BUILDING WEALTH IN CHANGING TIMES

The Solari Report

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Global 3.0 - The Scientific Breakthroughs

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C. AUSTIN FITTS: Ladies and Gentlemen, it's my pleasure to welcome back to The Solari Report a gentleman who needs no introduction. I should say he's not just a gentleman, but he's a gentleman and a scholar, Dr. Joseph Farrell who is joining us today for our Quarterly Solari Report.

We were talking earlier last week about what we wanted to cover. I said, "You know, as we discuss this idea of going from Global 2.0 to Global 3.0, there is nothing more fascinating than trying to make sense of the scientific and technological developments."

One of the things I most enjoy about Joseph's website www.GizaDeathstar.com is just the tremendous coverage he gives to the latest stories and helping us understand the latest stories about science and technology.

Dr. Joseph Farrell, welcome to The Solari Report.

JOSEPH FARRELL: Hi, Catherine. Thanks for having me back.

C. AUSTIN FITTS: Are you ready to engage in some high octane speculation?

JOSEPH FARRELL: Oh, you know it!

C. AUSTIN FITTS: Not everybody may be familiar with my term of Global 2.0 to 3.0, so let's talk a little bit about Global 3.0.

We're going through a change, and a lot of that change is, in fact, driven by technology. Maybe you could give your take on what I mean when I say 'Global 2.0 to 3.0'.

JOSEPH FARRELL: My take is this, and I just talked about this recently on my own website with my own web developer. My take is if you look carefully at the technology needs that have been pushed in the last five to six years, there seems to be certain technologies and means that constantly recur. One of them is space and space commercialization, and the private development of space resources and assets such as asteroid mining and mining on the moon, usually in connection helium three, mining other celestial bodies, and so on. That's been one meme.

The other meme has been new energy technologies. This is a particularly fascinating one. I've got several blogs scheduled over the next couple of weeks on my website dealing with energy technologies. The story of the moment seems to be both fusion in its hot sense and in the cold fusion sense. That's been another meme – alternative energy technologies.

The third meme that has been recurrent – and you've pointed this out many, many times on Solari – is the new manufacturing processes: additive manufacturing or 3D printing. I've pointed out on my site in various interviews and so on that 3D printing looks to me to be the first step in the technology tree to the old Star Trek replicator with transporter capability. They've already used 3D printing in space matters. NASA recently took a photograph of a rock on Mars and 3D printed it on earth to have a better look.

Now, I don't believe for a moment it was just a rock. I think it was probably something unusual that may have had some anomalous artificial qualities that they wanted to look at, but this is already being done.

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The other thing that I think is happening is if you look carefully and combine all these things together, we've seen recent articles on www.phys.org about scientists in Australia who have successfully tested a tractor beam – talking about Star Trek again – that has been able to move and both pull and push tiny little objects in laser beams to a distance of about 20 centimeters.

Now this is a huge leap from previous capabilities. That's almost eight inches that they've been able to move objects forward and backward inside of a laser beam. So you put that together with the recent massive DARPA announcements that I talked about when we were together up at the Secret Space Conference. DARPA has come out and made a stated goal that they want the United States to be warp capable in 100 years.

Warp drive is, again, a Star Trek science fiction concept to a certain extent, but what that would mean is vastly shorter transit times for space travel. From Earth to Mars would not take a matter of months; it would take a matter of minutes.

We have all this coming down. When you put all of it together, new energy technologies, new technologies in terms of robotics and additive manufacturing, new technologies in terms of energy, new technologies in terms of being able to scan and print objects remotely at a distance. We're getting very close to the idea of teleportation.

C. AUSTIN FITTS: Right.

JOSEPH FARRELL: It looks to me that if you look at it in a whole, what you see happening is they are quite literally releasing to the public stories of technologies which, when put together, look like Star Trek. I mean, we've got warp drive, we've got teleportation, we've got tractor beams, we've got replicators.

C. AUSTIN FITTS: Right. We've got materializers. Yes.

JOSEPH FARRELL: Exactly. In the next 100 to 200 years we're on the cusp of a drastic change in the way human society will be organized and the way that things will be manufactured. These technologies will drive down transportation costs dramatically. We won't see trucks hauling things across the country; we'll simply dial it up and 3D print it.

C. AUSTIN FITTS: Exactly.

JOSEPH FARRELL: Whether you're at home or in a warehouse, this is going to

drive down costs tremendously when these things actually come online in a major way.

C. AUSTIN FITTS: I laughed tremendously this morning because a lot of what is holding back the 3D printers is the economics of the materials. So there's a real dovetail between the fabrication technology and the new materials. Of course, you will read a story about what grapheme can do, and its' really exciting until you discover what the expense is.

This morning the headline was that the President announced a whole new series of initiatives in support to manufacturing, all designed to bring the costs of the materials down.

JOSEPH FARRELL: Exactly.

C. AUSTIN FITTS: Exactly.

JOSEPH FARRELL: It's going to change so many things, Catherine: labor costs, transportation costs, energy costs. The thing that is very intriguing to me about cold fusion in terms of this Global 3.0 model is if you look at the various claims out there about fusion processes, in the last three weeks we had the University of Uppsala and the University of Bologna in Europe releasing a paper of their examination of the E-Cat cold fusion reactor of the Italian physicist, Dr. Andrea Rossi.

In that paper, it's very clear that these two major universities have come right out and said that this is a real process, it really works, and we are getting nuclear reactions at thermal energy levels far below the hot fusion model. That in itself is very interesting because if this reactor can go online to produce practical energy, it could be very, very cost-efficient.

