Holographic Projection Technologies of the Future

"Killer Applications"

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Table of Contents

Chapter VII: Military and Space Applications 90

Chapter I
A Brief History Of Holography

"If A Picture is worth a 1,000 words - How much is a Holographic Image worth these days?"

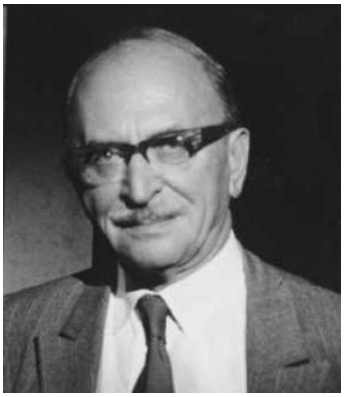
Holographic Projection Technologies of the Future are moving forward fast and as you can image there are many entrepreneurs who are dreaming up some "Killer Applications" for this new science. In fact the one industry analyst from the Online Think Tank acknowledges that the new Cell Phone Holographic Projection technologies have a market value of 500 million to 1.5 Billion Dollars in the first 18 months to two years and that is just the Introduction.

In pops a new Chapter of technology as once again Science Fact catches up with Science Fiction. The Brief History of Holographic Tech is about to be written. Who dreamt up this new technology? Well believe it or not there are some Inventors of days gone by and some Historical Innovations leading up to modern day Holographic Imaging.

The Origins of Holographic Imaging in 2D are quite old and the thought of 3D on a two-dimensional plane we have all seen in pictures. 3D Movie theatres were also quite popular as the images appear to be all around you.

Today man is playing God with Holographic Imaging; "Let There Be Light" and now we are about to see the Bending and Blurring of Reality with holograms. Where Are We Today? Well there have been several Major Breakthroughs in Holographic Tech, especially in the Entertainment Industry.

Inventors and Historical Innovations



Dennis Gabor

Dennis Gabor is considered the Father of Holography and Holographic Technologies. Dennis was born in Hungary in 1900. He started his study of physics at age 15 and eventually became a Physicist in Britain. Dennis wrote a paper in 1948 that has become the foundation of modern Holography. The most interesting thing about all this is that laser light had not even been invented yet, when he wrote his paper. Thus his brilliant innovation and creative genius stands out as one of the great inventors of the 20th Century. Later Dennis Gabor became a Professor at Imperial College at the University of London in Applied Electron Physics. To learn more read a brief Auto Biography; http://www.holophile.com/html/gabor.htm .

[http://HolographyInfo.org]

Dennis Gabor worked in the field of Holography until he died in 1979. Of course there have been many other notables in Holographic Imaging such as;

- A.B. Baez
- S. Benton
- Y. Denisyuk
- M.E. Haine
- P. Kirkpatrick
- E. Leith
- G.L. Rogers
- H. El-Sum
- J. Upatnieks

Most of these gentlemen's papers can be found online doing a special customized Google Scholar Search:

http://scholar.google.com/schhp?sourceid=navclient&hl=en

Many folks do not understand the difference between Holography and Spectral Imagining and they often get the technologies confused. Holography has specific limitations that presently keep it from being able to do the things that we associate with Holographic Images such as the Star Wars "Holographic Image" communications devices. This technology is totally possible, but it is not really Holography doing it. Perhaps watching a couple online videos might clear this up?

Learn about Spectral Imagery Video Museum Library;

http://www.holophile.com/html/spectral.htm

Although both technologies run parallel in potential applications they are vastly different in design and the way that they work.

Where Are We Today

"Bending blurring of reality"

Two dimensional Art using holographic imaging got a rather rocky start, almost a false start. It really was not until the Movie Industry started making 3D Movies that the general public really became excited about it. Gary Zellerbach writes in Leonardo Magazine back in 1992;

> *One of the biggest problems in the '70's and early '80's was the public's lack of familiarity with holograms. During those early days, almost all visitors to my gallery were seeing holograms for the first time. While many were astonished and enthused, just as many walked away scratching their heads in disbelief. To them, holography seemed at best a "trick" or "fad."*

Obviously art is a great application for Holographic Imagery and it makes sense that is where its roots were first planted. Although one can understand that the real money in art is made with collector's pieces and not so much new fad novelties like holographic images as art. High-end art was considered an investment and as Holography became common place this simply would not compete as an investment in art.

> *From 2D to 3D on a flat piece of cardboard was cool, but simply not what folks were looking for.*

Now then **Hollywood 3D Movies** were a big deal to movie goers and many remakes in 3D enjoyed another round at the Box Office. Similarly we see folks willing to re-watch their favorite Action Movies again on the large screen under the din of a **Giant IMAX Screen**, as it is the *experience*, not only the movie. Movies like ***Jaws III in 3D*** were very exciting and drew large crowds to partake in the *3D experience*.

Entertainment although the first commercial application and real use of Holography and Holographic imaging is certainly not the be all end all of the technology.

Today we see Holographic Images on our ATM and Credit Cards or Microsoft Software as proof of authenticity and thus preventing counterfeiting or piracy. Although some argue that if the human reader of the credit card or holographic image on Microsoft Vista or Microsoft Office 2007 does not know in advance what they are looking for then this might also be an opportunity for thievery and counterfeited products to appear to be real. There are many theories on privacy protection and Holographic Images.

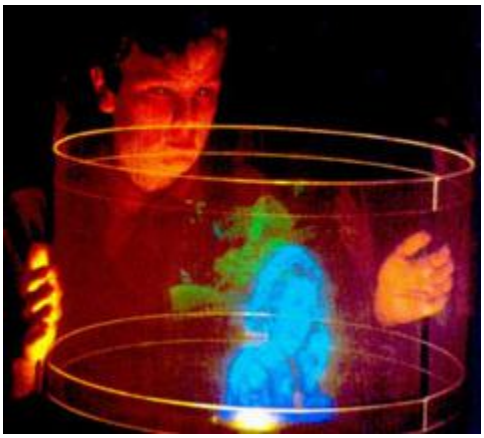
Laser Light Shows have also given off the "Wow Factor" to audiences for years. Laser Lights have also been incorporated into large events, inaugurations, rock concerts, 4th of July celebrations and grand openings. In 1973 the public was introduced to the Griffith Park Observatory in the World Famous LASERIUM (laser light shows). Of course within five years was the use of a fully automated laser light show using computers and in Boston in 1977. Using computers and better accuracy the system could intersect beams of light to perfection to produce letters or words in the sky.

What is rather fascinating is that Gabor did not feel that his work in Holography, which he basically created, a whole new field was amongst his greatest scientific achievements. Others who followed who did not know of Dennis Gabor were rather disheartened to learn that their greatest achievements were pre-dated by Gabor, although they significantly added to the field of Holography during their many years afterwards working to refine it.

Today there are 100s of potential real world applications for the science of Holography and it has far surpassed being limited only to the realm of Art, although it is hard to deny that indeed Art is an excellent applications. At the Advanced Critical Technologies (CACT), Irvine Valley College in Irvine, California, which has a special course in Holographic Science the professors note that:

> *"To date embossed holography stands out as a killer application while many other potential applications still remain as great challenges as well as opportunities."*

Major Breakthroughs



The major breakthroughs in the Science of Holography are all dead now; Gabor, Leith, and Denisyuk. Nevertheless the vision does live on in the field, with some rather unique and well qualified evangelists for instance; James D. Trolinger and Vladimir Markov of Metro Laser in California have a few questions they ask us to ponder:

1. Where are the applications with greatest potential?
2. Will we ever see 3D movies, TV, and telecoms through holography?
3. Will holographic art ever become a publicly accepted art form like painting, sculpture, and photography?
4. Why did holography museums, departments in universities, research teams, exhibitions, and companies spring up everywhere in the late twentieth century only to become almost extinct in the twenty first century?
5. Why did almost obvious applications of holography like jewelry, decoration, and portraiture flower out and almost die in just a few years period?
6. Why is the only holographic portrait of a U.S. president not hanging in his presidential library?

These questions have indeed provided the Online Think Tank to look deeper. Was it IBMs Spectral Digital Imaging and roll-out to be marketed to Trade Show Exhibitors and the Education Field, which did it? Has it been the recent absence of Hollywood movies like Logan's Run or Star Wars with Holographic Imagining in them? Today one major company has designed a video projection Cell Phone, the size of a brick, although Moore's Law will soon fix that.

So, there are Research and Development monies available for the next step, those very obvious applications that are desired by industry and consumers alike. The *"Star Wars Holographic Communication Device"* is one item that people want and would pay for that could easily become a Multi-Billion Dollar Industry almost immediately. Education, Communication, Entertainment and Military all need the next generation of Holographic Imagining Sciences.

One interesting thought from the Online Think Tank was to introduce more Holograms into *Hollywood Movies and Educational* Classrooms to propel more kids into this fascinating field. Here is one device now available to introduce the science of Holography:

http://www.arborsci.com/detail.aspx?ID=324

Major breakthroughs are forth coming and turning light waves into ***Holographic Stereograms*** is being done. Since we know all these major breakthroughs are forth coming and we realize some of the many applications that are currently using them such as; Art, Life Science Modeling, Movie Industry, Military and Education, the next question is how will they be used? Will rogue elements of the entertainment industry such as the pornography industry grab these technologies to enrich themselves? Probably and thus we must ask is that a good or bad thing?

Ben, a friend of the Online Think Tank participating with us on the Holographic Think Tank Team makes an astute comment and there are indeed "Important Questions" that must be answered as Holographic Technologies move forward or any technology that moves forward and that is how will it be used;

> "So much time is spent in trying to find ways to develop new and better technologies, but little thought is put into whether or not such technologies SHOULD be developed in the first place; whether or not limits should in fact be placed on them; and if so, who should have the power to do so?"

In this work we hope to follow the examples of great leaders and advocates of the Scientific Field of Holography such as James D. Trolinger and Vladimir Markov. It is our hope that the many killer applications that our Holographic Think Tank Team has come up with will indeed invigorate the industry and bring forth these technologies for the betterment of all mankind. If there are some minor adverse effects or uses of this technology they will be far outweighed by the benefits, at least this is what most of us believe and hope.

Holographic Projection Uses and Applications:

In the very first brain-storming session, actually within the first 15 minutes, I myself came up with these potential applications. It was evident that we needed to devout an entire book to the subject, to properly give this topic the justice it so deserves. Here is the short list and hopefully this will light-up your virtual mind as you get into the book:

NASCAR Driver Training at 200 mph with Future Technology of Holographic Projection; the projected image would be ahead of the car to allow the driver to get use to setting up the corner and turns and drafting and driving next to other cars. The wall could also be projected so they could practice driving close to it.

Martial Arts Holographic Sparring Partners, to prevent injury and practice for countless hours alone, thus developing reflex in defensive tactics.

Modeling Holographic Projection to Study Hurricanes, projecting these in classrooms and for weather modification scientists to study. We can learn a lot from studying airflows in natural vortexes.

Public Speaking Fears Defeated in Virtual Reality, project the crowd in front of them, getting use to talking in front of very large groups.

Holographic Art for the Lazy Modeler, instead of building models of concept cars, designs and what not, simply make them in the virtual world, save them and allow one to make

modifications, saving the original, via 3D cad cam program - also good for a Holographic Super Computer Wind Tunnel Testing for aircraft model design.

Holographic Big Game Hunting of Endangered Species, hunt hologram projected imaging without killing the actual animal - make it so the holographic animal is the same in every way.

Holographic Husband Soldier Companionship, when men go off to war the women can have a holographic husband to serve as a companion, to keep them feeling good.

Holographic Projection and Accident Recreation in Virtual Reality to determine what happened and to prevent it in the future and allow engineers to see the accident and parts failures to determine prevention methods in the future designs.

Hang Gliding Training Through Holographic Projection, learning to fly a hang glider is dangerous and VR holographic simulation would be another great application.

Viewing a tattoo, before you put it on permanent, should be relatively simple to do and would certainly help people make a better choice or none at all?

Presidential Debates in Holographic Future Virtual Reality, this way the debates could be done without the participants meeting together.

Save Endangered Species with Virtual Reality Holographic Projection, so even if we lose the species we can still study it forever.

Training Teachers with a virtual classroom of little monsters fooling around; Teacher Training in Virtual Holographic Classrooms could help the new teachers adapt to a real problematic classroom.

Indeed the applications are endless and there are a few companies who are very active in the field selling their technologies out there. Recently, the author of Tech Trending, Amy Zuckerman mentioned how high-tech video conferencing could be a very good thing for curbing pollution (namely Global Warming) as more people use these communication tools, there will be less traffic and business travel. Just how much less is the question, which will require much research to get to the real facts and data points? Holographic "Star Wars Phones" would certainly be the next best thing to being there.

Current technologies such as video conferencing and online video do promote virtual meetings. Most any person looking at the question would have to agree. For instance ask yourself;

> *"Would you say that you personally having available such things as Holographic Phones, Tele-commuting Technologies and Virtual Office Systems, you might travel less and opt to use these business tools rather than hop on a plane or sit in traffic, if you didn't have too?"*

Think about this for a second what are the positives and negatives of using such technologies and what about that hot political issue **"Global Warming?"** You can see how Holographic Communication business and personal tools might help curb man's footprint signature on the atmosphere. For instance just for the sake of argument, even if you do not buy into the mass media hysteria or Global Warming Alarmist's views, Holographic Conferencing would indeed change the impact ever so slightly;

Positive:

Flights Across Pond - Airliners not heating up upper atmosphere and using Jet fuel (like Kerosene) so it puts out CO2.

Less Congestion on Freeways stuck in traffic putting out excessive Carbon Monoxide since cars have richer mixtures when parked than at optimum cruise speeds; 55 - 70 mph cruise speeds and less truck traffic, stuck in traffic thus less CO2?

Of course with every positive there has to be a flip side right? So consider more people working from home or traveling less and what that impact on pollution will be - things that would negate the positive curbing of less pollution from less travel due to Holographic Communication Technologies.

Negative:

Intensive computer systems for those who work out of the house would draw a lot more power. Holographic Imagining Technologies might be very high electricity users. The system might use 10 to 20 amps plus the 10 amp computer, which is needed to run the program to make the Holographic Video System work. So, a couple of those units would be similar to running air-conditioning. The more home workers the more air-conditioning units running in summer time in places like FL, GA, NC, SC, TX, OK, TN, AL, LA, MA, NM, AZ and CA might cause power outages and many coal-fired plants put out a good amount of Greenhouse gasses including CO2.

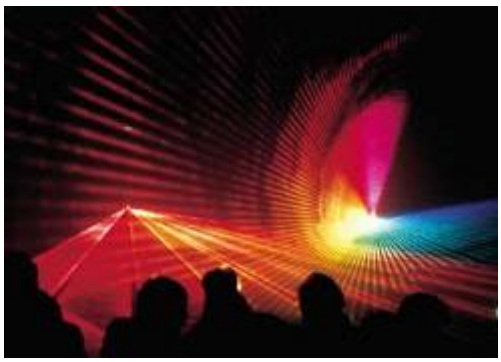
A work force of 10s of thousands more folks staying at home in each suburban town would require more electricity output from the power plants. Corporations generally are much more efficient in their energy usage, with things such as new "glass coatings" and energy efficient systems, solar panels on roof, roof gardens (newest trend), parking lot coatings (preventing urban heat), etc.

Would we really be saving traffic on the roads or just redistributing it, for instance if more people work from home that means more delivery trucks doing inefficient deliveries to individual houses. Pizza, Joe's Italian Deli, Fed Ex, UPS, special messengers and the Geek Squad to fix their computers. I know they use Volkswagons, but I thought I would through that in for the FUN of it?

With clean coal technologies coming soon it will actually help out working at home. I almost died once in the Big Dig in traffic sitting there on a hot day for 90 minutes breathing fumes, no air-conditioner (freon depleted) and rolled down windows.

Curbing pollution might be a good selling point for Holographic Technologies in the communications sector due to the current climate, but it certainly is not the only positive thing we can come up with application wise for the use of the technology as we will explain further as we go. Having additional angles to help promote Holographic Technology is worthy from an Industry marketing standpoint, so we have mentioned it here, although this is hardly the reason to propel the forward progression of Holographic Technologies.

Holographic Technologies can help us shore up labor shortages in many Industries, assist us in data visualization for planning, be an awesome asset in training and of course a Must See for the entertainment industry, as well. Still there are uses for government, military and so many more. Sense Entertainment and Art have been first adopters of Holographic Technologies we should begin by discussing those applications and potential future applications along those lines.



[http://www.lobo-laser.com]

Chapter II
Holographic Tech Entertainment

Holography in Entertainment has been pushed beyond its actual capabilities in the past, although the current technology is rapidly approaching the Futurism of the Sci Fi past. Next will come the Video Gaming in the Living Room, IMAX Style High-Tech Theatres and Extreme Sports Holograms as our Invisible Friends Come Alive. From Cartoons to Reality and you can do anything you want in a dream world with Holographic Technologies of the Future and yet we are forewarned of the Dangers of Blurring Reality as Hollywood Goes all the way with High-Tech Holography.

This potential problem should be easy to see in the future for instance there is the darker side to such things - Holographic Adult Entertainment, which ought to bring in quite a few dollars to the infamous porn industry. And if that is not enough, well just wait until all the Entertainment Turns into Advertising? Nevertheless folks want their entertainment and they are willing to pay for that desire. We know there is always big money available for Research and Development of any technology that has a killer entertainment application. From Xbox to the new iPods, we have seen this technology trend for decades.

Video Gaming Living Room

What will your living room look like in 2020 with all the new nifty high-tech entertainment devices available in the future? Already we see the flat panel large screen Television monitors and the new Xbox 360 is certainly incredible too. Then there is surround a sound and also little earbuds for perfect sound with little tiny electronic gadgets like the iPod.

Is it possible that in the future they will add holographic projection to these devices too? A literal virtual reality setting in your own living room; that is to say the future of Holographic Virtual Reality in your living room may appear more real life than the real world. And probably more exciting, challenging, entertaining and fun as well?

This does bring up a good point about the issues with visionaries and technology, as we watch the battle for the consumer electronics surpass the average consumer's imagination and warp your real world into a rather augmented reality. Many high-tech engineers have lots of VR thoughts, some military with regard to simulation, Mars CAVE, automobile and truck simulators for training too.

Particularly of interest along the concept and theme and with regard to holographic VR, turning one's living room into your own VR gamming or learning experience; you will not have to go very far on any Internet search engine to see my point and a glimpse into the possible Holographic Virtual Reality Living Room. .

Can Movie Theatres Compete with the Home HD Holographic TV in the Future?

With High Definition TV on a large screen plasma TV it will be so real, you will literally feel as if you are there. As price comes down due to overseas manufacturing and supply and demand, we will see more and more families charging the remaining balance on their credit cards for these systems, they will connect them to DVDs and it will literally be like virtual reality in your own living room.

