use to heal are just tools/metaphors. Light is only a metaphor. Energy is only a metaphor. The various energy bodies (auras) we see around people are metaphors for the data we receive about those people – data that answers our intent when we connect with people at a level deeper than the physical. The data is real, while what we describe to others is our subjective interpretation of the data. That interpretation must necessarily be expressed in terms of our personal experience data and our personal beliefs. People travel through tunnels or go through doors or fly about in NPMR because they believe that you have to move to go somewhere. Early astral travelers were connected to their bodies by silver cords because they believed the physical body was fundamental and the astral body was derivative. People have to sit up or roll or do something physical to get OOB when only a shift of perspective is necessary because they believe you have to do something physical before anything can happen. People talk to (interact with) their dead relatives who appear in familiar looking bodies wearing typical clothes because that is more natural, comfortable and believable than interacting with data. Ever wonder why all those non physical entities are humanoid in form (if they are good guys) and are always wearing PMR clothes – have you noticed that robes are always in style for strangers in NPMR. All is nothing but data moving back and forth and we dress it up in human PMR form and function from our past experience because that is what we are used to, that is what we believe and the way we think – so that is the way we interpret the data.

Explorers report what they see with their own eyes. However, eyes exist only in PMR -- seeing is a physical concept. In NPMR we don't see, we interpret what we experience (the content of the data) in terms of physical sense data because that is our habit -- the only way we know how to express/communicate information. Being skeptical, having no expectations, and not having any biases or beliefs is critical to getting a good pattern match metaphor that captures the essence of the NPMR experience.

In any reality frame, One must strive to become aware of one’s abilities and limitations and discover the operational causality of the immediate environment.

Because of the nature of consciousness (units of bounded organized data, sharing bits), everything is subjective, only consistent well planned probing and a statistical analysis of the results of that probing -- i.e. carefully considered experience, can give you a sense of what the objective reality behind the data is like.

Mostly NPMR experience is relationship centered (about interaction with others) as opposed observing the set. PMRs have sets (a stage and props) while NPMR mostly has just actors and ideas (data).

Picking up a rock in PMR has no direct analog in NPMR. People know that either you can pick up a rock or you cannot. If you say you can pick up a 100 lb rock then that is easy to test conclusively. If you say you do remote viewing or OOB, people expect you to describe the painting hanging in the next room – and do so just as if you physically walked into that room. Maybe can, maybe can't – there are many variables.

What is "objective here" and what is "objective there" are as different as rocks and data. This misunderstanding accounts for much difficulty for psi researchers and the public in general. They believe that operating in the non physical must be similar to operating in the physical. Either you can do it, or you are as bogus as a 3 dollar bill. There are real physical and mental issues of attaining and maintaining precise altered states – and even more difficult: remaining perfectly detached. No doubt these conditions can be exceedingly difficult to consistently achieve on demand. But that is not what I am talking about here. These individual problems are in addition to issues that are fundamental to the nature of consciousness

The process of perception is the same in all reality frames (objective source with a subjective interpretation) but the mechanics in PMR and NPMR are very different. One might ask: If our Physical world is really subjective why does it appear to be objective – the same to everyone? Answer: Because we all have nearly identical physiology (sensors). And, to a lesser extent, very similar cultures. Lets explore the differences: What if some people could only see Visible, or UV or infrared light? Different perceptions produce different realities. Have you ever experienced not being able to find something that is right in front of you – that is usually a belief issue. The key concept is: NPMR is experienced through your consciousness – your consciousness represents an awareness limited by what you come in with (physiology, personality, and consciousness quality) and the PMR experiences you have after you get here – all of which influences how you interpret those experiences through a complex iterative process of choices generated by feedback. In NPMR, You experience through your consciousness, not through your senses. Do we all have nearly identical personalities, beliefs, and experiences like we do sensory equipment? Do we all interpret the same experience in the same way? 5 people viewing the same accident from the same corner give 5 different stories – why? Then why would one expect that we would all perceive the same reality in NPMR when our sensing mechanism (consciousness receiving data) is so dramatically individual?