As these technologies enter our home as we know they will, is there still going to be a place in our lives for our present day big screen Movie Theatres with $12.00 per person costs with the inclusion the impulse purchase of soda and popcorn value pack? The movie theatres will have to come up with a greater and greater entertainment value to get people to continue to patronize them.

Sure people will be more than interested in a Friday or Saturday evening at the Movies, but what about during the week competing against the comforts of our own homes? Will movie theatres need to upgrade to 3D movies or IMAX type movies? Will they have to for survival? After all movie theatres are a business, buildings and property are expensive and ROI is the goal and it must be achieved. We have seen in the last two decades the closing of thousands and thousands family and locally owned theatres for the larger Multiplex Corporate theatres.

One way for movie goers to feel a greater entertainment value and enhanced experience would be the adding of brain wave enhancement. For instance brain wave manipulation inside the theatre for the viewers of Delta, Alpha, Beta, and Theta waves, they are now doing this with high-tech video games. In large multiplex Theatres certain movies could contain such a system, which would have sound devices in the walls, which were broadcasts into the room. WOW.

Imagine a scene where the actors were tired after fighting a storm all night in a boat. You would feel tired - then as a big wave crashed over the bow, you would feel anxiety. In a love seen you would feel very peaceful and content? Imagine the enhanced experience you would feel? Since the technology is now available it could be deployed now.

Of course for scary movies where your heart would race wildly out of control, perhaps grandma might not wish to attend. Movies would have to be not only labeled; “G”, “PG-13”, “R” there might also be intensity ratings on 1-5. Meaning you would have to sign a waiver to see the movie and also submit that you are in good physical shape similar to that form they have when you enter a 10K running race. Now take all that and throw in holographic technologies in 3D both at the Theatres and at home in the Living Room entertainment center of the future.

2006 Holographic Imaging Trends

Major advances and strides were made in Holographic Projection research and development of data visualization. Many new techniques of commanding light to project data and digital imagery into holographic projection have been accomplished recently as scientists and engineers blur the lines between real life, entertainment, video games, movies, augmented reality and the virtual reality realms.

Systems have been simplified and they really work and the first time view is generally amazed at the images and stunned. Some are so taken aback that they run out and tell all their friends and talk about it for weeks on end. 2005 was the year that scientists figured it all out, now in 2006 we will see many applications are reading themselves to enter the market place for the consumer;

http://www.physorg.com/news2516.html

We will also see in 2007 many of these applications being used by the military and in space as well. The possibilities are endless and the Xbox 360 Virtual Reality Living Room of the Future will blow your socks off with new and improved action that looks so real it will blur your reality. We will also see movie theatres improving ticket sales by sectioning off one or more of their rooms for the ultimate 3D experience in a similar venue to IMAX only with surround a sound and Holographic images, putting the movie goer in the middle of the action.

Future of iPod

Everyone is buying iPods these days and all the retail stores are out of stock. Many parents had to buy gift certificates for their children for Christmas having missed getting into those stores early enough to get them an iPod. This is one massive consumer movement; can you believe it? Do you have an iPod yet? But what will the future of the iPod craze look like in years to come? We already have the iPod Nano and at the Consumer Electronics Show in Las Vegas we saw the announcement of the Eye-bud, which is a tiny head and eye mounted unit allowing you to watch music videos or Pod Casting with full motion video.

Well with all this technology, how can it advance any more? Well, glad you asked and here are some ideas regarding the future of the iPod and iPod Nano. I believe that the iPod device will eventually end up with several variations such as a wrist watch with a voice activated feature and become a holographic entertainment center and communication device (3G Video Cell phone too). It will be able to run whole seminars and University Classes on the table at Starbucks by simply laying it on the table and turning on the holographic professor.

How will this be possible you ask considering the size, small battery and bandwidth needed to make that all happen? Well, consider LED lights and LED Circuits that use only a few watts and then using a little optical physics, we have everything we need to make it a reality and Moore's law will be a big help as well.

All these technologies are moving forward now and soon we will see them all integrated into the newest versions of the iPod for your viewing pleasure. Isn't technology great? Stay tuned to the iPod saga as the story will be even better than this with future renditions.

Virtual AI Holographic Assistants

Virtual friends come alive and how about a virtual holographic assistant to help you prepare a meal in the kitchen, after a couple of times you will be able to do it yourself or if you prefer the virtual assistant is always available. When you are away perhaps the virtual assistant will sit at the table and make you pets feel at home?

A companion for lonely people might help curb depression or allow the person to talk about things. An Artificially Intelligent computer might indeed be programmed to work in conjunction with such a holographic image. Surely there are teams working on these things as we speak. It might also be used to project virtual shadows for protection to prevent burglars or provide an image that can be seen through the window from the street, which would prevent a thief from taking advantage of an opportunity when no one was home - Endless possibilities.

Holographic Adult Entertainment

What propels human innovation? Well, we know where the funding comes from. We know that funding comes when a Return on Investment is available. What do people spend money on? Well, think of Maslow's hierarchy of needs. People want to maintain self preservation, so you will find the greatest technological money flows in those things, which protect the sanctity of life; things such as Health Care and Medical advances, security and military. People also wish respect from their fellow man. They want to look good; thus you will find consumer items such as make-up, clothing, sports cars, etc.

Humans also want companionship and entertainment and so we see advances in movie special effects, computer games and now the Japanese are developing human female robots. Today they advertise them as maids, receptionists and servers. But in the true spirit of Kama Sutra, you can bet that those Japanese robotic engineers will soon be designing Blonde Hair Blue Eyed sex robots to serve their will.

These Japanese scientists have unveiled the most human-looking robot to date, well at least in the public domain. Secret research is being done now which looks towards the future to build robots so real they will fool humans, in other words they maybe sitting next to you and you would never even know it. The Japanese scientists call their new robot android Repliee Q1 Expo. She flutters her eyelids in normal human increments, looks like she is breathing and moves her hands just like a human would. This robot has over 42 actuators. But indeed, this is merely the first step in human type robotics.

We all know that the Internet is used most in recreational use for surfing websites, such as pornography, chat, online dating and personal communications of the sort. It should be obvious that the near future of robotic androids will be used for sexual pleasure. Isaac Asimov and others have cited this as the most probable use. Not only have science fiction authors put these futuristic predicts forth but Hollywood has as well in several movies such as "A.I. Artificial Intelligence."

Using tactile sensors and the latest Haptics research the Japanese scientists are well on their way to the development of their next marketable technology. The Repliee Q1 Expo has 42 actuators, but some of the MIT robots, will mimic the human nerves in the hand already have 250 sensors. New skin technologies will allow the robots to have real human skin grown in petri dishes and these might also be incorporated in the sexual revolution of robots.

As sciences advances our species, much of how will live our lives in the present period will change. Many have asked; what will sex be like in the future period or 100 years or 150 years from now. Will humans enjoy sex in the same way? Obviously evolution will not get rid of our sex organs even if we no longer use them for procreation, due to favoring a safer and less inhibiting BioTech solution to childbirth.

Still we know that the human body has many nerve endings in their sexual organ region and since the brain and body enjoy the sensation of sex, surely it will continue in some fashion. What technologies will humans develop for these purposes? Will the robotics age provide humans with sexual partners for quickies to relieve stress? Some Japanese Robotic Professionals are counting on it as they work in the research and development lab to make it so.

Will Holographic Technologies be employed to improve our sexual desires? We are seeing an emergence of advances in this area of science right now, with more than enough potential applications; will sex be one of them? It only stands to reason that the Adult Entertainment business will continue to drive technology. Right now we see much of the High Definition Television Technology is moving forward due to the huge monetary rewards to the pornography industry.

Whether we choose to address the issue of Holographic Technologies being used by the pornography industry, we may as well face the fact that it surely will. Indeed, there have already been movies where a man comes home from work and is entertained by a Holographic Room Mate with an extremely sexual voice. All this and more will be a reality in the future.

What Might be the Potential Social Effects of the New Holographic Projection technology?

It takes only a moment's thought to imagine how Holographic Projection would revolutionize the video-gaming, film, and education industries, but what of the porn industry? Ben Vietoris is quick to once again as the Holographic Think Tank the tough questions. The answers given might upset any mother out there with a daughter or a son and thus Ben states:

> I'd like to see some sort of an analysis of Holographic Projection's affects on the Internet porn industry, and, therefore, an analysis on the effects of personal relationships in general as well. I mean if it becomes so realistic and convenient to engage in personal and sexual relationships online using Holographic technologies as opposed to meaningful relationships in real life, what would the effects on society be?
>
> Would Holographic Technology provide such realism and convenience to virtual sexual activity as to make virtual sexual relationships with a person on the other side of the world as commonplace as real-world relationships? What of porn? What of artificial intelligence controlled personalities? Could cyber-sex become more commonplace than real-life sex?
>
> If so, what are the sociological implications, considering rates of sexual violence, divorce rates, birth rates, increase or decrease in the prevalence of mental illnesses, etc.?"

Indeed Ben has some good points and these must be considered, because these challenges are inevitable and forthcoming. Turning our back on these issues will not cause them to go away, as this topic will be an issue in the future. Ben further reiterates:

> "So much time is spent in trying to find ways to develop new and better technologies, but little thought is put into whether or not such technologies SHOULD be developed in the first place; whether or not limits should in fact be placed on them; and if so, who should have the power to do so?"

On the moral issues, we should also address the reality of the church and religion and how unfortunately it has made something that is quite natural into something that is dirty. Without addressing the innate characteristics of the species we could easily make the wrong decision on this issue and overstep the bounds of morality and thus take away personal freedoms. Many people do not have a problem with such things, although most people are appalled at any degrading of women and thus have a problem with that aspect of the equation, but not the naked human body or the innate drives of the human species.

If the technologies were developed in a "loving sexual way" rather than a perverted context, it would not be a negative problem on society and who knows it might even take off the edge of the "Testosterone" hard-core attitudes of fighting. As more people inhabit smaller spaces in the future as the human population balloons, perhaps Holographic Technologies will be a positive thing keeping people from killing one another.

In fact the Holographic Think Tank felt that these dialogues on the miss-use of Holographic Technology should be flushed out for the project, as they are important considerations and if we are going to address the implications of these technologies it is best to solve the problems before they ever occur. That is the difference between brilliance and genius. Brilliant People solve problems while geniuses never have the problems in the first place, due to the fact that they are addressing all the issues well in advance.

Currently there seems to be a little more government regulatory oversight in the Video Game Industry as well as the Internet on both sexual content and violence. Others are concerned with "Gangster Rap" as well. We can expect regulatory oversight on Holographic Entertainment Applications too.

Making Love In Virtual Reality;

What will making love be like in the future? Will phone sex be totally out and 3D long distance love affairs totally in? What if your spouse is an astronaut on a space mission or over sees protecting freedom and democracy against evil dictators and International State Sponsored Murderous Terrorists; then what? What if you spouse dies, will you still be able to feel them close by using of virtual reality in 3D Holographic Full Motion Video in your bedroom?

What will these technologies bring us in the future? Will we welcome their gifts or will we condemn them as perverted, immoral or unacceptable pornography in the face of all that is holy with God almighty? Will we make laws against certain uses, with politicians telling us what we can and cannot view or will we simply let the judges decide since well:

"They'll know it when they see it?"

Those who have been following such research and development know that Holographic Technologies are getting closer to becoming available in that sort of reality and soon we can see the data on our computers in 3D, 4D and 5D. We will enjoy Virtual Reality on our 360 X-Box in our living rooms. Great, great grandchildren will be about to meet their past ancestors and watch a holographic video.

We will communicate in video conferencing with the image of the other people sitting next us, but not actually there. All this is on its way and even more, as the applications are endless indeed and there are companies already producing such business tools and thus it is only a matter of time and a hop skip and jump to other uses.

It therefore stands to reason that these technologies will be used for intimate relationships and other innate characteristics of the human species, whether they are psychological need, humanly lustful desires or coping with the stress incurred when a loved on is away or has pasted on. Virtual Reality is already being used to curb Post Traumatic Stress Syndrome for our veterans and Holography will also be incorporated as time presses on.

Entertainment
Turns to Advertising

Illusionary Presence in VR

In the very near future holographic technologies and imagery will be refined to the point that you will think you're seeing ghosts. In the past you may have seen an image or a ghost and considered such an act of God or something supernatural. But in the future it will merely be one of the latest technologies.

In fact, Wal-Mart may opt to save money on their greeter at the door with a little illusionary presence and holographic imagery. The ghost greeter will say;

"Welcome to Wal-Mart have a nice day" or

"Did you get a receipt with that item?"

Perhaps your church will invest in the illusionary presence and holographic imagery of Jesus - a visual aid to help you in your spiritual revival. Although some might say that is blasphemy, if it helps someone understand and become closer to god it will be used, especially in the more progressive churches catering to the up and coming next generation.

Whether anyone cares to admit it or not Churches are a Business and without an inflow of sufficient tithing they cannot operate and will fail. Those churches which provide a greater entertainment value will have more members, than those with an unenlightening monotone message. The TV Evangelists bring in the money needed to propel their message.

Perhaps at your school or college your teacher or Professor may rent a video holographic image of a speaker to give a lecture to the class. This prerecorded message in 3-D will be the illusionary presence and holographic image of perhaps a business titan, world Explorer or research scientist. The applications for holographic imagery and uses for illusionary presence are endless indeed. Perhaps you'll someday be videotaped in 3-D holographic full motion imagery?

A perfect example of 3D advertisement comes from this article - press release from Dimensional Studios of the UK below:

A New Era in 3D Advertising

This Essay is By Steven Wilson
http://www.DimensionalStudios.com

This world's innovative technology can enable observers to see lifelike images that float deep inside and project several feet in front of a display screen.

Dimensional Studios, a leader in 3D visual display solutions has recently introduced its unparalleled digital signage in the UK. This world's innovative technology can enable observers to see 3D holographic-like images that float deep inside and project several feet in front of an LCD or plasma display screen. Its aim is for advertising agencies and consumer products who wish to catch a huge impact from this new break through media.

Dimensional Studios 3D digital advertising spot is the most modern advertisement innovation to be applied in UK. "By integrating our unique 3D visual solutions, with infotainment-based networks, we are redefining the entire digital signage proposition. Our 3D displays are unlike others. Delivering dynamic moving images with sound or full motion 3D, the images are visible to the naked eye-requiring no special viewing aids-and can be seen at 120-degree peripheries, enabling multiple viewers to witness the images simultaneously.

The content falls, drips, runs, pours, bubbles, breezes and tears like a twister out of the confines of the video screen into the sightline and the psyche of everyone in eyeshot. The reverting effect has the ability to stop viewers in their tracks – an obvious benefit for retail marketers", said Managing Director, Steve Wilson". In the future, the idea of organizing the exhibition or event will be even more interesting and attention-grabbing not only from the participants but also from other observers who will get to perceive from our 3D live broadcast network from the displays.

3D displays are unrivalled in their ability to stage powerful advertising messages. Global brands and retailers realise significant revenue growth generated from the holographic-like 3D images produced on state-of-the-art digital signage. Brand messaging is flexible and can be altered seamlessly through a sophisticated online network to accurately target changing consumer demographics and maximise penetration and product recognition.

Dimensional Studios distributes 3D advertising media through arrangements with its partners. The company offers customised, end-to-end solutions for the creation, distribution and placement of 3D experiences throughout the advertising and entertainment industries. Our proprietary flat-panel LCD and plasma 3D displays can be placed in nearly any environment for maximum, convenient exposure. Corporate marketers will enjoy increased returns on investments; global brands will benefit from our digital signage in locations that will directly reach today's out-of-home consumers. 3D displays for advertising will initially target the in-store promotions, out-of-home advertising, events and promotions, and entertainment, hospitality and permanent installations.

3D display technology without using any special viewing device makes it effective in expanding marketing activities at the sale spots to a wide area throughout the country. Apart from innovative and dazzling technology, Dimensional Studios have made it possible for the UK to become 3D commercial spot development center capable of producing first class advertisement spots, advancing the company's existing reputation in animation and innovative advertising production. [Other areas of application can be seen at http://www.dimensionalstudios.com].

Dangers of Blurring Reality

There are some more pros and cons to the Holographic Technologies, such as the blurring of reality. We know there are those in human populations who have obsessive compulsive personalities and Holographic Virtual Reality Home Entertainment could be a very easy addiction for them. In China they limit Internet use at the Internet Cafes and even warn people of the addiction problems with the Internet. If everyone is using the Internet all day, the civilization cannot stay productive is another concern, which is pretty real in fact.

In North Korea there was a gentleman who was playing an Internet Game and did not eat or sleep for many days and actually died - true story. The most interesting comment on this issue came from a Holographic Think Tank Member who stated:

> *"If this is true then the Holographic Virtual Reality Home Living Room Entertainment Center will compete against recreational illegal drug use and probably win - No more Drug Problems!"*

Indeed, but at what cost? If the average Holographic Virtual Reality addict can no longer function in the real world then will they lose their job, wife, family, home and end up on the street begging for others to allow them to use their Holographic Virtual Reality Living Room? And will we need ***Holographic Reality Rehab Centers*** as well?

Hollywood Goes All High-Tech

There is no doubt that as more people get HDTV with Holographic Capabilities that they will wish to receive Holographic Programming Channels from DirectTV. Watching a sports game or something on the Movie Channel or your favorite Music Video stations would surely be something to see immersed and surrounded not only by stereo sound by also be images of light that looked ominously real. What about other shows on you Holographic Entertainment Center?

The History Channel moves into the Future

Many people spend hours watching and learning on Television. There is the Discovery Channel, Science Channel, History Channel, Wings, Animal Channel and a host of others and they are indeed very interesting to watch. Some say if you watched all the history channel programs that you might know more about history than most High School History Teachers. Since I like many others have, I concur that to be the case. But why not take the History Channel and the other Discovery type channels to the next level in technology? You see Holographic Technologies are getting closer to becoming reality and soon we can see holographic projections in our living rooms via computers and in home systems, watch our shows in 3D and 4D.

We will enjoy Holographic Augmented and Virtual Reality on our 360 X-Box or Sony Play Stations in our own homes. We can watch home movies of weddings and graduations in 3D and perhaps great grandchildren will be about to meet their past ancestors and watch a holographic video. We will be communicating in business using full motion holographic video conferencing with the image of the other people sitting next us, but not actually there. All this is on its way and even more, as the applications are endless indeed.

Just imagine watching the history channel in the cockpit with Charles Lindbergh or sitting next to the historical notables during the signing of the Magna Carta; crossing the Delaware with George Washington or standing on the moon with Neil Armstrong as he utters those famous words; “one small step for man, one giant step for mankind!”