The language of consciousness within the less constrained virtual realities (what we call the nonphysical) is about the choices, the intents, the web of interaction, about learning potential –- People and relationship -- not about the details of the set or on the petty ego needs of the players. The details of the set are peculiar to your PMR experience and personal in how they relate to you -- but have no intrinsic value or importance. They are often not saved in the databases in high fidelity detail – you may, in your remote view of the historical database, notice a picture on the wall but the details of the picture are not recorded or displayed unless there is some big picture need to do so (some meaning or significance or some connection to someone's growing up). Insignificant data is not tracked or stored. Ever notice things that you have seen 100 times but never recorded? Neighbor's green shutters ; a comic book store. The finite resources of the larger consciousness system are not wasted on recording and displaying things that are not relevant to the purpose of the system.

"What you experience (data received) does have an objective source within the reality frame you are in. but how you experience it is subjective." Here, in PMR that subjective component is in the margins (5 people all see an accident from the same corner) – in NPMR – data exchanges between very fundamentally different interpretive consciousnesses -- the difference is not in the margins – it is primary.

Data from NPMR: Try to describe the room you are in both conceptually and linearly. The conceptual lacks detail but captures ambience and significance while the linear is a descriptive list of items. For those in PMR it is the linear detail (the facts) that constitutes "proof" of an NPMR vision because PMR residents extrapolate their sense of an "objective" physical reality to their expectations of NPMR. However, NPMR bandwidth is not wasted on insignificant PMR details.

Let's explore the idea that you interpret the data you receive from NPMR in terms of metaphors and symbols that mean something to you – that are relevant to your experience data base.
For example: You experience a NPMR being of great knowledge teaching or helping others on a grand scale. As a result, you interpret: Saint, angel, Jesus / Ancestor, guru, Master / Advanced Being, guide, helper depending on your beliefs and culture. If You have a deep fear – insecurity – that you are small and out of your element when in NPMR, you may get a monster, an evil being as a metaphor or symbol of that fear.

Another example: You are asked to remote view and describe a picture on the wall. The picture is of horses jumping over a hedgerow on a sunny day with onlookers -- a picture of an Old English Fox hunting scene. You get the fundamental nature of the picture – a sense of jumping animals, lots of commotion and excitement, a mix of people and critters – staged drama, something impending, an uncertain ending. Because you are not at all familiar with the experience of fox hunts, but have been to many circuses, you interpret this data as a circus act – horses or other animals jumping – multiple animals, lots of commotion and excitement, a mix of people and critters – staged drama, something impending, an uncertain ending. So you say: "It's a picture of a circus act involving people and animals doing tricks – with the ambiance of a bright, fun, and expectant holiday outing atmosphere ….. except, you say, there is this overtone of violence that just doesn't fit. If you are NOT a practiced observer, you might add in some clowns and elephants just to make your circus metaphor more complete. The little red hats the fox hunters are wearing are entirely missing from your received data because they carry no value or significance in NPMR terms. They are meaningless details of the PMR set not worth recording. Though you get a 100% as far as receiving the NPMR data describing the picture accurately, your metaphor is wrong and much detail of the setting (e.g., red hats, woods, etc) is missing – from the PMR view (where the physical setting detail is the most important thing – a literal, linear list of the stuff in the picture) you failed miserably and get a zero. Point: when your intent says: "what is that picture about, what does it look like", you should not expect to receive a photographic image of the picture. You will get only data that captures the significance of the picture from an NPMR perspective and you will have to interpret that data according to your experience base. On the other hand, if the point of your NPMR experience from the perspective of NPMR (perhaps as implemented by "guides") is to give you or others personal evidence of the realness of the larger reality (say, as part of an effort to awaken you to the existence and nature of the larger reality), then you may be provided all the detail you need.

Fear, Belief, and Inexperience are the primary constraints that keep you from experiencing what is actually there (the full content of the data). Not from experiencing at all, but from experiencing what is actually intended by the larger consciousness system to answer your specific intended query.
Tom C

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2 An Orientation to Virtual Realities:

The rendering of virtual realities, whether it is computer games or specific reality frames within consciousness, follow similar processes. They must generate specific virtual realities from specific rule-sets, update the action (apply the rule-set and record the choices made by the players in the present moment) at a high enough frequency to facilitate smooth fluid change from one state to another, and be extremely parsimonious in their use of computer cycles.