There is probably no better use of the technology than to educate our populations in their own homes and thus making a smarter and more intelligent set of voters to prevent us from repeating the past and dooming our future in a never ending cycle of our own follies. Think on this.

Skateboarding of the Future

Future Skateboard Lighting Systems

During daylight savings time it is easy for skateboarders to hit something and lose control and crash. Many of them we interviewed told our Online Think Tank that crashing; sucks. When considering these statements we indeed agreed with them. Thus future skateboard designs will need to encompass a special; Lighting and Safety System to prevent these problems.

Of course skateboards must stay small, light and maneuverable and thus the lighting system must be low wattage. Meaning about the only possible system that can be used would be an LED Self Powered Lighting System run off magnets on the wheels or generating the energy as the skateboard goes over bumps. Consider the Shake-able flashlights if you will and how these could be integrated into the skateboard.

Low wattage circuit boards could also generate Holographic Images to use as a Holographic Training System where new tricks learned. The rider would see the image in front of them and match its moves until they did it perfect and learned a new trick. Advanced riders could create, sell or trade the programs online in Skateboard Image Exchanges.

LED Lights are great because they can come in many different colors. For instance a Wipe Out could be a "Red" flashing light and High Level Rad Move, which was successfully accomplished could be "Green!" Indeed, the board could have ground affects too which allowed it to change Board Color or Modify its color based on the pace of the tricks or speed of acceleration.

The skateboards of the future will have advanced lighting systems and most likely they will use low wattage LED Bulbs and circuit boards, which are light-weight and ultra bright. All this and more will be part of the skateboards and hover boards of the future.

These same LED Lights can be used to project Holographic Images while you skate or record your best moves to play later in your Living Room Home Holographic Entertainment Center and watch yourself do tricks and learn how to do them even better.

Skateboard Parks of the Future

Imagination has always been the hallmark of new futuristic concepts. From Science Fiction usually comes new technologies and we know many of Arthur C Clarke's concepts in his books make up much of today's modern satellite technology. Now consider the recent question posed to the Online Think Tank;

What will the future of skateboard parks be?

What will they look like? How will they work?

It was agreed upon by all participants and thus we set on our way to discuss the future of integrated skateboards and hover boards, as well as their riders in the future parks. First we spoke at length of Interactive Training to improve safety and considered that it will be similar to motorcycle racing schools, with simulation, Virtual Reality and real life experience and that the skateboard or hover board would be in constant contact net-centrically with the parks IT system.

Next we talked about High Level Contests, video systems and bill-board displays integrated into an Artificial Intelligent Scoring System measuring such things and wobble, speed, height and smoothness based on a mathematical matrix. We also considered one-on-one competition with the parks system where the competitor was Holographic and that was the Competition to beat. Much akin to the IBM Big Blue Artificial Intelligent chess matches, where man is pitted against machine.

How real will these systems be we were asked? Oh very real we said.

And how probable are these scenarios? Well, now that we have invented the idea, pretty probable indeed. In fact hover board and skateboard parks will soon be Blurring Virtual Reality and Reality. This too can be duplicated with holographic 360 degree 3D Xbox Systems at home too. How so you ask? Well the rider can take the Skateboard Park Home (VR Living Room) and these can be integrated into eLearning while Virtual Skateboarding on the carpet.

Skateboards can compete against Holographic Images of riders from anywhere in the world. The Skateboard Olympics at home - competing with Other Nations without Moving and bringing us all together in a common cause; Technology of the Future.

Skateboarding Video Games

Rainy Day Virtual Reality Living Rooms of the Future

With interactive digital skateboard parks we will also see a whole new wave of digital recordings for skateboard riders. Through CAD/CAM technologies and digital video will come the video material needed for ***Holographic Virtual-Reality Skateboard Parks***, where the rider stands on a board in his or her living room, which is mounted on a platform in front of a large high-definition flat-panel screen. At first these systems will show up at theme parks and then eventually be incorporated into the lineup of videogames by Sony or Microsoft Corp.

You can expect these virtual-reality living room games to be used by kids during rainy days or inclement weather. As more and more people buy these systems the prices will come down. Currently these technologies are not is expensive as you might think because the skateboard can be mounted to the platform, which will record the speed attained by the foot motion and as the rider leans from side to side that to will be recorded and displayed on the screen.

The Online Think Tank estimates the Virtual Reality/Video Game Immersion Industry to be well worth 5 Billion Dollars by 2012 and grow by over 8-15% per year. Skateboarding or Hover Board type augmented or virtual reality gaming will be a sub-sector of that market, which once introduced will surely grow along with the total market and Holographic Projection will be needed to make it all come alive.

Interactive virtual-reality games such as this are good to help a rider practice without getting hurt doing very complex trick maneuvers. It will also keep young riders active during bad weather and give them a workout, meaning that we might prevent onset juvenile diabetes. Not to mention that such a videogame/virtual-reality system will be extremely fun, challenging and exhilarating, especially for grown up kids who cannot perform as well as they once did in their youth. The 'glory day' reliving of the Baby Boomers and X'ers childhood will be a percentage of the users.

Professional skateboard riders could sell their best trick performance is to an online trading system such as on eBay, so others might try to match their skill. This would allow riders who spend all their time skateboarding to earn a living for their efforts. It would also be a good way to get additional content for videogames or to be used in Hollywood movies.

Holographic virtual-reality living room gaming is on its way and this will allow a rider to experience a near reality skateboarding session totally immersed in the activity. It will also give the rider confidence in his or her ability to overcome fear, build self-confidence and attain an expert skateboarding level. Why are we so sure all this technology is coming? Well, if you look at the current trends of Video Gaming, Home Entertainment, High-Tech and the demand of consumers for more, it is should be quite evident to even a novice Tech Trend Observer.

Advanced Skateboards in 2025

What will skateboards look like in 15-20 years? Have you ever considered that? Well, in the early 1900s skateboards were literally roller skate wheels strapped to two-by-fours and they were not very safe at all. In the future skateboards will come with Stability Control Systems similar to those required on new SUVs. No more high speed wobbles on hills if your trucks are too lose.

But that is not the only cool features that the advanced technology skateboard engineers are considering. One gentleman from the Online Think Tank believes that they will also have Holographic Projection to set up pretend barriers to jump and fellow skateboard riders to try to duplicate their radical moves and tricks. Holographic Projection Technologies will soon be here and they will be integrated into the new skateboards and hover boards of the future.

Of course the Skateboards of the future will also have on-board video cameras to film your best moves and tricks and you can play them back at home or thru the Holographic Display. We are talking about one-hundred percent pure adrenaline with Replay Technologies to Share or Trade with Friends. All this is in the pipeline and soon to hit the streets in your lifetime.

Yes let's build a net-centric Skateboard with active RFID chips, it can dodge obstacles or incoming objects and also be fixed with the latest lidar, radar, stereo sonar and optical flow sensors. Let's make all the components fully integrated with the skatepark and/or a Video Game, Virtual Reality C.A.V.E. or system or even a full on simulator.

Extreme Sports - Holograms for Sale

Super Bike Training Schools of the Future

If you have ever watched Street Motorcycle Racing with Super Bike factory sponsor riding celebrities as the take corners at speeds of 160 plus miles per hour dragging their knees on the track, then you know how dangerous that sport can be. Imagine yourself as a factory sponsored rider on a crotch rocket in full gear and the training you would need.

Well, it just so happens I my self was in the same shoes as most “squids” when I signed up for Super Bike School many years back in California. At the time they were riding Ninja 600’s and nothing like today’s race bike technologies and believe me we were racing around afterwards in the novice class and were no where near those 160 speeds, especially not in the corners.

Learning to race motorcycles is fun as you come in to set up for the turns, your mind goes into slow motion, but it takes a while to get use to doing it in a fluid motion or even close to the finesse of the professional riders. One new technology on the horizon is the Holographic Technologies, which are getting closer to becoming reality. Imagine watching an image of a factory rider in front of you setting up the turn and executing it perfectly? You would match your bike to the holographic projection and attempt to mirror you actions to it.

By doing this you would be able to visualize it and then watch the video of yourself doing it for critique by the Super Bike coaches. Such an application for this technology could also prevent motorcycle accidents in traffic as you learned to maneuver your bike in all situations. I would recommend super bike school to all motorcycle riders, because these skills are important to avoiding all the idiot drivers out there. Think on this.

Holographic Climbing Assistant

For those learning to be rock climbers, they know how tough it is and how challenging it can be. You have to be in excellent shape and much has to be learned the hard way through trial and error. There are many good books on rock climbing, but reading it in a book is a lot different than doing it.

Many rock climbers buy instructional videos. These seem to work better than the books and also make a nice supplement to the workbooks, if one chooses to use both. Once the potential rock climber becomes proficient in the book knowledge generally he or she will go out and get some rock climbing experience with a real rock climber.

The rock-climbing instructor of course will talk them through occasionally the student rock climber will get nervous and upset or psychologically distraught. Obviously this situation can become dangerous and it therefore takes a really re-assuring instructor to keep everything under control, as fear of falling is highly an innate characteristic of human beings.

I propose using the latest cutting edge Holographic Technologies in 3D and 4D full motion projection to assist in this. The student will have a small holographic projection device which has a pre-recorded expert rock climber on the exact same training rock climbing up and the student can rewind it play it over and over again as they match their movements against the holographic image and conquer their fears. Think on this, as it is a very good application for this new holographic technology.

Extreme Parachuting and B.A.S.E. Jumping Future Concept

Probably the most dangerous sport known to man is BASE Jumping. We have all seen pictures and videos of these daredevils as they purposely jump off a Bridge, Building, Antenna, Cliff or various pieces of infrastructure and then pop their parachute just prior to splatting on the ground.

In the last few years extreme parachuting and BASE jumping has become a very popular as there are always plenty of spectators to watch the death defying feats and those who dare to deliver the goods are in for the adrenaline rush of their lives. Unfortunately this is a sport, which claims many lives each year and is even more dangerous than being an astronaut or racing NASCAR.

It is for this reason I propose some safety features for those who are getting started in BASE jumping to help with their training as they attempt the sport of extreme parachuting. I propose using the latest cutting edge and state of the art Holographic Technologies, which are getting closer to becoming reality using 3D and 4D projection.

The BASE Jumper would just prior to the attempt turn on his micro projection unit strapped to his chest and match step for step a previous attempt by an expert world-class jumper. This projection would be played as he jumped and when the image in front of him pulled the rip cord so would he and thus be insured that he did not splat on the rocks, water or concrete below. Think on the use of this technology on your next BASE jump!

Chapter III
Holographic Tech Teaching and Training

Holographic Technology - Teaching and Training

Holographic Projection technologies are coming soon and the scientists and researchers are being funded by smart entrepreneurs who see the benefits and potential applications. In fact imagine a solution to the problem in grade school with too many kids and not enough teachers? Well with holographic technologies the Virtual Teacher's Aids Come Alive.

Of course such Virtual AI Holographic Assistants can come in many forms such as One on One with VR Holographic Avatars or for use in training of adults in real life simulation. A college class may have a guest speaker and sign up at the Guest Speaker's Bureau and a virtual holographic speaker ought to be a little bit cheaper. The question is if the speaker is Real or Memorex? What about your regular college teacher? Is Your Professor Real?

Holographic Technologies will also be great for Sport Technique Coaching and Training. In fact nearly all training in Virtual Reality Simulation will go Holographic with Holographic

Demonstrations locally or thru Long Distance eLearning initiatives where the Holographic Images are broadcast over the Internet.

Holographic Projection Technologies will surely surpass all the current research going on in the field of virtual office concepts and video conferencing. Those who spend or waste 2-years studying these current concepts will see holographic projection technologies leap-frog their research and leave them in the dust.

The Holographic Projection Technologies will be preferred by educators and students, even business trainers, consultants and speakers. Other technologies are just not as good. Online webinars are great, but nothing like what can be done with holographic technologies.

One-on-One with VR Holographic Avatars

We all know that there is a shortage of teachers and we all know that the more students in each classroom the less individual help that each student gets. One way to shore up this problem is with Virtual Reality Holographic teacher assistants and another is with VR Holographic Avatars, which will help the student with their needs and help them achieve up to their maximum abilities.

What Are Avatars and Why Should They Be Used for eLearning for Kids?

Avatars are being introduced to assist kids in eLearning. It turns out the kids love the avatars and they can be used as teacher assistants. This helps with teaching in overloaded classrooms and increases the learning of the students. What is an Avatar? Well Glad you asked;

An "avatar" is a fictional character inside of Computer. For instance Microsoft word comes with a "Paper Clip" which is there to assist you or you can turn it off and choose a different Avatar, I think I remember a puppy, which is a popular choice for Avatars with kids too.

It is a virtual person; it could be a cartoon character like Mickey Mouse or a More Virtual Person like a Caricature of "YOU" the teacher. Which [opinion] I believe would be very interesting to test the psyche against a fictional Donald Duck. It is often considered in Psychology that those without a father figure around have to invent themselves having no male roll-model around, an avatar might help a child develop self-esteem in the absence of a teacher there to help them one-on-one. This could be good.

Some say having an "invisible friend" is an okay thing for a young person, this indeed would also take the place of that and create a "friend-ship" with technology; a relationship if you will. Now mind you I am NO Psychologist, just a studier of human nature like anyone else participating in a society of humans, so the comment of contributing validity to your project might be somewhat limited, nevertheless I believe that "self-esteem" is a very important issue. Thus a virtual friend in the computer makes a lot of sense.

Of course I believe only happy, friendly avatars should be allowed, because often we find even cartoons can cause violence in children; Road Runner and Wiley Coyote or many of the newer cartoons today, so the Avatar should be realistic and nothing that might relate too much with a character on TV used in entertainment.

Although some might disagree feeling that Super Man might be a good Avatar to look up to, even though the cartoon has violence? Perhaps you might find information on that. Here are some Avatars;

http://static.flickr.com/40/100109107_c3efcdb8cf_o.png

http://static.flickr.com/82/234289752_8bcbe01de5_m.jpg

With collaborative avatars one can choose something to represent them selves, perhaps choosing attributes that they wish that they had or roll model avatars signifying how they feel about themselves or how they feel about themselves, this helps the instructor too, by what they choose to represent themselves.

The avatar they choose to be they assistant teacher is also of interest and it shows what type of authority figure they would most likely enjoy? It also gives them a sense of "self" and unique-ness and self-esteem that the special kids might be lacking? Of course Avatars are proving useful in eLearning initiatives with children with special needs as well as advanced placement kids.

It should be easy to see what a natural these Avatars would be as a potential application for Holographic Technologies and helping out the teachers too. They say that if a company puts a picture on the wall of a person looking at them while the employees get their coffee that they are 75% more likely to put in the required contribution to the coffee donation fund. A virtual reality holographic Avatar will keep the kids honest and keep them from cheating in the same way, even though every one knows it is not real.

Holographic Lego Assistant

Studies have shown that when children create with toys that their minds become more adapted to problem solving and learning. One of the best toys for children is Legos. Other toys in the past have been Lincoln Logs and Erector Sets all of which have served American Children very well and helped their parents develop their young minds into very well adapted problem solving machines. Thus if Child Day Care Centers have Holographic Lego Assistants then we should see an increase in stronger and earlier brain development in problem solving and creative activities.

Guest Speaker Bureau

"Real or Memorex"

Conversation with Plato in 3D Holographic Virtual Reality

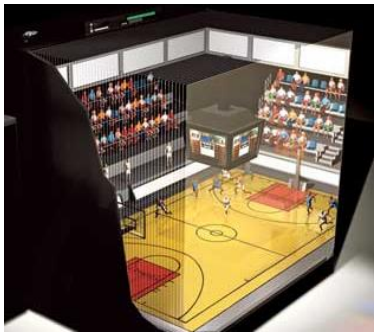
There have certainly been many worthy philosophers and learned men in World History perhaps none more celebrated that the Greek Philosopher Plato. Unfortunately we are unable to talk with Plato as he is from a past period, while we are in the present period moving into the future period. Much of the basis for our Republic comes from Plato's comments on civilization and his philosophy. What if we could watch Plato and Aristotle having a philosophical conversation?

I propose that we use Holographic Technologies, which are getting closer to becoming reality to produce educational works to teach humans and help them learn. You see, soon we will visualize data on our computers in 3D, 4D and 5D. We will enjoy Virtual Reality on our 360 X-Box in our living rooms. Military strategists and war fighters can play out the battle in the virtual battlespace in advance and then watch it un-fold in real time.

Great, great grandchildren will be about to meet their past ancestors and watch a holographic video. We will communicate with Holographic video conferencing tools with the image of the other people sitting next to them, but not actually there. All this is on its way and even more, as the applications are endless indeed. This will save lots of money in Corporate travel.

It makes sense that we would use such technologies to re-enlighten the masses, teach them to think and learn from the masters of past periods. The sooner we deliver these technologies to the masses and make them available the sooner entrepreneurs will find such killer applications for them. Plato would be proud of our ingenuity and we should be proud to do him such an honor.

Sport Technique
Coaching and Training



Indoor Soccer Goes High Tech

One of the newest trends in the World of Soccer is the high-tech indoor soccer stadiums. They are used for all year around play without regard to seasonality. Many of these stadiums are owned by companies, which lease or rent them out to the teams.

The business model is quite profitable and some markets have more than one company with more than one facility each. These companies also sell items such as soccer balls, refreshments and video play back services. They also often have automatic kicking machines for practice like those used in tennis or for batting training in baseball.

Since these soccer arenas are indoors and climate controlled I propose that we take the coaching and training to a much higher level. I propose that we incorporate Holographic Technologies, which are getting closer to becoming reality, and use them to teach soccer techniques. Thin of the benefits if you took some of the greatest plays in World Cup Soccer and allowed the kids to replay them by setting up the holographic 3D images to move in full motion video on the field.

First you would put an athlete next to each of the players and then run the projection as the athletes matched them stride for stride and step for step, aligning themselves to confront the opponent by moving with the hologram into position and taking the shot or defending the goal. The athletes and players would learn immensely by watching and playing along side the greats. And all this is nearly possible. By using special coatings on the artificial grass to help the projection reflection it could be done quite easily. Think on this new technology and what it means for youth soccer.

Hockey Athlete Holographic Training

Hockey is a tough sport, not only do you have to have excellent skating skills, but you also have to have total puck control. Learning to skate and control the puck simultaneously is not easy and through in a little competition and well anything can happen. It is a sport on the edge of chaos during the entire duration and well, let's just say it is not as easy as it looks.

It takes years of practice to become proficient and it takes nerves of steel to as the level of play increases. The trick to hockey is to make the basic skills such as controlling the puck, passing and skating so natural and innate that you could do them in your sleep and once you are at that point, you are well on your way. Learning the fundamentals and trick shots is also a major important part of Hockey. Knowing how to fall, hit and bounce off the wall is also important.