Within multiplayer games such as “EverQuest” or “World Of Warcraft” there are thousands of players interacting with each other and with the “set” (which includes the local VR environment and “computer characters”). If several of these players are together (at the same place within the virtual reality) they see the exact same “physical” environment (rocks, trees, mountains, grass, critters, other players, etc. as well as each other – in other words, the contents of the individual experiences of each individual player are highly correlated due to the common rule-set that defines the virtual reality they are sharing.

Players within the average computer generated virtual reality might notices backgrounds such as trees and mountains suddenly popping up into view as a character moves into position to see (experience) them. It would be a waste of computer resources to render a background or a “computer character” when no player is able to observe or experience it. The same is true of rendering virtual realities or “reality frames” within consciousness. We in the PMR reality frame, do not notice trees suddenly popping up in the background because the rendering engine that applies the rule-set updates to our reality (updates changes that take place in the present moment) so quickly (runs at such a high frequency or equivalently, has such a small time increment, relative to what we can measure) that all action, along with time itself, appears to us to be perfectly continuous.

In a virtual reality frame within consciousness, a portion of the larger consciousness system coupled to a “Virtual Reality Rendering Engine” (VRRE) is programmed to implement a specific rule-set within the context of a local environment (the world/universe). This universe “game” environment evolves from initial conditions interacting with the constraints of the rule-set to represent the entire “natural physical world” that defines the virtual reality. Beside the natural world, there are a large number of sentient “players” that inhabit that world to experience interaction with the “natural physical world” as well as with other players.

For the sake of consistency, the representation (or embodiment) of players within the game (reality frame) must also have evolved within the constraints of the reality frame’s rule-set. Furthermore, the larger consciousness system operating the VRRE knows its rule-set, its universe, and its players very well. It knows (in terms of probability) what is possible, what is likely, and what is likely to be both important and unimportant to each player and to the game as a whole.

All action (natural environmental dynamics and the choices representing the free will choices of the players takes place in the present moment (one increment of PMR simulation time – DELTA-t). The future is actually a probable future (representing all possibilities) and exists only in terms of expectation values. It remains probabilistic (un-rendered) until required by game play – i.e., some player within the reality frame requires the data by making an interactive choice that causes something to happen (creates new information – something that can be measured and recorded). The past is recorded in two databases: a database of everything that happened (actualized past -- series of present moments reflecting the interactive choices of the players and the dynamics of the environment) and a database of everything that could have happened but didn’t (un-actualized past with the associated probability of each unactualized possibility)

One of the key ideas here is that consciousness is a real finite system and real finite systems require considerations of computational parsimony and demand efficiency of finite resource utilization. Logically, nothing needs to be rendered within PMR unless some sentient entity requires it and then only as much as required. This is a simple statement defining the economically constrained mechanics of our reality system, but its ramifications are is not as simple as they first appear. An explanation will be more understandable if it given within a physical context – so let's work through a couple of examples.

Imagine that a human explorer sees trees on distant hill on a remote island that no person has seen before. Those trees (just before the explorer sees them and notices exactly what they look like to him) exist only in probability according to the rule-set of the reality frame they are in. Now, because the explorer's awareness is demanding data, an explicit "most likely" representation must be rendered and delivered to the consciousness of that explorer to define that part of the set (physical universe) that the explorer/observer is experiencing in the present moment. Because the explorer/observer is viewing trees on a distant hill, these trees only need to be rendered at a very vague level of detail – no more detail is necessary than can be seen from the vantage point of the observer – perhaps only the green leafy foliage of the tree need be rendered. Given our rule set and history (consistency is required), tree trunks are highly likely but they do not have to be rendered within the consciousness of this observer.

Now let's imagine that a family of color blind squirrels lives in those trees. The trees and forest floor must be rendered within the consciousness of squirrels, but only to the levels of awareness inherent to squirrels. The squirrels perceive the woods only from the limited perspective of a color blind squirrel just as the human perceives the woods only from the limited perspective of a human. Each live in their own reality. Indeed each individual squirrel and each individual human also lives entirely in its own reality. Because squirrels, in general, have very similar limitations and abilities, their individual realities appear to them to represent a common reality shared by other squirrels playing in their multiplayer game because each unique individual squirrel-reality shares extremely similar content. In other words, because they have similar capacities, capabilities, and viewpoints, their individual perceptions of the same virtual reality are highly correlated. Likewise, humans, in general, have very similar limitations and abilities; consequently, their individual realities appear to them to represent a common reality shared by other humans. Humans call this shared reality "the objective world". It appears "objective" because each of the unique individual human realities contain extremely similar content – in other words, their individual perceptions and experiences are highly correlated because of the common rule-set that defines the virtual reality they are sharing.