I propose using Holographic Technologies, which are getting closer to becoming reality to assist in the coaching of hockey athletes. An full motion image can be displayed of Wayne Gretsky as he skates up for a goal shot and the hockey player trainee would skate along with the image slightly behind it and match the images skating and every movement, line up the shot and fire it into the goal, helping him visualize that perfect shot. Can you imagine the power in using this high-tech new holographic technology in that way? Think on it.

Holographic Boxing Training

"Save the Sparing Partner from Headaches"

Boxing is a sport where men and sometimes very tough women get into a ring and knock the ever-living crap out of each other. It is a test of will, stamina and strength. Some say the one-on-one nature is the epitome of what sports competition is. To watch two people go through the rounds of boxing match seems to be something that we all can relate with, whether it is symbolic of life or our innate competitive nature.

To box competitively long hours of training is required and this takes its toll on sparing partners. Without sparing partners it is difficult to practice. So far there is no robot, which has been developed to move, weave and bob, like a professional fighter. No robot exists which can move that quick, block and dodge or one, which can hit back and actually make contact with a skillful human boxer.

Imagine sparing with your partner, which is Sugar Ray Leonard and fighting his holographic image? Imagine fighting his exact Olympic Game fights, step for step, right there in the ring with you? You would be able to stand behind him, making the punches or in front of him, dodging them and then taking the shot when you could? Once you got good you might even stand inside of him like a choreographed routine. Can you imagine the moves you might learn fighting Rocky, Sugar Ray, Jerry Foreman or Mohammed Ali? One of the greatest uses of these new technologies will be in training of high impact intensive sports and Boxing is certainly the perfect application to train our athletes for competition or to represent the United States of America in the Olympic Games.

Pole Vaulting with Holographic Virtual Images

Pole Vaulting is a tough sport and even a harder one to coach, as you can only coach after they screw up and it takes a lot of energy for each fault. The athlete's form in pole vaulting is paramount; as if you screw it up you end up 15 feet in air against a stanchion and no where but down to go. Unfortunately there usually is not very good mat protection there to break you fall to prevent breaking your leg, arm or collarbone.

With today's high tech materials the poles are getting stronger and do not break as often as the pole-vaulter goes for maximum flex to insure the desired height. It takes countless hours to train to be a proficient pole-vaulter and a coach to stand around and critique your form and give you pointers is not always available. Although for safety reasons pole vaulting is not something you want to do alone, as you need someone to call the paramedics if you screw up real bad; it stands to reason that you will always need someone to explain to you what you are doing wrong or what you are doing right.

It is for this reason that I propose using high-tech Holographic Technologies, which are getting closer to becoming reality. I propose that as the athlete runs down the runway, that the second he passes a certain predetermined place that he triggers a laser sensor which starts the holographic image ahead of him, with the perfect form needed to get over the bar. As the athlete jams the pole into the box the holographic image begins its full motion 3D video. The pole-vaulter will of course match his form to the image as he travels up and over the bar.

Olympic Track Training

For the Olympic Track and Field Competition the United States always faces challenges from other very competitive nations. Track and Field in Olympic History means a lot for the United States and they show a sign of strength and honor of the individual. Generally the United States does quite well, as we have regions of our nation with year round outdoor training weather.

One critical factor in track is form and pace, both of which must be mastered to be competitive. As a college track athlete and 4-minute miler, I can vouch for the fact that it is paramount that our Olympic Athletes have the best coaches and training to master these skills. An Olympic Athlete who is in search of the top of the podium and gold medal must train all year around and coaches are expensive.

I propose using Holographic Technologies, which are getting closer to becoming reality to help train our track and field athletes by projecting runners to help establish the right pace to meet the goals of the workouts. Additionally holographic athletes can provide training to help with running form as they are projected to run around the track while the runner matches their pace and form. To do this I propose that a track with a base for the Holographic projection is used to propel the device.

Holographic Ski Instructors on the Slopes

Learning to ski is not the easiest thing to do, but it is well worthy doing. Skiing is extremely exhilarating and probably why it is so popular and extends beyond all demographics. Skiing instructors have a hard job and those learning to sky often fall down so much that they spend more time on the ground wiping snow of their rears than actually skiing down the beginner slopes.

It is often fun to watch the new skiers attempt to ski, but in doing so one has to ask; there has to be an easier way to teach these folks. After all, a ski instructor with a medium sized group cannot watch everyone at once to comment on their form and balance or use of their ski poles. If a Skier could see a holographic projection ahead of them as they learn, they could match their bodies and form to it and learn in a third of the time.

It makes sense that those skiers who are just learning for the first time or advancing to intermediate or advanced levels would opt to pay extra for a holographic virtual reality ski instructor to accompany them on the slopes.

Is Your Professor Real?

Augmented Reality and Holographic Projection in Colleges

These days there is a big shortage of really good college professors. The professors are paid a lot of money and that costs students in tuition and well it prevents many students who do not have the money from going to college. Additionally we have too much political bias in American Colleges, which is brainwashing students to a liberal skew. Now that is not to say that a Democratic View of the World is a bad thing or a good thing, but rather simply saying that perhaps politics ought not to preach in the classroom.

Now then to solve these problems I would like to see Holographic Technologies, which are getting closer to becoming reality used in the classrooms. There will be no more sexual misconduct between Male Professors and their female and/or male students, thus keeping up the integrity of the learning institution. I propose Holographic Professors teaching the best approved syllabuses in Virtual and Augmented Reality.

Now then, one could argue that if we take away the human aspect of education that this would jeopardize our higher education system. However this argument is baseless because currently we already have a problem and it is no properly being addressed. By removing the human factor, we also cost costs, remove abuse and protect the integrity of the information being taught.

The top professor can be video taped and we can use his holographic image and pay him royalties. This will get other professors to compete for the best taped course without political preaching, thus we maintain the integrity of the system and everyone wins. This will save millions in unnecessary costs and thus lower tuition costs allowing more students the opportunity to higher education. Holographic Professors may be the best thing that has ever happened in higher learning to date?

Chapter IV

Holographic Tech in Virtual Communication

Science Fiction is generally a projection of current technology trends into the future. For instance take the Star Wars Holographic Video Phone? Do you know that there are now cell phones that are a little bit smaller than a brick which can project an image video onto a wall using a 3G wireless phone? Very cool and we know with Moore's Law that indeed these will get smaller and better and soon will probably be the size of a Nano iPod.

Think of the benefits and uses for a technology of this kind; you could Record Yourself for Future Great Grandchildren and they could take this with them or save the data in their wrist watch so incase they had a question, your hologram would pop up with some gentlemanly words of wisdom to assist them in making the right decision.

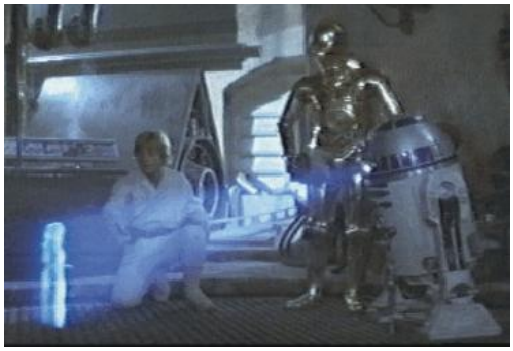
Of course on the business front is where this technology will really take off. Think about Virtual Sales Presentations or Corporate Meetings Without Travel. This will save time and money and for sales it will surely be a lot more convincing than a "cold call" and that is surely a good thing.

What about for government or politics - can Holographic Projection be used for communication with our friends and allies too? Sure, how about; State Department VR Holographic Diplomacy or a US Presidential Visit - Holographic Style. Wouldn't that be something else? That would surely help us keep in tough even with the busy schedules.

If you are into extreme sports well you might be in luck as you could video tape your adventures and then make money by Selling Your Experiences Online in Holograms. You would be getting paid to do what you already love to do? Where do you want your Hologram to go today?

Star Wars Holographic Video Phone

Today IBM has Spectral Imagining Technologies which are somewhat different than Holographic Projection Technologies, which can in fact replicate the images we saw in the Star Wars Holographic Video Projection Communication Device.



The future is here and it is available now. IBM's first application was for Sales Presentations at Trade Shows which makes sense as they used the technology itself to introduce it to the Industry at an Industry and Association Sponsored Trade Show. IBM Has many Multi-Spectral Imaging Patents and their projection technologies are state of the art in need of more applications and smart, well funded entrepreneurs to license these technologies and run with them.

Record Yourself for Future Great Grandchildren

One obvious use of Holographic Projection Technologies or Spectral Imagining will be the ability to leave messages to future generations, allowing common sense wisdom to pass on beyond the normal human life span. All ready Holographic Wills are replacing video wills as parents hand down their last wishes and gifting instructions to their kids and grandkids. This trend will continue and more holographic features are soon to come.

Virtual Sales Presentation

One obvious tool of Holographic Projection Technologies, Virtual Reality and Spectral Imaging will be in sales presentations. There are many companies working with these technologies now and have made them available to the large companies. This saves travel expense, schedules and decreases sales and pre-sales sales process time, as demos can replace the actual sales person.

IBM believes that these technologies will be common place within a decade and are hot on the trail to insuring that Big Blue is there to cash in on the rewards as the market expands. So, we should expect these sales tools at the corporate levels, but what about the consumer level?

Ebay 3D Holographic Projection Tool

Joe, 20, an advanced user of Mobile 3G Wireless Cell Phone Technologies suggest a USB port Holographic Projector thumb drive or miniature projection device which would display any product on a B2C or B2B (Business-to-Consumer or Business-to-Business) e-Commerce website. Obvious users might be E-Bay or perhaps Motorola selling their latest 3G + cell phones or even Apple Computer selling their latest iPod Cell Phone. Joe would like 2% royalties on this novel idea and concept if it comes to fruition.

Indeed the applications for this might be endless, a 3D USB projector would be great for everyone from Designers to Aerospace Engineers and no doubt this will one day come to be. The concept of using it to project items that are for sale online would be a novelty at first but consider the benefits for purchasing something using this technology. No more sight unseen or weakly composed digital pictures.

Online Dating is yet another application which is sure to be a hit with folks, as they can see the Spectral Image of the potential dating partner. A CAD/CAM device with special software would take a 2D picture and estimate its 3D image that was downloaded by the online dater and that would then be made available for possible suitors.

Corporate Meetings Without Travel

The Ultimate in Corporate Online Holographic 3D Power Point Presentations.

Virtual Reality and Computerized Projection Video Conferences with Holographic Images or Spectral Imagining Technologies are an obvious first adopter industry use. Indeed, these technologies already exist and those who use them swear by them.

In the future there will be VR Virtual Reality meetings using computerized holographic projection, as these technologies are all currently available and becoming more robust and soon will be mass marketed. Give it 3-5 years, 10 at most and we will see some pretty wide spread use of these technologies. The first uses will be for entertainment; Virtual Lovers, Living Room 3D Gaming and meetings with fellow bloggers and Internet Friend.

The costs at first will not be cheap and the bandwidth requirements substantial so not everyone will have them right away. Call the challenge the "DBD" or Digital Bandwidth Divide. Well we will need the increased speeds for future holographic meetings, video on the go and all sorts of communication devices too. I have some ideas to be able to read the information much faster using shapes as symbols for words rather than one's and zero's.

My thoughts are to use the spaces between the frequency waves to create unique shapes, each shape could be one of 40,000 characters. Each character could be a whole sentence or a word, imagine the speed then? You could still have 26 letters, 22 currently used symbols.

The distance between each device would mean that only the intended reader could read it and the cold could not be broken, as it would have to be done in real "non-time" which is impossible. And then you could send streams of light waves as information at unbelievable speeds and still use the latest images on photons techniques to really scream the stream to a living room or Corporate Office near you?

State Department and Government VR Holographic Diplomacy and Time Savings

Can we free up some of the US Senators time? Can we keep them at home more in their own districts away from the dirty deals and corruption, votes for sex or the massive onslaught of special interest lobbyists? It would be safer for our nation too, as having too many Senators in one place in such a high-risk city is not the smartest thing in the world. By sending the Senators back to their districts they will better serve their constituency and thus serve the people better.

But how on Earth can we get this done?

I propose using the latest Holographic Technologies, which are getting better and closer to becoming reality. I propose using HDHI, High Definition Holographic Imaging to put an image in each seat of the United States Senate without them actually being there. I propose placing a 12 inch high, 2-foot in diameter box in each seat of the United States Senate instead of the actual human man or woman. These boxes will project the image of the Senator from the base unit. With the next generation of HDHI Technologies the images will appear opaque rather than translucent.

There will also be a centerline video camera on each row of the Senate to watch the events of the day. The Senators back in their home offices will need to sit in a large office surrounded by ten mirrors, which will display the US Senate interior of the building like a Virtual Reality Cave. There will be no excuse for them not being in their office for the vote or listening to the events of the day.

The State Department can project their correspondence with foreign government via a similar system for real-time instant communication. This open communication Holographic Virtual Reality link will help to prevent potential political impasse which so often leads to war and in the end there are no real winners to such human conflict - only animosity and a greater likelihood for a reciprocal response. The United Nations might also have a similar system as the US Senate.

The Presidential Visit Holographic Style

The President of The United States of America is a very busy person indeed. The President has to worry about, not only every single aspect of American Life, the giant government bureaucracy, but also what is going on around the world in 280 plus countries. God knows that isn't easy.

Imagine the information over load, the teams of consultants, staff and all the dirty politics you have to worry about? Then there is the media always coming up with something, some skewed view or event totally blown out of proportion. How on Earth can one person be on top of all that? Well, the fact is they cannot, but luckily like a big corporation there is more than just one person running it all, as there are layers of people and administrative structures to help.

Yet even so, how does one over see all of this and still have time to visit all the other nations around the world and converse with their leaders as well? It is not easy minding the country, much less being the leader of the entire free world a job, which seems to be understood by those who look at the President of the United States.

I propose a solution, which would allow the President to visit all the countries of the World via virtual reality and HDHI (High Definition Holographic Imaging). High Definition Holographic Imaging is the next generation of Holographic Technologies, which would provide an opaque image rather than a translucent one in 3D. Imagine a Virtual Reality Holographic image on our 360 X-Box in our living room, because it will soon be here. You see eventually we will communicate in video conferencing with the image of the other people sitting next us, but not actually there.

With emissaries around the world each day the President could line up 10 meetings with foreign heads of state, by having his team simply set up the holographic imaging equipment in their countries which would consist of a 2-foot in diameter floor projector which was about 6 inches high and two other smaller projectors on the side. The device would be brought into the room and set up and then linked to the satellite via the nearest window.

The head of state of that nation would be video taped and that image sent to the president in the Situation Room at the White House and converted to 3D, 4D image and displayed in front of him. He would converse with the image and that image would converse with him with a one-second satellite delay each way of course. That's how it works and I hope you like.

Recently a specialist in Political Science asked The Online Think Tank about this concept of ours. The questions were quite relevant, for instance:

Specialist: If it is taped how would he converse with the image - The technology would have to be real time?

Lance: Indeed, my thoughts were to video tape the other side in the far away country, send those images back to Washington, convert into 3D holographic in real time, because sending that much data would not be easy otherwise. And the problem with sending and bandwidth is also an issue. So it is not there yet, although with a direct link to the satellite, we do have the technology to keep up with real-time communication even if all the processing of data is done on only one side.

Specialist: Thinking further on your idea, I believe that with current technology it can be accomplished with a minimal delay. Real-time, while obviously the best is probably still a ways away. However, I have a firm belief that a lot of technology is already readily available but is only given to the public in dribs and drabs to maximize profit margins and limit competition.

Lance: Indeed, not all technology, which can help mankind is as readily available as it should be. There are many potential transfer technologies that we should be moving forward which are locked away presently. Some technology obviously cannot be trusted to such a questionable species I suppose, judging from human history, well they really like to use technology to kill don't they? Nevertheless Holographic real-time video communications technologies, especially for this application are something that could help unite the world and allow it all to run smoother as well.

Specialist: With this Holographic imaging after further thought. What is to say that image cannot be manipulated and controlled by others? There is something about meeting someone face-to-face. You look into their eyes; you trust their feelings. What if a rogue state sent a computer generated holographic image stating that they are going to start WWIII or claiming responsibility for something they had nothing to do with? Thoughts?

Lance: I totally agree; that is to say someone claiming they had WMD when in fact they had none simply to use it as a weapon of fear to promote their political will, then claim that they were another nation, when they were more or less a rogue nation or international terrorist group with some really good Holographic Imaging Hackers, which got into the encrypted communications system.

It would be better to scan their eyes and body language to see if they were lying, as humans seem to so innately? Never the less if the technology is working right, then it should be rather crisp and realistic. The technology, especially the IBM Spectral Imaging systems are pretty true to form and the Holographic recording device would be linked to the satellite transmitter by code and only that unit could send to the satellite.

I wonder if the holographic communications would only be used to staying in touch, that is to say, staying on first name basis, but not allowing familiarity to breed contempt or serious issues like the G8, Davos or UN? Those would require the actual meeting, or for instance President Bush in China is necessary to get a feel for what is really going on there.

But some little countries seem to be feeling left out and run by war lords, it may not be smart to go there or even allot the time, as there are so many more crucial matters to deal with. But we need them to join the world in the forward progression of the species rather than festering and becoming a problem, nuisance, distraction or crisis later? I guess those are my thoughts really.

Chapter V
Holographic Tech in Planning

Holographic Technologies in planning make a lot of sense, as you change the variables you can see the image change before your eyes. Holographic data visualization will be one of the best uses of Holographic Projection Technologies and provide us with real-time monitoring and pre-planning tools. We see computers do this now with data visualization, but we will soon be able to take this to a whole new level; for instance in disaster planning for FEMA.

Perhaps you remember seeing that Futuristic Docu-Drama; "Super Volcano" which was set in Wyoming's Yellowstone Park. Do you remember the Holographic Volcano Table that helped them predict what kind of an eruption they might have? Disaster Planning with Holograms might save 100s of 1000s of lives one day.

In fact we remember the horrific Katrina Hurricane, what if Holographic Projections were interfaced with Super Computer Artificial Intelligent Weather Prediction devices? Maybe in the future they might all be hooked to Weather Control Equipment and using the "Butterfly Effect" maybe, just maybe in 20-30 years we might be able to predict and prevent a real live Hurricane?

Of course this is not the only potential uses for holographic technologies. Think of the many uses to streamline our civilization and alleviate our over taxed infrastructure? What if Department of Transportation and their top planners and researchers had Holographic Traffic, Transportation and Distribution Flow devices that they could project and look at the entire Nation's Highway system, all the air traffic, trains, subways - all at once?

By having these tools we can properly plan for disruptions in the system and keep the system intact even in a catastrophic event. The value of knowing in advance or using such advanced planning tools is something that would make Holographic Tech worth its weight in gold.

What if the Federal Reserve could take their Beige Sheet Reports to a completely new level and study by Watching Monetary Flows in 3D Holographic real-time and then apply various changes to see what the outcome would be in advance? Never another glitch in the economy, always running smooth like a Swiss Watch - thanks to Holographic Information Data Visualization Tools that were state-of-the-art!

Why Study the Flows of Civilization with Holographic Data Visualization Tools?

The reason to study the flows of civilization is out of the growing concern of the direction the United States is heading. Without a doubt the US of A is by far the greatest and most free country in the World. This is without doubt. However, as our study will show, it can be better and it is not good enough and often fails the people to enjoy their right of pursuit of happiness. We should therefore work hard to insure that the United States is not considered a footnote in World History, a thousand years from now as a great civilization of freedom, which imploded or completed it's life cycle. Went up for 200 years and down for 200.

There is no reason we cannot fix the flows, refine the system and give this greatest gift ever to the rest of the world. Every one wins. There is also no reason why it cannot work. Such a set of systems and methods, franchise so to speak, will unite the world and set us on course for another 200 years of prosperity. There is no reason that in 1000 years we cannot look back and say that in this period we launched the human race on a course that changed the world. There is no reason not to start today and complete this project and set the course within our lifetime.

Therefore without a reason not to complete this project it would behoove this species to get busy and get it done. This in depth study will give 10 or more pages (chapters) to each of the flows listed above. Where we have done well, where we could improve and observations of the absurdity of political correctness.

For us to fix the World, we in the US must lead by example, fix America and simultaneously admit our own mistakes and use that knowledge to fix the world. Our goal is to fix the World, but unfortunately there are so many barriers and restrictions to doing so or assisting in the process that we must first fix the flows first and then let the flows help us as we fix the world.

You cannot fix the world or convince others to join your cause if they are hateful, starving, suffering, at war, caught up in religious fanaticism or un-yielding in their current point profiting in the obstruction of flow.

We will show that it is the best for all concerned when the world runs efficiently in all these flows. The power brokers and Powers to be, the companies, the people, our neighbors and the World all stand to do better if the flows are strengthened. This includes the environment, non-profit groups, middle class and the under privileged.

Why do we care, why am I personally concerned about all this? Well it affects me in a very personal way as it does every single American and member of the Homo sapiens species. I hope you enjoy this study and matter of factly efforts to make these issues understandable to anyone.

We are absolutely willing to discuss and/or debate with any competent individual with anything of importance to say on this important issue as long as they have the open mind to do so. Everything is related to everything else, everything affects everything else. Everything is connected to everything else. You are connected with me and we are all one. Therefore we ought to act in a manner that reflects these truths. Wouldn't that be a cool world to live in?

Studying Flows of Civilization

We all see the patterns, cycles and flows of our current home planet and indeed we understand much about how they work. But we need to know more and understand the current climate change cycle and how this will affect mankind. We study wind patterns, jet streams, Hurricanes, rivers, volcanic ash clouds, smoke from wildfires and thunderstorms; it all seems so difficult to predict in any absolute sense.

Ocean currents with any crevasse of the ocean may be very simple to study as the earth spins in the water flows it is relatively constant in certain places. Near the surface of the ocean where the water is less dense and more obvious and numerous factors play a part in the direction and flow it will be more difficult to predict, as more factors exist. However once all those factors are known it will not be as difficult as it once appeared.

Now let's take the atmosphere which can change rapidly and has to take into consideration the ocean flow, temperature, height of the waves along with the heat of the landmass which could include; Urban heat, clouds, barometric pressure, precipitation, static electricity, wind, land formations, man-made pollution, man-made structures and many other non suspecting conditions and in many variations. This however should not scare away the scientists, the dreamer or the funds of those with the imagination to take this species to the next step.

We have come a long way in the study of our planet; its cycles and flows, we are learning more every day. Soon we will be able to use this data to stop droughts, put out fires or steer the extreme weather storms, which threaten our civilization. Think on it.

3D Modeling for Healthy Forests

Forest Vegetation Simulations for Fire Prevention, Healthy Forest and Saving Lives. Grid Response Research for those things, which affect the flow of life on the Surface of the Planet. Let's discuss the thinning of the forest based on Grid Modeling and ESRI Software ARC Info modeling. We need to look at several layers of overlapping data to take into account many things such as Biomass Thinning and pre-commercial thinning of trucks less than 12 inches.

This modeling takes into account carnivore and plant eating animals, endangered species and other things. It is good because you can take into consideration many layers of data with the ARC INFO Gird Software based on the data of tree height, elevation, GIS coordinates, GPS locations and possible fire hot spots in canyons. As well as potential slide areas and areas of secluded structures or private lands which could be affected and pose potential loss of life. Or areas of extreme fire hazard based on wind speeds in the atmosphere, winds aloft known data and lightening strike data.

Areas of bark beetle and other problems could be thinned as those inferior trees could not sustain. Also areas of prescribed burning which dies kill the underbrush fuel and smaller trees of 4-6 inches in diameter or less, but with flame heights controlled in certain seasons which are not dangerous to do controlled prescribed burns you could keep the forest healthy after removing the above mentioned and harvesting the surplus. Here is the explanation of how to deal with the complexities in computer modeling and simulation of forest policy.

http://www.fs.fed.us/r5/snfpa/library/arch...ume3/appn_b.pdf
(This Study is old and much of the new studies and software is event better)

Such under burning helps the forest and prevents the big burns as we saw recently in California. During years of severe drought certain species of trees in our forest population, take a tremendous hit, in some cases up to 60% of a certain species will be eaten alive by insects. There is no sense in wasting that level of forest destruction.

What we find is that after the bugs come the fires of the dried and dead timber, which burn so hot they kill even the old growth of 60-inch trunks and up burning hotter and nothing survives. Many of these fires are man made. Then next comes the floods and land slides preventing fast growth of new seedlings. Floods are serious and I can certainly remember doing my share of sand bagging the following years after large California Wildfires. Please read the following so you can understand the subject matter before continuing; Regarding the effect of water and droughts on the forest, you must understand the severity of the issues of the issues. We still have severe droughts in Montana, WY, ID, NM and it will be a few more good solid rain years before AZ and CA are out of the woods. Meanwhile due to changes in the Jet Stream flows OR and WA have both been added to the list of drought areas, these states are normally flush with water.

When we allow growth and put out the small natural fires without taking out the dead wood, under growth we make the eventual fires huge with 120 plus tons of fuel sitting ion each acre. I cannot tell you how to get out that much underbrush without putting in a few roads. But I can tell you how to figure out what growth to take and what growth to leave so that you do not have the entire forest burn down. This can be calculated using computer modeling and Lighter than air UAVs can mark the trees to be removed and the most problematic areas for fires, insects, pathogens, flooding, etc.

Healthy forests are pretty important on our Planet, it is obvious that we need them. And there is no reason to let the entire forest go up in smoke just because in our infinite wisdom we have affected the natural flow of things after millions of years of evolution. The latest fire simulations are much better today than in previous years due to the large numbers of people working on this. Here is a paper being prepared which outlines all the variables, which are encountered and can taken into consideration through such modeling.

http://www.ncgia.ucsb.edu/giscc/units/u130/u130.html

When I first got involved with ESRI ARC Info and Arc Data in 1993 things were taking a new turn. Back then the software was more limited than today as we have better database capabilities.

http://www.rand.org/education/mcarthur/Talks/esri.html

If we take what we learn in wars and fighting the enemies and use such scenarios to fight unhealthy forest areas, insects, drought and water issues, we can prevent the catastrophic fires like we saw recently. Even though we know they have been part of the forest since before mankind has occupied the continent. It is important with these new innovations that we apply high tech tools to help us manage fire risks and good forestry policies

Disaster Planning with Holograms

CDC, FDA, 4D Holographic Data Imaging of Flows

4-D Situational Analysis of Cycles, Flows, Logistics, Events - I just got done reading the reading the Ben Bova book about Jupiter and recently read about the DOD contracts on 4-D imaging for war room readiness and field ops. By taking into account the latest technologies and understanding the principles of such a realistic real time modeling study, so much is possible. Good things for mankind and we are so near, so close really.

Think of the tools we have infrared, thermo scanners, night vision, radar, lasers, GIS, GPS, along with terrain data and ARC programs (Jack Dangermond's stuff); all coordinated together and recording onto a multiple 2.6 GHZ processors recording the data in holograph in front of you. Can you see it?

A holographic real time visual data progression as it happens? Able to be replayed over and over again, with unlimited scenarios. Watching as each small change is made and how it affects the pattern of perceived chaos and bring the situation under control. Picture a display below you the size of a half tennis court with 4D view in holographic motion presentation - Augmented reality of the real world and possible futures.

This technology at work can be used to enforce standards to allow for freedom and peace and no disruptions on the way to the utopian society. Can you see how the human race can develop a defense strategy for our benefit and future? And why stop their? We can fight fires the same way. Fight and respond to natural disasters and put the whole thing in Mobil units for FEMA. And with the data flow, it does not even cost a lot to do it. We can use this modeling to understand and control weather and master our planet. Stop pollution, by controlling its flow.

We already have all this technology right now, time to spend a little and get the top people working on it now. Imagine studying demographics the same way, watching real time money flows, electronic transactions to and from territories, states, Countries, companies and people. All on a similar floor right in front of your command and control mobile situation center.

But in the Flows of Civilization this technology shows even greater promise for instance The Federal Reserve can watch in real time and predict flows to make better decisions. Knowing and watching bank transactions, foreign wire transfers, taxation flows, currency markets, large purchases, stock market, bond market, commodities markets, etc. A complete 4D Beige Sheet which never stops and never lies, it is all on the table in front of you to help you make the right decisions and see true trends as they are happening.

Now then the reason I mention this is that the CDC needs a full blown system like this to track diseases and things which threaten to disrupt our lives. Mad Cow, Bird Flu, SARS, West Nile Virus, AIDS, Influenza.

The CDC can watch disease situations and the USDA food contamination to eliminate it by watching the DOTs version of transportation flow, like airlines, cruise ships, border traffic, food shipments by truck, train, container - all inter-connected and available at any time. And best of all you can record all of it for the future to teach the next new controllers of the system - controlling everything for the future of mankind to serve us.

That is what I see from this technology. You are in the beginning of the first step. Imagine watching these flows move about the cities in every market switching the holograph view, by clicking a button on the console or headset computer. The Controllers of civilization will be able to protect human life and prevent wide spread break outs.

Holographic FEMA Disaster Personnel Psychological Conditioning

Often first responders to large natural disasters get themselves into a place where the death and the destruction literally makes them ineffective. Their brains are over whelmed and they cannot turn them back on to do their job. This causes them to become part of the problem instead of the solution and thus they are just in the way.

Often Dogs searching for victims of major disasters like earthquakes refuse to work, as they keep searching but only find dead people and no one living, they just quit trying. After natural disasters people often have psychological trauma, which prevents them from functioning properly in normal society, interpersonal relationships and it often affects their jobs too.

Lately there has been much talk about using virtual reality technologies to help soldiers get over shell shock or emotional problems, but I would like to pitch an idea to everyone involved with helping people who have lived through these traumatic events. I propose that we use Holographic Technologies are getting closer to becoming reality and deploy them before these first responders and soldiers enter the battlefield or disaster scene. Waiting until after without preparing humans can be problematic and takes much more work that pre-conditioning does.

Holographic Technologies are ghostly like images rather than pictures of graphic scenes a person walking thru a virtual reality or augmented reality cave with holographic images in 3D around them might get a better sense and a slower pre-conditioning to help them psychologically. One they are in the real life situation it is too late for training and it takes a lot to undo such graphic visual imagery impressions in the brain.

Bumping and Jumping Theories in Seismic Prediction

Recently we have seen some unusual seismic activity, some flooding and some Earthquake swarms, which more resemble magma flow under the crust, in California. As this topic was being discussed recently in an online think tank one member mentioned a bumping theory. Where there were bumps, which rubbed up against each other where tectonic plates hit each other and therefore they would slow the sliding or folding under and put pressure on certain points until they finally gave way.

One think tanker hearing this stated; Well regarding your bumping theory, I would say that there are bumps at all layers inside the Earth, as well as along the plates sides, on the tops (obviously mountains), between them too. Jagged edges, pieces getting caught in-between, wedged until they finally fail under pressure like trying to chock the wheels on a large semi truck on a slope with a piece of wood, eventually it is crushed and the truck rolls over it.

Joe states; "If you wanted to model future events, you probably need a supercomputer, but to get a ballpark of how much floodwater or rising tide would create a dangerous timeframe you might not need more than a calculator and some history."

Yes and such things are somewhat predictable. You could build a system and a 3D CadCam holographic display and number and label all the parts underneath, see them using frequency wave bouncing techniques like they do for oil exploration, or like the Military has to find weakest points on a fault line to make an Earthquake.

You could determine pressure by infrared or heat signature. And you could perhaps prevent an event by alleviating pressure elsewhere or triggering an event prematurely now, before build up was too great. Or trigger a large Earthquake for another purpose, such as stopping molten flows

underneath and stop a volcano or use the volcanic build up to put pressure somewhere else? Depends entirely on the mission and purpose.

With the use of sound and or high-energy lasers at a weakened point you could do this. If the weak area was exposed, well even easier to trigger a minor event to stop a major one or trigger a major one for another purpose; creating a canal thru a region or large land mass I suppose? Be good in wartime, stop the enemy cold, and make a giant ravine. Consider this in 2006.

Traffic, Transportation and Distribution Flows

3D Modeling in Transportation Flows

We need to borrow the technology that the military uses for the Battlefield 4D holographic simulations in the Net-centric Warfare Battlespace and transfer this technology to help the DOT and DHS predict how to keep the distribution systems are moving in our Nation in real-time.

We need monitor the movement and keep flows moving under circumstances involving Choke Point breakages in the Highyway and railway systems in case a bridge out, an accident occurs or god forbid we are attacked again by International Terrorists. Such a tool could help people like Secretary of Transportation of the current administration make split second decisions using a complete visualization in real time.

Imagine looking down at a holographic view of a city, state or the whole country at the same time watching the different types of traffic flows all interacting. Cars, trucks, trains, boats, planes and seeing first hand as traffic jams occur and being able to replay and store that image and run it over and over again modifying variables; Traffic signals, times of travel, adding lanes, off ramps? We have the technology now to eliminate traffic jams and increase the real world traffic bandwidth able to flow thru our transportation system.

This tool also when used in simulations can predict BMPs for things like blocking a lane for construction, adding a bridge or extra lane based on modeling by ERSI vendors and Battelle which is doing projects similar but not 4D in Seattle at their Pacific Northwest Laboratories.

Why this is important is we can then see how toll ways, off ramps, signals and other things impede traffic flow and the flow of goods and services to markets. How trains and boats and containers interact. How people on buses, trolleys, trains, aircraft, hydro craft, ferries, motorcycles, taxi cabs, limos and passenger cars move.

How the system works together with Air, rail, Water and road travel no matter what the type of transportation used. This is like a giant train set you never have to build, can change at will. A holographic display, which can zoom in, zoom out, replay, record sessions or back up. Move to another state, county, city streets, just like a Google Map, but in 3D and 4D. Four-D in that you can see subways underneath tunnels and double-decker freeways such as in Seattle or San Antonio and can see the NY subways, Bart trains under the bay, the Baltimore Tunnel - you see, why we need this? And since we have the technology, we can run the system to perfection, increasing our nations productivity, decreasing traffic jams, enhancing time for first responders.

We can run our a Net-Centric Battlefield, not delivering bombs to the enemy, but delivering products, people, packages, goods and services to the masses. Efficiency in the flow of transportation is a vital part to a healthy economy.

Someone like Snow the treasury secretary, a former Railroad man, might want to have a similar device for money flows and markets and since he is very valuable to the administration than that of merely a treasury secretary, he should be given the assignment of working with the DOT to develop systems to streamline the infrastructure.

This will lower prices to consumers through efficiencies and raise profits for transportation companies which will increase flow and help us with the future inflationary period by lowering costs through efficiencies and it also saves fuel and of value to our dependence on foreign oil and the Energy Issues which are vital to the country. Can you see the potential here?

By using such a system and GPS tracking of trucking, cargo containers, ships, planes (using Lockheed's global system and the FAA system) we can predict under utilization points and times and fill them while alleviating times and areas with choke points causing a loss of productivity to our citizenry, small businesses and government agencies. This will increase quality of life giving back 1-2 hours in metro areas to all travelers.

This is a gift worthy of the taxes charged by our government for the services they provide. It is fair and easy to do. The over all cost of this project I see at about 500 million dollars and will give the US the advantage to do more with less and therefore compete with a higher standard of living while delivering goods and services to the world. This system has another benefit. Better and healthy air, since vehicles pollute less when running at optimum not idling in traffic.

Here are a few examples of what has lead me to this conclusion. By having someone in the know with years of rail and distribution experience looking over the 4D model they can easily within minutes pinpoint problems and make good and important decisions, this is one reason at rail yards the Rail Master is in a tower for a better vantage point and why Air Traffic Controllers sit with an unobstructed view over the ramp and can see BLOS. There is an exponentially and mathematically component to this and that is that the cost savings to businesses will make them more profitable meaning more profits and more tax revenue.

Moms and Dads will not be stuck in traffic and spend more time raising their kids with out latch key syndrome and that means better students, better citizens, less juvenile delinquency, drugs and less need for costly police, jails and rehabs. Every time you assist our economy in more efficient operations we all win. It should be relatively easy to see why we need such holographic 3D projection systems to help us in guiding our transportation systems. Not only monitoring the flow for efficiency, but for safety too from natural disasters, international terrorism and traffic accidents which are killing about 40,000 Americans per year on our highways.

Of all the uses of holographic projection, this one might be the most important to the running of our actual civilization and such a system worth far more to human society then any other single use of Holographic Technologies or Spectral Imaging.

Watching Monetary Flows in 3D

Monetary Flow Analysis for Economic Stability of a Nation

4-D Situational Analysis of Cycles, Flows, Logistics, Event Software has come along way. Perhaps the Federal Reserve needs to use these modeling computerized informational systems to record and watch the monetary flows of our nation. Recently we have read about the DOD contracts on 4-D imaging for war room readiness and field ops. By taking into account the latest technologies and understanding the principles of such a realistic real time modeling study, so much is possible.

This technology at work can be used to enforce standards to allow for freedom and peace and no disruptions on the way to the utopian society. Can you see how the human race can develop a defense strategy for our benefit and future? And why stop their? We can fight fires the same way. Fight and respond to natural disasters and put the whole thing in Mobil units for FEMA. And with the data flow, it does not even cost a lot to do it. We can use this modeling to understand and control weather and master our planet. Stop pollution, by controlling its flow.