In fact, each human, squirrel, and bumble bee within PMR, are no more than subsets of sentient consciousness participating in a virtual reality game whose rule-set defines our universe. Each player, within the abilities and limitations that define its character type, exercises its free will in the present moment. The bidirectional data stream that connects each sentient entity to the PMR virtual universe is the fundamental source of one's personal reality within PMR. Because each consciousness must subjectively interpret the data that comes through its personal connection to the shared virtual reality in terms of its own unique understanding and experience, all individual realities are both unique and subjective. The term "objective reality" refers only to the illusion of sameness shared by like being-types who are engaged within the same multiplayer virtual reality governed by the same rule-set. The rule set is objective. The perceived reality of each sentient entity (VR player) is personal and subjective.

The shared or "objective" reality of the squirrels is not the same as the "objective" reality of the humans though some of the elements may be similar. The humans, being clever and superb tool makers, may try to catalog, describe, and probe the functionality of "everything" in their shared common to humans virtual

reality (one can wander about in the EverQuest VR doing the same thing) but that amounts to simply collecting the details of what can be rendered under the rule-set (Such an endeavor is,in general, called "science" – physics tries to discover the rule-set itself). Such a conpendium does not make the virtual reality less virtual – only better understood.

Now, our intrepid explorer sets up his telescope and looks at the distant woods. The VRRE must render individual leaves to the limit of the telescope's resolution – but perhaps still no tree trunks. So you might ask, at this time, does the tree trunk exist in PMR or not. The answer is: That's an illogical question since there is no such thing as PMR. Your habits of thinking make you start from the assumption that PMR has fundamental existence – that is an erroneous cultural belief. PMR is a virtual reality and as such exists only in the minds/consciousness of its players. The trunks of these trees can only be probable in the minds of the explorers (could be a new type of vine with leaves that look just like tree leaves growing over some sort of support structure). On the other hand, tree trunks have been actualized in PMR by the squirrels (have been brought into the virtual PMR game experience) but only in terms of a squirrel's understanding and perception—i.e., through a limited data stream feeding a squirrels consciousness.

Looking through the telescope, the observer sees a few bright blue leaves among the many green leaves on one tree. Being a botanist, his curiosity induces him to investigate – so he makes his way to the blue leaves. His companions, not being botanists, break out the emergency beer from the cooler and take a rest in the shade of a strange tree of a type none of them had ever seen before. Upon reaching the woods, the observer sees that they are indeed a grove of short bushy trees with slender trunks inhabited by a few small squirrels. The blue leaves turn out to be normal leaves covered by a bright blue fungus. While he is there, he cannot see his friends or his ship – does that mean they disappear from PMR? Don't be silly. Remember, there is no PMR. His friends and his ship are simply no longer part of his physical perception of PMR. They are no longer being rendered to him through the incoming data stream entering his conscious awareness because to do so would violate the rule-set. It is only probable that they still exist where he last saw them. When he again gets in a position to see them, what is most probable at that moment will be rendered (taking into account all the interactive free will choices that have been made in interaction with the rule set which together define the dynamics of the multiplayer game). The botanist collects a sample of the unknown fungus and returns to have a well deserved beer with his friends. Tossing their beer cans, candy bar wrappers, and cigarette buts on the ground, they go back to their ship and sail away – back to a rather trashy human civilization. When the explorers sail away, do the trees and blue fungus cease to exist. I am sure by now you can guess the right answer – it is an illogical question -- There is no objective PMR for the trees and fungus to exist in, or for them not to exist in. The trees still exist in the data stream feeding the squirrel's consciousness but that data only describes a squirrel's perception. The trees still exist in various degrees within the memory of the humans who recently viewed them. The blue fungus "exists" (is being rendered to the botanists when, and only when, he looks into his sample case. If he shows this sample to others, the blue fungus will be rendered in the consciousness of those others because when he opens his sample case the highest probability is that the sample will still be there where he put it – because that is the way the rule-set (which defines PMR causality) works – things stay where you put them until acted upon by some other force. By the rules, the fungus sample is available as a shared part of this virtual reality. If he tells them about his memories, then what he describes exists only as probability – also because that is the way the rule-set works.