We already have all this technology right now, time to spend a little and get the top people working on it now. Imagine studying demographics the same way, watching real time money flows, electronic transactions to and from territories, states, Countries, companies and people. All on a similar floor right in front of your command and control mobile situation center. But in the Flows of Civilization this technology shows even greater promise for instance The Federal Reserve can watch in real time and predict flows to make better decisions.

Knowing and watching bank transactions, foreign wire transfers, taxation flows, currency markets, large purchases, stock market, bond market, commodities markets, etc. A complete 4D Beige Sheet which never stops and never lies, it is all on the table in front of you to help you make the right decisions and see true trends as they are happening.

Chapter VI
Other Holographic Applications

The Holographic Projection Technologies Think Tank Team spent considerable hours studying what is being done currently with Virtual Reality and how these applications may lend themselves well to our Holographic Future. In going through this effort we uncovered some more potential applications that are perhaps of interest.

Holographic Tourism

The World of Virtual Reality is expanding into the tourist trade. Most major tourist spots in the world have virtual tours of their cities online and you can peruse much of it from a bird's eye view online, similar to home shopping and virtual tours. Nearly all-major Universities either have such "Campus Tours" or they are in development to recruit future students and assist in decision-making.

Indeed the virtual tourist is a growing industry and it is bringing the world closer together too. With Google's Satellite photos online on their map search feature, one can see exactly where something is and then zoom in for a closer look.

But what if you could bring the Smithsonian Exhibits and other notable museums around the World into your own living room? Could it be possible? Wouldn't that be the coolest? Well some visionaries in hologram 3D technologies are working on it right now.

You see, Holographic Technologies are getting closer to becoming reality and soon we can see the data on our computers in 3D, 4D and 5D. We will enjoy Virtual Reality on our 360 X-Box in our living rooms.

We will communicate in video conferencing with the image of the other people sitting next us, but not actually there. All this is on its way and even more, as the applications are endless indeed.

Perhaps the most promising of all Holographic Technologies is in turning your living room into a virtual reality cave with full motion holographic images, as you tour the Worlds treasures and wonders. Think on this.

Holographic Tour of the Pyramids

Many people want to see the Pyramids during their lifetime. They are wondrous indeed, unfortunately traveling to that part of the world is not so easy and it does cost quite a bit. Recently some are fearful of visiting Egypt due to unrest in the world and perceived animosity towards Westerners. Additionally there are issues with diseases and polluted water supplies as well. That is not to say that you will be in danger if you attempt the visit but there are enough stories that perhaps one might consider the risk. It would be a shame if fewer people went to visit these great monuments of human history, but maybe there is another way?

There are many companies, which offer virtual reality tours of such places and many are quite good, in fact some are very realistic. Generally these are used to spark interest to get you to want to actually see them and help spark interest in tourists to go see them in real life. Additionally it really helps in educational purposes.

- http://www-vrl.umich.edu/project/pyramid/
- http://www.casa.ucl.ac.uk/digital_egypt/hawara/
- http://www.bergen.org/AAST/Projects/VirtualReality/

I propose that we fund those who wish to go one step further and wish to design a Virtual Reality Pyramid using Holographic Technologies in 3D, 4D and 5D. Perhaps that technology maybe affordable in 5-8 years for the consumer market, but as HDHI or High Definition Holographic Imagining projection become available in the labs, we should be using it to help our populations

see the Great Pyramids now. The HDHI technologies allow for opaque images rather than translucent ghost like images and thus the experience is much more real than even Memorix, so think on this.

Law Enforcement Applications

Holographic Traffic Cops

Have you ever seen a traffic cop standing in the center of the street when the power goes out directing traffic or after a big game directing traffic to keep the flow moving? Have you ever considered how dangerous this really is? Have you ever stopped to think that someone not paying attention or talking on their cell phone could at anytime mow over the traffic cop? Hey now be nice, as you probably deserved that last ticket, so don't go there. You are evil I cannot believe you just thought that?

In any case my point is this, with the up and coming future advances in Holographic Technologies, which are getting closer to becoming reality we may soon be able to design a Holographic Police man to stand in the intersection so you can run him over all you want; no harm, no foul.

I propose we put holographic projectors in the police cars to display the 3D or 4D in Virtual Reality, just like what Microsoft is planning with the next generation of our 360 X-Box Video Games in our living rooms.

The system will run off the police cars extra alternator for juice and will not need the power grid, so if the power is out after a severe thunderstorm, Hurricane or Earthquake, the police car can drive up point it, turn it on and restore the flow of traffic without risking his life.

This will insure an end to the chaos and smooth traffic flows and it will save lives and prevent injuries. This is smart because as taxpayers the last thing we want it to pay for medical bills from a flattened policeman. Our public servants deserve more than this and if we can use advanced holographic technologies to keep them from harm, we need to get after it.

French Riot Holographic Training for Police

The riots in France are nearly under control after almost four weeks of mayhem. Over 300 cities effects with cars being burned, some 20,000 automobiles were destroyed. The French looked very ineffectual to the rest of the world as they allowed the rioters and civil unrest to reach epic proportions. Molotov Cocktails were used made from recycled bad French Wine bottles and thrown into buildings and cars to start blazes.

The French were only able to arrest a few of the arsonists and threatened to bring them to court, meanwhile the police were afraid to go head to head with conflict. All this after the French Leadership during a United Nations Conference told the world that they knew how to deal with International Terrorism and the rogue elements of the Muslim Populations. The French led by Jacque Chirac told the world that; "We are a very old and wise country and we know how to deal with these things." Additionally he stated that the United States was a; "young and naïve nation."

Well perhaps but the facts are now that France once again failed to defend their selves from evil. I therefore propose we build them some Virtual Reality Caves to help them train their ineffectual police in anti-riot control. I propose we use the latest state-of-the-art Holographic Technologies to help them help themselves, since it is rather obvious that if something is not done France will burn to the ground, if not this time, then some time in the future. We must help France, as it seems now they are so old, wise and Weak, that they are unable to solve their own issues there. Think on this

Virtual Holographic Lawyers

No one can deny that there are more than enough lawyers in the world choking our nation's economic engine and industrial capacity. The efficiencies of all sectors of our financial markets are burdened from a nation which is over lawyered, where lawsuits are more common that rat births. Each year thousands of lawyers are accepted into the bar and released into the wild to do their damages on our economic vitality.

But I have some good news and it does not involve saving a bunch of money on my car insurance by switching to Gieko. In fact I am grateful to alert you to the fact that lawyers are on their way out. They will soon be replaced by Holographic Images and robotic humanoids to help you with your case, which is fitting indeed, as many say that "lawyers have no souls" in fact there is no empirical evidence ever presented in any court of law in the 200-years of United States History showing that they are human at all?

Whether the rumors and stories about Lawyers having "no soul" are correct or not is immaterial because soon such Holographic Technologies will become a virtual or augmented reality and Lawyers will no longer be needed at all. Now then how do we get rid of the Politicians? Think on this

Holographic Imagery for Pets

Holographic Pets via iRobot Vacuum

We have recently seen iRobot go public and its IPO did quite well. Each year iRobot is introducing new models in their consumer division and vacuum lines. Some say that cats and dogs do not like these robots much, yet I find my animals often following the robot around the house and our cat stocks it and then pounces and then runs away.

So indeed our iRobot has in fact become part of the family and we would not want it any other way, besides I hate to vacuum anyway. Since the robotic iRobot vacuum models are so cool, I propose that they take them one step further. Perhaps use a little of that IPO money for some real research and development and really get into some of the latest state-of-the-art and bleeding edge technologies. How so you ask?

Well let's face it right now Holographic Technologies are getting closer to becoming reality. Great, great grandchildren will be about to meet their past ancestors and watch a holographic video. We will communicate in video conferencing with the image of the other people sitting next us, but not actually there. All this is on its way and even more, as the applications are endless indeed.

With that said I propose we take the top of the iRobot vacuum cleaner and make it a platform able to do holographic projection. For instance, while you are gone, you might set it to display various animals that your cat might like to hunt? Such as a pigeon landing on it and then taking off again - your cat will no doubt find this challenging and intriguing and it will hone their hunting skills. The vacuum might have a random projection set of 10-12 holographic images to keep your cat entertained and more than occupied?

Technician Training

Truck Technician Shortages and Certified Maintenance Professionals

Many folks know that there is a shortage of auto mechanics, because they have to wait to get their cars worked on. Everyone who works in the Auto Industry knows all too well the problems this is causing. But it is not just in Auto Maintenance, as there are shortages in Aviation, Heavy Equipment and Truck Maintenance too.

On the truck side of the equation there are some serious issues to consider and one is the challenge to meet the demand of having trained technicians for all these new vehicles, which include Hybrid Trucks and even the coming Fuel Cell semi-trucks.

Technicians will need to get certified on the new equipment and yet most shops really cannot afford to send the technicians to more specialty schools. Not the cost, the problem is they need them in the shop working on customer's equipment and the shortage of qualified truck mechanics is intense and getting worse. It will continue to be a challenge and get worse as time goes on.

It appears the labor shortage crisis is all around in the Trucking Industry and the shortage of drivers is only the half of it. Due to the shortage of qualified, certified and trained Truck Mechanics and Technicians and the growing complexity of the equipment itself, thus the number

of training hours to certify a master truck mechanic, the way in which trucks are repaired and maintained will have to change.

Thus we can expect in the future Holographic Manuals which overlay next to the piece of equipment being worked on and walk the mechanic through the procedures step-by-step.

We can also expect Artificial Intelligent Assistants to talk the mechanic through his work and interpret the operation and procedures for the task at hand. Right now Carnegie Mellon is working on such systems to do just that. Indeed when this technology finally gets here it will not be a moment too soon.

Of course the T-5 Group (The Truck Think Tank Team) is also considering other High-Tech Futures in order to deal with the labor shortage of technicians such as easier diagnostics through the use of special materials. Such as Valve Covers of Nano Tubes for faster inspections and trouble shooting.

Clothing and Holographic Attire

Holographic Neck Ties

Well it is hard to stay in style in the world of neckties. Too stuffy and you look silly. Too silly and you look like you are a fool or former class clown. If you are a salesman you need many ties in your car so that you can change them to fit the mood and ambiance of your clientele. If you are selling to an industrial firm and you look too slick, they are liable to kick your rear end out the door.

If you walk into a large corporation with a tie, which mocks the dress code you will certainly not get the sale. What a dilemma indeed. But there is a better way, a new technology, which will change all this. You ask how?

The “Holographic Neck Tie” will solve all your problems. How does it work? Well, glad you are interested. The Windsor knot is standard, but the knot is a projector device, which clips onto your shirt at the top, like those clip-on ties. A fishing line sized string hangs down and is fastened

to a lower level button. The line is made of carbon nanotech fiber material and will not break and it guides the Holographic tie replica image to enlarge or contract as needed while walking, sitting or standing up. Each Holographic tie has 24 images to choose from and you can also purchase other theme cartridges to put in the back if you wish to purchase them from the HNT Corporation.

Communication Between Intellectuals

It is time for the super stars of humanity and those who possess talent, passion and creativity to join together in a collective think tank. It is time for the Genius and Brilliance, which comes from strong genes and or hard work ethic to join together in a common cause. It is time for humankind to ditch linear thought and to solve the challenges that plague the forward progression of the species.

You see dialogues between Imminent Achievers in the mental domains of Brilliance, Genius, Creativity, etc. are a useful tool to all and we need not waste this brain power or disregard its potential. As the operator of an Online Think Tank I have discovered the incredible value of bringing people from all walks of life, industries and endeavors of expertise and get them talking again. I say again, because we know that in past periods intellectuals have gotten together to do some incredible things.

Take the olive tree area in Greece, the areas of Florence, which produced so many great geniuses or the Geological Societies of Europe in days gone by. Consider if you will the World Fair in the United States where inventors, innovators and scientists of the day met with entrepreneurial capitalists, bankers and doers to bring forth ideas to conquer all challenges? It is time to revitalize this process using the Internet as the backbone of the communication system.

In a few years we will have holographic video and will be able to sit in our living rooms and discuss things with other super intellectuals in our scientific realm or others that are completely different. This cross-breeding of information will garner incredible results and that day is almost here.

Holograms in The Sky

Laser Cloud Art

A new art form in the future will be CLA. Cloud Laser Art. People can go to a place where there are laser units, sit out side in a small shielded area and draw on the clouds. It would be fun and a great form of self expression, which would make humans very happy. We know that mankind likes to use the natural environment for self expression from cave drawings to rock piles near road ways and graffiti on rock formations.

The idea of drawing on clouds is much better, because the cloud eventually dissolves and like an etch-a-sketch is ready to start over. This will be similar to what happens after Ice Carvings, Ice Sculpting is alive and well in North America. We have all heard of Sand Castle building and contests, which go on around the world.

Often you will watch kids throw rocks into a glass clear pond or lake. They will throw one rock in and then another and say; "Okay, those are the eyes." Often people star up into the clouds and try to imagine a face, shape or resemblance to something in the 3D physical world. We have often seen pictures where the clouds appear in the shape of Jesus or a face and everyone calls it a miracle. Many people gaze up at the clouds and attempt to allow their minds to find a familiar shape or form. One might call this a frame burst from the brains memory and the mind fills in the rest and a seemingly regular cloud takes on the imagination and a new meaning.

People are fascinated by these coincidences. Rock formations often look like people from certain angles. The fallen "Old Man on The Mountain" was one such anomaly. Today we look to Mars and see faces in sediment and erosion features.

http://www.ascrocco.it/home/img/sf_desk/ar...o_marseface.jpg

You will have to admit this looks pretty real, so either we are not the only species which re-designs our natural surrounding or our mind automatically is filling in the blank, either way since kids, teens and adults do this and we find this interesting, it is an innate tendency and therefore a relevant idea to promote weather control research and manipulation, what better way to find

research dollars than through entertainment? This is something man has done for thousands of years. Some obvious examples are the Sphinx in the Valley of the Kings, cave paintings. We have heard of some famous stone artists, who claim they can see the inner sculpture within a stone before they start, as were comments by Michael Angelo - Freeing the statue inside. Today we have the famous rock carvings of Crazy Horse, which is nearly completed.

Why not put it on a cloud also? It is possible you know - Weather control, cloud art, etc. Mother Nature often does it for us, but if we focus our energies on controlling heat and light within a cubic artificial grid of air, then we will be able to control the clouds completely.

Art is certainly interesting and our obsession with nature and art is interesting in that it seems to be an innate need of mankind to be able to control his environment and to provide some order to the complexity born out of simplicity, which we see everywhere, a concept that Steven Wolfram would most certainly agree. Los Alamos is doing just that and soon will be able to do it on a larger scale with super computers. This will entail lots of number crunching, but well worth the energy and time and money to develop - We maybe able to control not only the weather but stop Hurricanes too.

As we learn to control the weather for purposes of drought mitigation, famine and disease control, feeding peoples of the world thru abundant agriculture yields, flushing and controlling environmental pollutants or even giving us an edge on war planning, defensive barriers or safety during assaults, this technology to a lesser degree will be used as art.

Many things that come to be in the way of innovation are funded thru entertainment, war or the mother of invention (necessity). Certainly as we look at the innovations in TV (high definition), Digital Displays (plasma screens), Transportation (race cars), General Hobby Aviation (composites, ultra-lights, exploits of Dick Rutan), Virtual Reality (theme parks, animation, portable mini-simulators).

We see that entertainment can provide the money flows to increase the speed at which these things come to market and the speed at which they are adopted by the users and thus entertainment has always been a quick way or short cut to the future inventions of mankind. The list is so long in fact in the area of art and entertainment and the innovations brought forth that it

might be considered the largest single factor towards the contributions to the forward progress of mankind. Necessity as previously mentioned and War and Defense being close seconds. Art should never be discounted as it is generally coupled with entertainment and imagination and let's not forget the words of Albert Einstein on imagination.

"Imagination is more important than knowledge..."

Is it possible that art can be the lead in to weather control? For instance drawing designs in the clouds instead of painting "I Love you Charlene" on a Hwy over pass cutting thru rural Alabama, Mississippi or Georgia in John Dear Green, would be something of value as a way of self expression.

A portable laser cloud drawing device could also be mounted in a semi truck if not a fixed location site for tourists or expressionists with a few extra bucks. A semi truck mounted unit could be hired to write a computerized message on the clouds for events, parties, etc. At a fixed site people would come for miles just to sit and watch what someone would write today. You can learn a lot from cloud watching.

You can learn about life, weather, flows of nature and you can unleash your imagination. Manipulating the clouds and localized weather can be done with modern and current technologies. This concept is simple really in terms of physics.

The truck moves to the center of where the cloud will be and send up ELF waves and creates a small Terminal Gradient Cloud, then drives about 2 miles away and has a design already made on the computer and approved by the buyers of the message:

"Congratulations Graduating Class of West Point"

"God Bless America and our Troops"

when as they de-plane or get off a ship. Great for weddings, bar mitzvah, country fair or you be the judge. In areas of big events people could pay to write their own message on the computer and the laser cuts the cloud and shades in the design or words and letters.

This is simple and not much different than the cutting of vinyl lettering by computers used by modern day sign makers. Very simple, using a 3-D program which knows the power intensity levels, based on the distance which is measured by laser which senses the moisture content in the clouds based on the distance from the device.

On one side of the semi truck is a chemical laser and the other side another, when combined at exactly the right distance at very low power settings they interact in various amounts, which have been designed into the computer program coinciding with the amounts of energy and chemical needed to dissolve the cloud. Since the Lasers are chemical based even though quite low, color could also be added and chemicals normally found in atmospheric make-up, thus no harm no foul with environmentalists.

This form of art is not too dissimilar to the smoke signal communication of the Native American Indians, the only difference it is done with modern technology and therefore the versatility is so much greater. Once the design is entered into the computer on a CadCam type program or graphic art program it is sent to the laser system and it starts pulsating the lasers under extreme accuracy using sophisticated algorithms and data sets.

After the system is built and configured it is ready to go and during transportation the laser heads and chemicals are stored at proper temperatures in stable tanks. And remember art is not the only use for this, for instance see some ideas below. Now you must note at the Online Think Tank we like to have a little fun and the night we discussed this at a local coffee shop in Springfield, MO we definitely were in a comedy mood with a touch of sarcasm. However these ideas will make you think and isn't that the point of this exercise? Sure you will get a chuckle out of it also we did.

> A.) For advertising things could be written in the clouds too. ***"Drink Coke," "Fly Delta, but Hurry! We need the money," "Vote for Dog Catcher, NJ Former Governor," "CT former governor runs for Hartford County Auditor," "Gray Davis for Public Treatment Facility Director."*** We all know aerial advertising is big business, look at the Blimps, Skywriters, etc.

B.) ….For safety, things could be written in the clouds during rush hour. “Mixing Bowl” four hour wait, use different route, “HWY 1” three hour wait go back to work, you are better off there?

“Free Parking on 405 to La Cienega use alternate.”

Bridge out ahead. New York Toll Way Fees raised today to $24.86 please have exact change ready to prevent delays, no refunds? Just write it in the clouds, since you will be looking up praying to your god for break in traffic for this cluster muck you have to drive in everyday - a perfect solution, with an artistic flair? But in all seriousness you can see the benefits, “Dense Fog Ahead, slow down, multi-car pile-up, freeway closed all traffic exit at mile 122.” In Montana during deer migration, ***“Watch out for Deer, Do Not Eat Road Kill”*** Public Service announcements are often put on Blimps:

C.) For big events;

“Use Shuttle at Parkway for NASCAR event, Parking $5.00.”

“Olympic Check Point, have ID ready.”

“Democratic National Convention Ahead, Lots of parking available.”

“Cody WY Nightly Rodeo, 7 PM.”

But these of course are merely words on clouds, for the RNC they might want a Giant American Flag? The DNC might want a big tree with a couple of guys hugging it? You see big events can stay in the spirit of things and get out the true message. NASCAR might want a holographic design of Dale Earnhardt at the Daytona Speedway before the event. Blue Angels might wish to have a message about ***“Fly Navy”*** with a picture of an F-18 or JSF on the cloud for the crowd?

D.) For the People; Perhaps a Smog alert warning to warn people in Los Angeles due to a temperature inversion that day. In NY during Labor Day, perhaps a cloud might read; "High Terror Alert" in red. During the election, ***"Do Not Forget to Vote Today"*** in Florida with a reminder of how to press the right button in the computerized voting machines? On the beaches in San Diego, Fort Lauderdale, the Keys, Santa Monica; ***"Solar Flair Today, Use Sun Screen."***

After Hurricane Charley,

"USAA and State Farm go to MLK Jr. High School GYM,"

"Relief assistance: FEMA and Salvation Army at Civic Center Auditorium."

"New Mobile Homes For Sale; Tornado Magnet IV Custom Deluxe on sale, financing available, OAC."

"Asteroid to Hit Earth Tomorrow, Run."

E.) For National Security; Border Patrol, "You are being tracked by automated aircraft - turn back or you could be shot or killed" In Spanish of course. For USMC, "Dear Iranian Insurgents, give up or you will be killed in 12 seconds." For US Navy, "This is a blockade, turn around now or you will be sunk." For US Army Recruiting; "Keep America Green, Join the Army." DHS; "Today's Threat Level is Green." Psych Wars: "This is Allah - you have been bad, go home and do not return."

Cloud Laser art could do all these things much cheaper and safer from the ground and also such a new idea would gather much interest and the word of mouth of any message or image would travel quickly. CLA or Cloud Laser Art is possible and fairly easy to do, we currently have the technologies to do this, and it makes sense. This is the ultimate in self-expression and can be used for entertainment, safety, homeland security, big events and even advertising if used in good taste.

Cloud Sculpting is the next logical progression of this idea, where you could make a cloud in the shape of a dog, cat or a dolphin. Perhaps you might want to make a UFO out of the clouds to see how many people call in during the annual UFO conference in Las Vegas? Think of the PR for the city, such a publicity stunt would certainly draw a crowd.

Although they might rather have you inside the casinos spending your money than out on the street corner looking up in the sky just in time to get hit by a middle-eastern taxi cab, shuttle bus or limo driver? In this age of International Terrorism perhaps we ought to all pay attention to what's happening in front of us and leave the cloud watching for recreational times?

Holographic Tech in Religion

The preacher looks up and says; "It's a Miracle - Angles in the Church - look and behold" and then says thank you for making all this possible with your generous tithing donations. This is our new virtual reality holographic technology that we just purchased from ChurchHolograms.com!

Does that sound to outrageous to you? Think again, because there are already some entrepreneurs pitching business plans of such technology to venture capitalists and Investment Bankers. So how would you like to get in on that IPO?

Who wouldn't want to Walk with or Talk with Jesus and say; "Hey Bud, good of you to join us for supper this evening - would you like to do the prayer?" How about Bible Study in 3D for the kids or a taking 3D holographic projection Bible at home? Everyone should have one.

For those of the Muslim persuasion, well they will not be left out either, because surely they will want to be able to Ask Allah a question or two of how to righteously lead their Islamic life. There might be all sorts of religious holograms to help people enjoy their faith and belief system.

How soon until Jesus is on the shelves at the local Wal-Mart? Well entrepreneurs think it cannot be soon enough and see sales pushing the billion dollar mark in the first 5-years. Imagine your religion in a hologram, ever present, like an invisible friend right before you that you can talk to

or ask advice of? This will help so many people who have a tough time visualizing a god and it may bring more Atheists back to faith so they can be saved?

Angles in the Church

Holographic Church with God Like Images

Do you ever get up on Sunday Morning and just dread going to Church and listening to more of the same? You feel as if you have your own personal relationship with Jesus yet, somehow sitting in a room with 100's if not 1000's of others chanting and singing, just seems to be a silly waste of time? Sometimes you will turn on the TV Evangelists, but also worry that perhaps it just isn't enough?

Well what if you could go to Church in your pajamas? That's right just sit there with a cup of coffee and well bring the Church to you, right in your own living room; sounds to good to be true doesn't it? You can sleep in and mosey on into the living room flip a couple of switches and instantly the church would come to you. How so you ask?

Well using the latest leading edge and state-of-the-art Holographic Technologies, which are getting closer to becoming reality. Holographic projection systems hooked to computers to produce 3D, 4D and 5D images right in front of you.

Why you may as well have that Sunday Morning cup of Java with Jesus himself? Or perhaps you want to have him join you for supper with a little red wine. Make a fire, get toasty, turn on the system and get drunk with Jesus. That might be fun, maybe he has a sense of humor too? Now that is what I call a personal relationship.

We will communicate in video conferencing with the image of the other people sitting next us, but not actually there. All this is on its way and even more, as the applications are endless indeed. But to me the best one will be inviting Jesus into our lives and homes. *"Think on this you God fearing human"* stated one gentleman on the Holographic Technology Think Tank Team.

Talk with Jesus - Ask Allah

Meeting Jesus without Dying

A recent survey was done and they asked people if time travel were possible who would like to go meet in the past? Who might you like to have lunch or dinner with? Most people chose Jesus and it wasn't just because he always had red wine with the meal. In fact in the United States Jesus won by a fairly large margin, beating out our founding father such as Thomas Jefferson, George Washington and of course let's not forget Martin Luther King to round out a politically correct line up.

Indeed, Jesus seemed to beat out all the other top three men combined. Why is this? Is it because he has become a symbol of goodness in the world? Is it because Jesus represents the Christian religion? Is it because 35% of Americans claim to have a personal relationship with Jesus and consider him their personal savior? Would a Holographic projection of Jesus help others visualize his image and come back to God? Would it help others to adopt Jesus as their personal savior and invisible friend? Wouldn't that be a good thing for peace on Earth and Humanity?

That means we can have Jesus right in our homes to help us pray. It will help the children understand the concept of God and Jesus and Christianity, so they to can become indoctrinated into the Christian Religion at an early age, so they may live the good life.

Won't that be wonderful for all? Perhaps churches may also have holographic Jesus images during ceremonies to help with tithing collection, so they can spend this money in good ways to help the community after paying their expenses and the salary of the Preachers. Surely the extra tithing monies will more than pay for the cost of this high-tech equipment to project Jesus into the room. Such a dazzling show is surely worth the ROI to afford a bonus for the staff and perhaps a new car for the preacher, after all maybe the preacher needs to be replaced too now?

Allah Projection for Ramadan

Islam is in crisis and traveling for the Holly Days is quite dangerous. The Pilgrimages are dangerous and many have died from stampedes in getting there. There is also an issue with polio as there are still 17 countries and most are predominantly Muslim which still have not gotten rid of the disease. Meanwhile due to insurgents making roadside bombs and attempting suicide-murdering missions there is now stricter border crossing security by coalition, US and Iraqi Troops.

Without the ability to travel the holy days of Islam are in jeopardy. This is not right as so many peaceful Muslims are punished for a few bad apples amongst the nearly 1 Billion members of the Islamic Faith. Something needs to be done to insure religious freedom, so that the good folks are not punished for the International Terrorists and their murderous acts.

I therefore propose a solution to insure that good Muslims are rewarded, while the evil rogue elements who dishonor Allah and the Islamic Faith are slowed to a halt. I propose Holographic Projection to help all good Muslims visualize the good one, the great one, Allah in their Mosques.

Since the United States research and development teams along with devout Muslim scientists will be designing these projections and giving them to those who desire them, we can make sure that the projected holographic Allah says that suicide bombing is bad and that freedom, liberty and democracy are important for all.

Those Mosques, which are good, will be able to use this technology and be giving the equipment for their members, while those who are against peace will not. This will prompt people to move over to Mosques, which preach the truth of the Islamic Faith and have the holographic imaging projection equipment and away from those who preach hatred, murder and killing of innocent life. Think on this.

Allah the Hologram

The Islamic Faith seems to be losing its way, even though Muslims have outpaced other human breeds with procreation and larger families. The Islamic Faith and Muslim Mosques need to dress things up a bit to keep the members staying with in the religion.

One way for the Islamic Faith to modernize a little might be to use some high-tech electronics and technology to keep the younger generation involved a little. It appears to be difficult trying to live a life of 2,000 years ago in a civilization in the present period. And this kind of makes sense doesn't it. But we know Islam is such a wonderful and peaceful religion, so perhaps we can bring it into the current times, with a little technological help? How so you ask?

Well, I propose that we use Holographic Technologies in the Mosques so the younger Muslim generations can understand what on God's Earth the older generation is telling them. By creating Islamic Lessons of teachings thru a visual holographic full motion projection of the Great Allah, who can stand up and explain to the children all about the world of Islam and help indoctrinate them into a World of Peace and thus preventing them from being recruited by those who have used dishonored Islam.

3D Mecca Computerized Model to Prevent Polio in Middle East

As Muslims travel in their pilgrimage to Mecca, they will bring with them diseases, viruses and pathogens, which may turn around and infect the entire Middle East. This is true anytime you get large groups of people that close together from so many places.

The big issue is that many of the nations where these people are coming from have not even gotten polio under control. Polio is spreading around the region already. Saudi Arabia Officials are quite concerned along with the United Nations and WHO; World Health Organization.

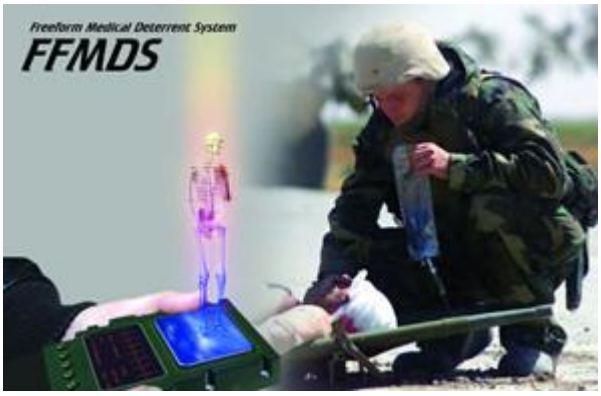
We need to be thinking here if we are to isolate this debilitating disease from the Middle East. People come from 20 or more nations including countries like Angola, Eritrea and Ethiopia where polio and other diseases are so high, they are almost beyond modern control.

Muslims are to make the pilgrimage once in their lifetime and this means a minimum of 2 million people each year will come by highways, ports, airports and even by foot. Along with the disease often comes violence and radicalism elements, which cause conflict in Mecca and along the way. I propose we dismantle Mecca and make computerized 3D Virtual Reality Diagrams to use in Mosques and shut down the annual pilgrimage to stop the spread of disease. Each self interested Muslim who makes the pilgrimage is putting their families and towns at severe risk. By carefully developing this 3D Model we can destroy Mecca without hurting the many millenniums of heritage. We must destroy Mecca to prevent disease to help people so they do not die. This proposal should be done as soon as possible to protect human life and the sanctity of the peaceful Islamic Faith. This is something that Holographic Projection can do.

The Bible in 3D

The Bible could also become not just a book, but using Holographic Projection Technologies it could become so much more and allow more realism and tell its own story in ghostly holograms, as this would allow people to visualize and righteously interpret their religious belief system and be fully entertained in the process, perhaps even mesmerized as well, which is the goal of any church in order to keep the attendance up. We should make the Bible Come Alive!

Chapter VII
Military and Space Applications



Holographic Technologies for Military Applications make a lot of sense really, especially if you consider the potential for data visualization and table top holographic displays of the Net-Centric Battlespace in 4D. Spectral Imaging is already being used in medicine and life sciences now and this is only a start to it's over all potential for military use.

In fact if you read some of the Future Fighting Force research papers and their References and Works Cited and do just a little extra Background Reading of other Research Papers or peruse the Media and surf some Internet Articles on the subject it should be relatively simple to see that this is the future. Battle Simulation and Scenarios can be played in advance so that every possible contingency can be calculated.

Holograms are a valuable tool on the battlefield itself also, consider Holographic Decoys and Deception Applications - deception tactics are extremely important in wartime. Better yet, just the fact that you have these technologies makes the enemy second guess you and hesitate and the way that wars are fought now at light speed, that is an extreme advantage.

Many new soldiers are not quite prepared for the reality of war and the gruesome sights they will see, which often leave psychological and emotional scares. With Holographic Imaging the soldier can be toughened up prior to battle using hologram Virtual Reality Training and Mind Conditioning equipment.

Tele-Presence in Command and Control Communication also will be a major military application of holographic technology. Instead of mere, voice or video, specially coded holographic communication will rule the day. Military application and holographic technologies make sense for a lot of reasons and the one I like best is that we can protect the American People using Holograms as one more tool in our arsenal.

Holographic Decoys and Deception Applications

Decoy Blue Force Projection in the Battlespace

In the future warfare will be much different than in any other time in human history. Mankind has been settling their difference and forcing their political will over opposing civilizations for as long or longer than we have been recording the human record. As we enter the future period and shed the methods of war of past periods we will see conflicts start and end quickly. We will see precision strikes, simultaneous attacks and a digitally mapped net-centric battlespace. New techniques to fight these battles will be thru Electronic Attack, robotic warfare, military hacking of computers and target decoy mirages.

I therefore propose that we use this technology to create a decoy of our friendly "blue force" signatures to trick the enemy on firing up on it, thus allowing them to give up their stealth and allow us to pin-point the enemy locations. How so you ask?

Well with full motion Holographic Technologies, which are getting closer to becoming reality. Our military strategists and war fighters can play out the battle in the virtual battlespace in advance and then watch it un-fold in real time in the command and control center war room table. This technology can be used in planning, strategizing and executing our political will to keep our nation free and strong from any foe or enemy.

Virtual Reality Training and Mind Conditioning

Virtual Reality Training for Military with Live Fire

In the past war fighters have often trained with pop-up enemy targets to shoot at, which for the most part are static in nature. You may have seen such training used by the Army or US Marines where the combat troops come into an urban war zone and have to deal with sniper fire, mortar rounds and pop-up surprise targets to test their skill under extreme stress.

The stress they experience include lack of sleep, fatigue from long distance marching carrying 50 lb loads, loud bomb shell noise and simulation, as well as fellow soldiers yelling and gun fire. They do this so when they are in the actual battlespace they can still accomplish their mission no matter what the chaos or circumstances, it is all about survival and overcoming the enemy.

I propose using Holographic Imaging and Full Motion Video Technologies, which are getting closer to becoming reality. Military strategists and war fighters can play out the battle in the virtual battlespace in advance and then watch it un-fold in real time. By using Holographic Images for training war fighter we will make the experience so real, that when the battle does begin the soldier will have already done it and it will seem like routine.

NAVY Seals Training Using Ghostly Technology

There is no greater human trained strike force in the World than the United States Navy Seals. They are trained to work as a team in the most severe conditions known to man. Very few of the people who volunteer for training can make it, as the qualification of agility, endurance, perseverance and strength are not common in humans. The United States Navy Seals Teams are made up of super humans and one cannot merely join the team until they can prove without a doubt that they have what it takes to perform at those super human levels.

This is not to say that those who do not make the program are not “Super Stars” they are, in fact you cannot even be admitted to try out unless you are the epitome of a super star athlete.

I propose taking their training to a whole new level using Holographic Technologies. I propose that we make the images so real that they appear to be combatants. This will save on target maintenance too, as the bullets will pass thru the 3D and 4D projections.

These technologies will soon be here and military strategists and war fighters can play out the battle in the virtual battlespace in advance and then watch it un-fold in real time on war room command and control tables. I believe that the World best war fighting teams; the US Navy Seals ought have this technology and use it to stay cutting edge in their march to protect the free world.

Holographic People Watching Training for DHS Professionals

Looking for suspicious behavior is something every security professional must be come good at if they are to do their jobs properly. The security and safety of the public depends on it. Let’s take the Department of Homeland Security (DHS) and the Transportation Security Administration (TSA) for instance; these folks must be able to spot the bad guys in the crowd when they see something, which is suspicious.

One security industry observer stated recently; “It would help to teach people that they can tell someone if they see something suspicious. It drives me crazy that most people are afraid to speak out when they see something that looks dangerous, suspicious or just plain wrong and out of place. I was thinking about the shoe bomber [Richard Reed], who was just plain ugly. I think that is part of the reason why he was caught as he is so strange looking.

Had he been a handsome person with a bomb in his very expensive loafers, would anyone have even paid a lot of attention to him. I can't remember the circumstances of why he was picked out to get a more thorough screening, but this had to have been part of it.” Can we use virtual reality and holographic imaging of real people and suspicious people with very minute clues of possible “evil behavior” anomalies to train our DHS and TSA personnel?

A classroom setting with theatre seating of 5 rows with tracks down on the floor. Each track would have holographic people in full motion walking as 2-foot diameter holographic images passed by with subtle clues. There would be up to twenty of these moving at different speeds for ten-minutes and the security professional students would try to pick them out.

There would also be distraction Holographic Images, which would be good people but draw attention away from the bad guys. After the ten minutes one by one the instructor would bring back each holographic bad guy and point out the clues and give-aways. I believe such practice is essential so that we can dump the political correctness and view situations in a more realistic setting; that is to say; Augmented and Virtual Holographic Full Motion Reality. Think on this.