Some 6 months later, a different explorer traces the first explorer's steps. He finds the beer cans and can't help but notice a beautiful blue tree in the distance. Because the existence of blue fungus was a part of the most probable state of the environment when the first explorer gazed on the scene, when this

scene again must be rendered to a human, the requirement of continuity (a ramification of the rule-set) demands that the new rendering must progress the probability of what was perceived before to what is most likely to be perceived now. In other words, when the first observer arrived it might have been absolutely equally likely (according to predictions of the rule-set) that a fungus would or would not exist on these particular probable leaves in this particular probable woods. And if it did exist, it might have been absolutely equally likely that it was an aggressive blue fungus or a more benign, less destructive yellow one. Because of the absolute equality of these probabilities at exactly this point in time when the first observer was making his observation, the result (blue fungus) was a random choice. But Once the aggressive easily spreadable, blue fungus was rendered to the consciousness of the first observer, it now, just six months later, has an extremely high probability of being rendered into the consciousness of the second observer in a way that is most probable given the rule-set. Now, six months later, the fungus had spread to the entire tree.

Now the second explorer/observer goes away. A few days later, all the squirrels (and any other sentient life) also go away. The trees are no longer rendered within any consciousness. Does this mean the trees no longer exist? Damn, you keep asking that same question over and over again. Let the belief that PMR has some sort of fundamental existence go. It does not. The trees never existed in the first place (before people and squirrels) except as a probability computation of the possibilities of existence as a function of time according to the causality of the defining rule-set. These calculations are a part of the probable future database. As long as the choices of people and squirrels required data, they were given the most likely and most consistent data available that was allowed by the rule set. Remember from Book 3, section 5, that everything that could possibly happen along with the associated probability that it will happen is what constitutes the probable future database. Also remember that this database is generated by progressing time one delta-t at a time (unit of NPMR time). Within the present moment, all the freewill choices of all the sentient beings are made and all the progressions (from the last moment to this next moment) of all the non-sentient processes, life-forms, mass, and energy are taken into account. Consequently, a newly revised future probability database is computed between consecutive DELTA-t (a unit of PMR time). When a player who is connected to the PMR virtual reality game (some sentient entity) makes a measurement (observes or experiences something – makes a choice that requires interaction, i.e., data/information), then the most probable system state for the PMR virtual reality supplies the most probable value or condition for that required datum consistent with the governing rule-set. That is the process that delivered a few leaves with blue fungus to the first observer and a blue tree to the second observer. It is also the same process that delivers your personal PMR reality to your consciousness and that collapses a quantum mechanical probability wave function to a measurable value in PMR.

Now, some six years later, the first explores returns to find a much wider beach, a larger pile of aluminum beer cans, some badly rusted abandon tools, no blue leaves, and a dead tree in mid decay lying on the ground where the tree with blue leaves once stood. It appears that the fungus quickly spread throughout the infected tree, eventually killing it, but that it was improbable that this blue fungus would spread from tree to tree. Consistency followed all three visits because the causality of the rule set ensures consistency. During those six years, that island was not visited by any sentient beings and thus no part of it was rendered by the VRRE within any creature's conscious awareness. However the island's change and evolution, along with the change and evolution of the entire universe was tracked one DELTA-t at a time within the probable future database of PMR. During those six years it was probable that the island would experience and be changed by probable storms, lightning strikes, earthquakes, and tidal waves.

For my second example I will introduce you to Planet Z. On Planet Z, which is about the same size as earth, there are just two large continents – both on the equator but on opposite sides of the planet. All the sentient beings and critters live on one very dry trashy continent and are unaware of the existence of the second continent. The second continent should be, in all probability, covered by lush green trees which would have the ability to supply virtually all of planet Zs atmospheric oxygen.

The trees have never been rendered in any sentient beings consciousness – thus they have never been rendered and exist only as probable trees that would be extremely likely to exist and thus would be rendered to the data stream of any sentient creature who would visit that continent.

The people and other sentient beings on the now trashy desert continent have plenty of oxygen to breathe, thanks to the probable trees. This works because they, living in a virtual PMR, are only breathing probable or virtual oxygen anyway – same as you and I. You are perhaps thinking – Hey, I am a real person and I have to breathe real oxygen or I will die. There you go again, thinking that you – the body that needs oxygen – is real. Boy! Those cultural beliefs sure are hard to get rid of. Your body is virtual and so is the oxygen you breathe. The beings appear to have plenty of oxygen from the un-rendered trees because it is likely that they would.