Pilot Training Augmenting the Real World

Red Flag Fighter Pilot Training and Virtual Holographic Technologies

Red Flag is the United States Air Force's airborne net-centric war game training. It resembles the United States Navy's famous Top Gun School only with added components. As warfare training and simulation gets better and our SmartBombs and Smart Munitions get smarter the future of war will be fast, furious and permanent for the players. You live or die based on your ability to communicate and execute.

Each year United States Air Force personnel rotate thru the high-tech war games of red Flag to learn how all the new components of the blue force communication in a net-centric team to identify, evaluate and terminate the enemy with split second and pin-point accuracy. So precision that the missiles launched fly thru windows and the aircraft fire before they are seen, as there is little left to chance.

Indeed there is no other Air Force in this world with the capacity and capability of the United States of America. I believe we can do better and therefore, I propose that we use state of the art Holographic Technologies in full motion 3D, 4D and 5D right up in the sky to simulate real world air-to-air combat, anti-aircraft fire and surface to air incoming missiles.

Military strategists and war fighters can play out the battle in the virtual battlespace in advance on tabletops at command and control and then watch it un-fold in real time. Meanwhile the USAF pilots can watch holographic images in front of them as if it were real and it will appear to be so real, that once in a real live battle situation, it will be a cake walk, think on this.

Top Gun Training

The United States Navy's special "Top Gun" Fighter Pilot school is known throughout the military aviation community. In fact it is well-known throughout the World Population due to the Hollywood Movie "Top Gun" staring Val Kilmer and Tom Cruise.

At the famous US Navy Top Gun School for our Nation's Best Pilots, is both good guys flying F-18s and other US Navy Aircraft as well as "bogies" or simulated bad guys flying F-5s. The bad guys try to sneak up on the good guys and attack while the good guys work hard to not be killed by electronically scored ordinance and/or fight back, destroy the enemy and continue their mission.

Top Gun is a place where the fighter pilot's ego, which is also a necessity of survival is also brought down to size often by the sneaky tactics of the bad guys. For these exercises live fire cannot be used as you do not want to shoot down accidentally a 50 million dollar aircraft, nor do you really want to actually shoot down your pretend bad guys, as those are also owned by us tax payers.

Therefore I propose using 3D, 4D and 5D full motion video Holographic Technologies to assist these pilots in their mission to be the best. Military strategists and war fighters will soon be able to play out the battle in the virtual battlespace in advance and then watch it un-fold in real time.

Why not take to the air in the Top Gun School where survival counts, where battles are won or lost thru skill, teamwork and airmanship? Projecting incoming missiles, enemy fighters and ground fire in real time in the air itself, giving the pilots the feel of real air to air combat, anti-aircraft fire and surface to air missiles.

The Holographic Technology at this level is almost here and such advances in science has the potential of literally solving many safety and efficiency issues in aviation in the present period, safety in space in the next period and survival for the United States Navy's Top Guns right here and now.

Aircraft Carrier Landing Training and Qualification

Landing a Fighter Plane onto a "postage stamp" in the middle of the ocean and that is exactly how the world's best pilots, those in the United States Navy describe landing on an aircraft carrier. It is a dangerous but necessary skill to learn and not as easy as it looks as the pilot negotiates with death and chaos in a controlled crash onto the deck.

Until a Navy Pilot has done it for a while their pulse and heart rates are redlined as they maneuvering the plane in attempting to get a hook hanging down off the aircraft to catch one of a few cables strung across the landing area. They come in under near full power, by establishing a sink rate at a high angle of attack and if they miss the arresting cables they are off at full power as they bounce back into the air to try again.

During this dangerous phase of carrier operations it is essential that the pilot muster his wits and use all his skill to get that 60 plus million dollars of taxpayer's money on the deck unharmed. The pilot must wear that aircraft like a glove and precision is the key. But to get there requires lots of training and proficiency practice to stay in the groove.

It is for this reason that I propose that holographic imagining be used for carrier qualification arresting landing training. The Holographic image of a like aircraft will be used for the pilots to project the glide paths in front of them as they fly, actually watching their aircraft (full-size) in front of them.

All they will have to do is follow the projection and match their aircraft to the angles and speeds of the holographic aircraft ahead. The projection will be set for safest glide path, avoid risk and be the most efficient decent. This will make flying easier and become a great training tool for new Navy Jet Pilots building hours and their skills.

This will insure a proper downwind to base and base to final approach, with perfect angles, no steep banks and help the pilot land at the perfect speed on the aircraft carrier deck. Additionally these Holographic Projections will be recorded and used for training of flight operations personnel and used by Navy flight instructors to watch to make sure the new Jet pilot is coming along fine.

The instructor will be able to reduce the scale of the aircraft to 1:24 or 1:48 scale and show student how they did. This can help in training new transport or fighter pilots in the USAF as well. This can add to the simulator experience. The Holographic Technology is almost here and such advances in science has the potential of literally solving many safety and efficiency issues in US Naval aviation right here and now in the present period.

Holographic Glide Path Projection

Holographic Technologies are getting closer to becoming reality and soon we can see the data on our computers in 3D, 4D and 5D. We will enjoy Virtual Reality on our 360 X-Box in our living rooms. Military strategists and war fighters can play out the battle in the virtual battlespace in advance and then watch it un-fold in real time. Great, great grandchildren will be about to meet their past ancestors and watch a holographic video. We will communicate in video conferencing with the image of the other people sitting next us, but not actually there. All this is on its way and even more, as the applications are endless indeed.

One application, which has not been mentioned, yet is the potential for pilots to have projected glide paths in front of them as they fly, actually watching their aircraft (full-size) in front of them. All they will have to do is follow the projection and match their aircraft to the angles and speeds of the holographic aircraft ahead.

The projection will be set for safest glide path, avoid wake turbulence and be the most fuel-efficient decent. This will make flying easier and become a great training tool for new pilots building hours and their skills.

This will insure a proper downwind to base and base to final approach, with perfect angles, no steep banks and help the pilot land at the perfect speed on the threshold. Additionally these Holographic Projections will be recorded and used for training air traffic controllers and used by flight instructors to watch to make sure the student pilot is coming along fine.

The instructor will be able to reduce the scale of the aircraft to 1:24 or 1:48 scale and show student how they did. This can help in training new fighter pilots in the military as well. This can add to the simulator experience. Such technology will come in handy for the NASA SATS Program making general aviation safe as we move more private automobile traffic from our ground transportation infrastructures into the air and help with the Virtual Control Tower Simulation Training Systems to help commercial aviation.

- http://sats.larc.nasa.gov/main.html
- http://www.simlabs.arc.nasa.gov/vast/vast.html

Imagine eliminating wake turbulence accidents by helping pilots avoid wake turbulence, by using net-centric systems inside the aircraft, which will re-project the holographic aircraft in front of them. Good for collision avoidance as well. This will alleviate issues with the 3-minute rule, when it should be extended or when it is not a factor. The increased efficiency will help the traffic flow at the larger airports, moving more aircraft on their way in less time.

- http://oea.larc.nasa.gov/PAIS/AVOSS.html

The Holographic Technology is almost here and it such advances in science has the potential of literally solving many safety and efficiency issues in aviation in the present period and safety in space in the next period.

Holographic Checkpoints

Holographic Checkpoint for Military

One of the most dangerous jobs right now in the United States Military is guarding the borders of Iraq. Your life expectancy if you do not stay 'heads up' is very low. It requires super human concentration and intuition, none of which is very easy when the weather is not cooperating, either too hot, too cold or dust storms. The soldier must be very alert at all times, follow protocol and you just never know when someone is out to do you in. Each day the soldiers live in fear that their number could be up in an instant, not knowing if it will happen to them, a friend of theirs or if today is, that day.

I propose a new concept using the up and coming future advances in Holographic Technologies, which are getting closer to becoming reality we may soon be able to design a Holographic Soldier to stand at the check point so if someone tries to run him over, they can try all they want as you cannot kill a ghost or a mirage which is not there at all.

I propose we put holographic projectors in the Humvees to display the 3D or 4D image of the Soldier in Virtual Reality. The system will run off the Humvee's extra alternator for juice and will not need the power grid, the Humvee will can drive up point it away from the road, park the vehicle, turn it on and the Border Patrol Soldier will do its job, along with sensors and cameras without risking his life. If there is a problem the Soldiers away from the area will open fire from a short distance away out of any blast range in case there is a car bomb. Think on this.

Holographic Tech in Space

Not everyone can afford to travel into space right now because it costs a lot of money due to the costs to lift a rocket into space, but what if you could Travel into Space in Your Living Room using the latest and greatest Holographic and Virtual Reality Technology. It would be similar to being completely immersed inside of an IMAX theatre with 3D all around you in a giant Hologram?

Of course it would also be a lot safer to fly into space and get the same experience without going anywhere. All this is just a hop, skip and a jump away in the future of holographic technology. The ultimate 360 Xbox if you will? Surely Sony or Microsoft sees the multi-billion dollar market here?

Indeed such a realistic approach and great application of such technology means that NASA might also use it for Space Flight Virtual Reality Simulation for space walks or to get astronauts or space travelers ready for the experience. NASA might also use this same technology to plan its Rover Missions and robotic representatives of mankind as we send them off to visit and explore foreign planets.

Some manned missions might have to deal with the human psychology of being locked up in a space capsule for many years, perhaps the rest of their lives and Holographic Virtual Reality might help with Sanity in Long-Term Space Flight. Astronauts could talk with their families via Holographic Video Conferencing and thus deal with the issues at hand without mental breakdowns.

Traveling to Space in Your Living Room

4D Mapping of Mars and the Benefits for Holographic Traveling

Let us discuss the mapping of Mars and some thoughts on the matter. We have mapped the Earth by using Satellites and have a complete GIS mapping with complete mineral deposits, underground oil areas, volcanic plumes and even huge natural water aquifers. We have also done this with the US Navy and mapped the entire terrain of the Ocean Floor.

At first it was secret and eventually given to scientists and the World. Today we even map the ocean elevations to find gravity anomalies and much of this data helps us with El Nino, weather predictions, ocean-surface temperatures and to learn about gravity effects and variations.

http://www.fas.org/spp/military/program/met/geosat.htm

Of course this information is very important to the US Military itself, but it also helps us with global climate change, weather forecasting, environmental issues, sea life migrations, fishing, super tanker safety, etc. Using GeoSats we have done this for our own Planet.

http://www.ngdc.noaa.gov/mgg/announcements/text_predict.HTML

Now then, since Mars is so close we can use the Earth as a Satellite, with multiple locations to give us triangulation. Using the satellite already there in orbit, I think it is called MOLA.

http://www.popsci.com/popsci/aviation/article/0,12543,198376,00.html

You see this is a valuable tool for us. Now then instead of sound, radio or other waves we can use Pulsed Lasers. But the pulsed lasers will be coming from us here on Earth because we are so close now.

With the speed of light at about only 3 and a half minutes during our close fly bye of the two Planets (using pulsed lasers the disruption patterns can increase the past the speed of light), we can get a good indication of the terrain and perhaps within inches, there for the tubes, that rock with the face, the CO2 and H2O polar ice, what's underneath. Where the rock is, silica type fine sand is, how deep it is. We can also see if there is larger life than the micro-organisms we already are positive that exist.

We can then build a 3D and 4D modeling for people to experience Mars as if they were walking or traveling on the surface itself. JPL needs this information and CalTech has been doing much hypothesizing and some of the things already found might shake the religious foundations of the human culture and societies throughout our little planet.

The problem I can see with this is that we would obviously have some disruptions of certain frequency bands while this is taking place. When the laser pulse signals return they would do so in a huge pattern or swath that would or should be even bigger than the Earth its self, causing some disruptions. But the data loss in transmissions is surely worth the knowledge we will gain. With this approach we could find objects too? Like what?

Well like the science fiction authors like Ben Bova, Arthur C Clark and others. I know this is way out stuff, but one theory of many is that mankind is of another merged species, which is an interesting concept and cool topic at science conferences and martini parties.

By knowing the types of rocks, terrain, amount of water, CO2, we can determine what type of life filled which niches and if that life has similar building blocks as we do here on Earth, which obviously it would. However with the C02 there would be life that may have shells or outer hard skin if living near oxygen or it could be jelly like small single cell and or complex life.

The rocks could be alive, the dirt or sand could be alive. All sorts of possibilities, including those tubes could be made by life forms instead of fluid flows of compounds. We need to know.

There are five un-manned satellites that had been dispatched to Mars now from many countries, the data being bought back has been enormously important and if there is not life on Mars now, we are almost certain there was.

We are not alone for sure in the quest to find life on Mars and we may not be alone in the other regard but it is imperative for the American People to be the first to know and for us to come to the realization that in the future Religion will be come more cultural than absolute. This should not be seen as a bad thing for religion has allowed our species to live in somewhat harmony over the last 10,000 years in which we have been keeping track.

Knowing all about Mars will mean we can be more suited to study the life there and perhaps in some way interact with it for the betterment of both. The United Nations counter part might be called the United Species of the Sun. We have been getting close to communicating between machine and mankind on a brain wave level and when we determine the type of complex life forms on Mars perhaps we maybe able to do what we have done here communicating with other species.

Rather than making predictions or like some scientists who allow theories to over drive their headlights, I am interested in learning all there is to know from our rendezvous' with Mars. I guarantee what ever we find this time will be truly out of this world - hold on for some astonishing new facts. We are getting very close to some incredible breakthroughs in our quest to find life on other Planets. This could be the biggest discovery ever made in the history of science.

Sanity in Long-Term Space Flight

In the future there is no doubt that humans will travel outside of our solar system and visit new worlds and discover interesting things. In doing this they will most likely be in an artificial environment or spaceship. Unfortunately this might cause psychological issues and whereas some people might be able to handle it by watching movies, reading and studying all the information inside the computer's data banks; for others it could be a literal living hell.

This is why for human sanity in long-term space flight it makes sense to consider virtual reality strategies. For instance consider a dome shaped device, which would actually be a flat-panel display, which would have scenery projected on it of various places on earth.

The humans involved in this space flight may have never experienced Earth and maybe three or four generations having lived in space and traveling. Nevertheless, with proper virtual-reality technologies such as scents, warmth, sounds and an immersed virtual-reality visualization it would be nearly the same and it would be quite pleasing to them.

It should be noted, that long-term space flight with our current technology may cause people to go insane and this is why we need to consider different solutions, which would provide the proper visual stimulus and scenarios to keep our space travelers of healthy minds.

Holographic Video Conferencing

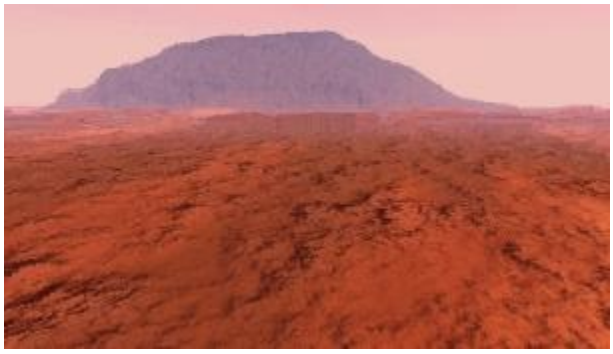
For the Astronauts and for continued support of the Space Program Holographic Video conferencing with Earth sure makes a lot of sense. These visual images will propel young minds to enter the fields of math and science and this will greatly improve our educational system. Further NASA can get a much better read on what is exactly going on in the astronaut's minds.

The astronauts themselves will also get benefit out of this because they will be able to get better communication from command and control and be able to talk with loved ones as well and thus psychologically improve their over all performance while in space. A positive mental attitude is essential in completing tasks and experiments up in space.

Space Flight and Virtual Reality Simulation

Holographic Projection Technologies lend themselves very well to virtual reality simulation training for space efforts. Celestial Bodies are quite easy to make with holographic sciences and the spectral imaging would be dynamite for training as well. This is perhaps the most futuristic use of Holographic Applications and yet it is also one of the most practical as well.

These tools also provide all those on Earth with some very excellent entertainment value while it helps us better understand how our tax dollars are being used and all the benefits that mankind is getting out of the advancement into space.



Conclusion and Concepts

Holographic Technology and Spectral Imagining has endless applications, as far as the human mind can imagine. These technologies are indeed available and getting more robust in abilities each year. Holographic Technologies are not just about art or business communication, they are about safety, security, education, planning and the strength of our civilization here and beyond.

From entertainment to data visualization we can see a bright future for Holographic Projection and the bending and manipulation of light. Those areas of society which most often bring about research and development funding in technology are present amongst the many potential applications for this science. It therefore stands to reason and makes common sense that Holographic Technologies and Spectral Imaging will become a very integral part of human societies and civilizations in the future. We are certain of that.

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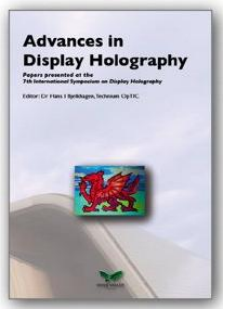

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A Dialogue at the Online Think Tank's Holographic Think Tank Group

Ben: I must say that I completely disagree with what I see as a lack of a moral stance on the development of the holographic display technology.

Lance: There are issues I agree and I would really like to use that statement in the E-book because it sets a tone. Indeed I see issues with Video Games, Gangster Rap and all sorts of stuff being peddled out their polluting the minds of our youth, but really it is not just youth.

Ben: Where I come from is this: the greatest crime against humanity ever committed is the rampant development of new technology without regard for the sociological effects that would result.

Lance: I agree that technology must proceed with caution, but I also agree that you still must proceed. Each incremental leap in technology means better understanding and that means greater awareness.

Ben: I make this statement not on moral grounds, nor any traditional ethical grounds per se, but, rather, on the grounds of a kind of 'survivalist ethics'. Consider please the following technologies

and the negative effects they have had and may potentially have in the future: nuclear weapon technology, the combustion engine, genetically modified foods, cloning, biotechnologies, nanotechnologies, consumer chemical products, drugs and alcohol, etc.

Lance: Yes I have considered, written about and have a good understanding and rational and even solutions for ALL those technologies to prevent problems.

Ben: When considering the development of ANY new technologies and the effects they may or may not have on our society, is it not rational to be cautious?

Very often corporations swamp the market with new products that negatively affect the environment in which we live, negatively affect our pocket-books and credit ratings, and negatively affect our physical, psychological, and spiritual well-beings, and yet these new products do not offer any significant improvement to the quality of our lives. Heaven forbid a corporation invents a new brand of toothpaste that, aside from whitening teeth and freshening breath, has the unintended and accidental consequence of making anyone who use it sterile. It is such unintended consequences of new technologies which makes caution so very necessary, especially in this day and age of rapid technological development and economic transition.

Lance: Indeed Ben, indeed. This is good dialogue and it ought to be included in the Holographic Technology Book simply as a demonstration of the many hours of discussion that went into the thinking of the Holographic Think Tank Project.