The trees exist only in probability as does the oxygen. One day the beings discover the element oxygen and the dependence of sentient life upon it, but they don't know where it comes from. If they ever venture to the opposite of their planet they will find a continent full of trees and discover the source of their oxygen. For now that half of their planet is not being rendered by the VRRE.

Eventually, the people of Planet Z explore their entire planet, discover their source of oxygen, and begin burning the forest so they can use the land to make more money. Does that mean that now everybody on Planet Z has to start breathing real oxygen like us? I am going to pretend that you didn't ask that question. Even after they are advanced in chemistry and biology (you know, like us – we are always "advanced" in every field of knowledge by definition), every oxygen molecule does not have to be rendered all the time – the beings of Planet Z just breathe and live – as we do -- because it is probable (according to the PMR rule-set of planet Z and planet Earth) that we can do so. Oxygen only needs to be rendered when its DIRECT presence is measured.

All computer modeling works this way. If a scientist wishes to create a quick simulation to see how trees bend in a high wind, they don't begin with modeling all the individual gas molecules that make up the wind. The just model the wind pressure as a function of tree size & shape and average wind velocity and then integrate that pressure over the surface of the tree. When they model the tree, they do not model all the cells that make up the body of the tree. They model at the macro level of existence -- what the wind or the tree is made of at the micro level is irrelevant to their simulation. Most simulations, including virtual realities work that way. The micro level is computed only when the micro level is being dealt with directly rather than indirectly. This approach saves tons of computing resources. Your virtual bodies breathe virtual air that contains no gas molecules of any sort and all is well as long as the rule-set says everything is likely to be fine.

The above description of reality will be easier to absorb if you constantly remind yourself that PMR is a virtual reality within consciousness -- an illusion that requires only the bare minimum of data to keep the illusion progressing consistently (according to the rule-set) in the minds of all the participants. As soon as you slip into the belief that PMR is a fundamental reality, as is our habit of thinking, the description of

people breathing normally because oxygen is a probable result of a probable forest hits a wall of incredibility. Cultural beliefs about the nature of reality are extremely difficult to let go of.

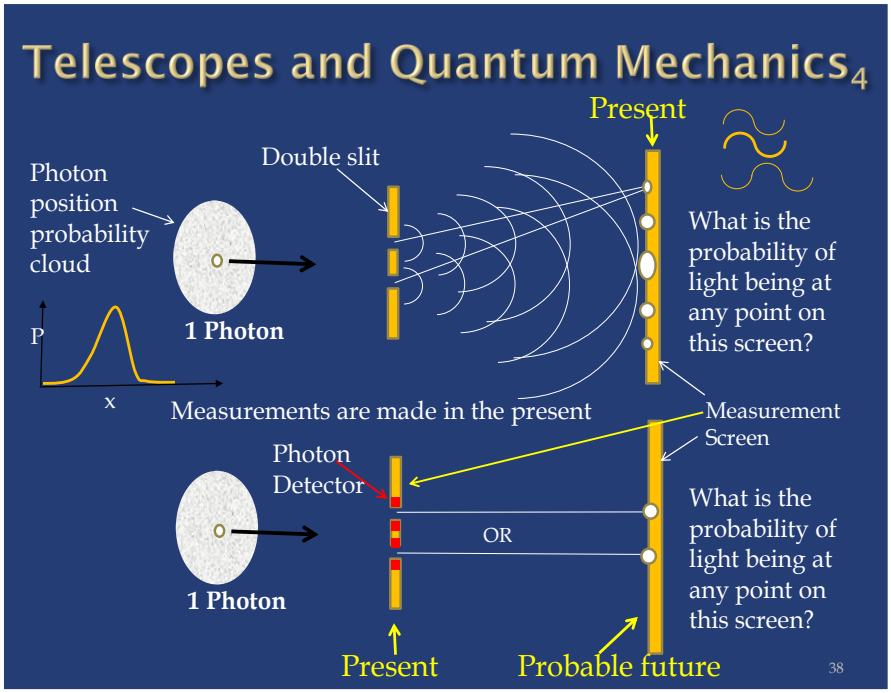
Do the creators of computer simulations – like The SIMS or World of WarCraft)– have to create oxygen for their characters? Of course not! That is easy to answer because we know the characters are not "real" like we are -- they are only pretend or virtual and thus do not need oxygen to survive. However, if one of those simulated characters falls in a river or pool and cannot swim, that character will drown and die because the writers of the simulation have developed a rule-set (physics) of their virtual world where the probability of getting enough oxygen to support human life under water is nearly zero. We are no different. Our sense of physical "realness" is an illusion. What is probable according to our rule-set is likewise enforced on us. In PMR, just as in the SIMS, molecules do not need to be rendered unless someone is looking directly at them.

Mystics have understood this for centuries – they just could not explain it logically. Now we see that the logical explanation also derives Quantum Physics, solves the outstanding physics puzzles, and provides a better theory to explain the collected scientific data as Brian Whitworth pointed out in his paper (see the physics forum).

Virtual reality and Quantum Mechanics:
We have discussed above that details (such as oxygen molecules) are not rendered (remain in the probable future database) until a measurement makes it necessary to render them into someone's consciousness data stream. In the macro world we don't notice the details because DELTA-t is very small and action at the macro level is action of the aggregate and takes place relatively slowly over trillions of trillions of time increments.

In the micro world we do notice. The photon is a singular "particle of light" and always moves at the speed of light. Photons and electrons, like everything, exist only in probability unless a measurement of their individual physical existence is made to bring them into PMR. Photon event probabilities must be able to interact – the interaction mechanism in PMR is modeled by Quantum Mechanics through the concept of interacting probability wave functions. When a physical measurement takes place, physicists say: "The probability wave function collapses to a specific physical state"

You are all familiar by now with the double slit experiment where small particles sometimes act like waves and sometimes act like particles – the so called duality of matter that lies behind the "measurement problem" within modern physics. When NO measurement is made to determine which slit the "particle" goes through, the particle remains outside of the PMR reality frame as a probability distribution within the probable future data base, which is updated before each DELTA-t to reflect what is likely and unlikely to happen during



that DELTA-t according to the PMR rule-set. The probability wave associated with each slit combines to give a most probable future result when it reaches the screen where the measurement is made in the present moment when the wave function collapses to a measured PMR value on the screen. One sees, in PMR, a wave pattern of light (an array of alternating light and dark areas) on the screen because the "particle existed only as nonphysical probability waves before interacting with the screen. When a measurement IS made to determine which slit the "particle" goes through, that measurement made by a particle detector at each slit forces the probability wave function to collapse at each slit -- either finding the particle at that slit or not finding the particle at that slit. Once that measurement collapses the wave function at the slit, a PMR physical particle either is, or is not, present at the slit. If it is present, the particle travels in a straight line and makes a single dot of light directly behind that slit like any self-respecting PMR particle should. If it is not present, no dot of light forms directly behind that slit. So whether that particle interacts with the screen as a wave or a particle depends on where the measurement is made that brings that particle (collapses the wave function) into PMR – does it occur at the screen after some portion of the nonphysical probability wave has passed through both slits and interacted with itself while still only probability (produces wave pattern). Or does it occur or at each slit where the wave function either collapses as a particle at that slit or it does not (produces particle pattern).

Being unaware does not change the probability of a possible future event. If something is likely to happen, it probably will, whether anyone is paying attention or not.

The probability of an event taking place based on past data is useful in predicting future occurrences only in the absence of any data about such a future occurrence. As soon as data becomes available to predict the probability of a future occurrence, the historical record loses all its value.

Psi uncertainty allows rule-set violations to happen as long as there is sufficient uncertainty (whether or not the rule-set was actually violated) within PMR to maintain the effectiveness of PMR as a straightforward what-you-see-is-what-you-get consciousness evolution trainer.

If a particular occurrence is determined to be an effective learning opportunity for someone or everyone, the probability of it happening is increased. The system is designed to automatically deliver timely custom-fit individual learning opportunities -- the presentation of such opportunities to individuals or groups is part of the feedback one receives relative to the choices one makes. Because the point of the system is to overcome fear (about you – high entropy) and replace it with love (about others – low entropy), if you have fear, the feedback system will manifest that fear in PMR to force you to deal with it (learn) or suffer the consequences.

Tom