Within a matter of days of this paper being publicly released, of course we had the Lockheed Martin story that, "Oh, by the way, we have a hot fusion reactor that within five years we're hoping to be able to put on the back of the truck."

C. AUSTIN FITTS: Right.

JOSEPH FARRELL: I find that a little suspicious in the timing of it because the Lockheed story was not accompanied by any data, so to speak. I think really the timing of it was to take some of the thunder away from Rossi's cold fusion device.

C. AUSTIN FITTS: But what about the Russians because the Russians had also come out.

JOSEPH FARRELL: Yes, the Russians and the Chinese have a fission fusion reactor that they're talking about. So the bottom line here is the other thing that fascinates me here is the sequence of the timing of these stories.

About two weeks prior to the cold fusion announcements of the two universities in Europe there was an announcement that the Rockefeller Foundation group had divested itself of all petroleum which I thought extraordinary.

Then, of course, we had Rossi's fusion announcement and then the Lockheed announcement and the Russians and the Chinese. In other words, they're telling us that we need to get set for huge changes in the world energy situation.

C. AUSTIN FITTS: Let me step back because I'm a great believer that I think the oil price has been coming down and we just had Goldman Sachs come out today and say that the oil price was going to hit 70 in 2015. I think, Joseph, what you're watching is a hit on the Russians.

JOSEPH FARRELL: Yes, I do too.

C. AUSTIN FITTS: In other words, if you want to bring Putin to his knees, you have to cut the oil price. Right now 87% of the fossil fuel or the energy demands on planet Earth come from fossil fuel. Putin is sitting in the catbird seat in terms of oil and gas. If he grabs the arctic, then he is going to be the largest instead of the United States.

It seems to me there is a real effort here to bring him to his knees. The

Rockefellers are making it look fashionable, but I'm not sure if that's real unless – of course – they bring out this technology.

JOSEPH FARRELL: I think part of it is real, and I do agree that much of the manipulation of oil and energy prices – oil and coal and natural gas and so on – is an engineered geo-political scheme against the Russians. This is the same strategy that the United States and the West used against the Soviet Union in the final days of the Gorbachev era.

Interestingly enough, it's interesting that you mentioned this because I have a blog scheduled in the next couple of weeks about an interview that was given on Rossiiskaya Gazeta by Nikolai Patrushev, who is one of Putin's close advisors. He's the former director of the Russian intelligence services, the FSB, and he's currently the President of the Russian Security Council. This is exactly his analysis of the situation, and he makes it very clear that the Russians know that the United States is trying to play this game again.

So, yes. I agree that much of this is manipulation. But I do think that all of the Russian matter aside that we are looking at a deliberately driven set of means here that the elite seems to be pushing fusion energy in one form or another.

If Lockheed comes out in the next few years on the reactor process – and I can't envision that Lockheed would be making statements that are just hot air – they have to have something behind it that gives it the confidence to make the announcement that they made.

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I do think that with energy itself, we both know the connection between energy and the financial system. This is a signal that we are not only in for huge changes in the next few decades in terms of our energy supply; we're in for huge changes in the financial system as well.

C. AUSTIN FITTS: Absolutely.

JOSEPH FARRELL: I just want to remind people that fusion is an energy source that is basically not subject to non-renewable resources. In other words, the financial game changes dramatically in that situation.

C. AUSTIN FITTS: Right. What it means is: Put aside the oil and gas industry. What it means for manufacturing, the number one cost of manufacturing in the United States is energy. So you're suddenly going to make the developed world phenomenally competitive in terms of labor with both lower energy costs and robotics.

JOSEPH FARRELL: And lower transportation costs.

C. AUSTIN FITTS: Right. So you can see manufacturing fly back.

JOSEPH FARRELL: Yes. Easily. I really think that this is going to be a huge story both in terms of investment opportunities in the next 10-20 years, and you've been pointing out several times that they seem to be moving to an equity-based system of finance. Given all these developments, I think that is quite true. We're going to see a very different kind of investment atmosphere in terms of manufacturing over the next couple of decades.

C. AUSTIN FITTS: Clearly one of the things that we do see is using technology to maintain much more invasive individual control. One of the things I sometimes wonder about is if they're scared to death to bring this technology out without having that kind of control – if there's a relationship between the desire for invasive individual control and the introduction of very powerful energy technology.

JOSEPH FARRELL: Oh, yes. I totally concur. In fact, this is something I've been talking about and discussing with members on my website over the past couple of months on a fairly consistent basis. If we go back, for example, and take the case of Nikola Tesla back at the turn of the last century, he was involved – as most people are aware – with a project to create a wireless transmission of power. In other words, quite literally,

broadcasting signals that were not simply communication signals but actual power without wires. The plug was pulled ostensibly, so the story goes, by JP Morgan who, once he learned what Tesla was up to, decided to pull the plug because he was concerned that you couldn't meter it.

I think that is a cover story because Morgan stood to gain a lot simply from the royalty and licensing fees on any technology and appliances that would have used that system. The real problem – the way I see it – was that the technology that Tesla was talking about and he himself acknowledged in a series of *New York Times* articles in the 1910's was this technology could be weaponized.

C. AUSTIN FITTS: Right.

JOSEPH FARRELL: I think the weapons problem back then was, "Okay, if we let this out of the bottle, how do we keep track of it?" I strongly suspect that the reason why we have the emphasis from the elite on hot fusion as opposed to cold fusion is that first of all, it would be a technology that would be comparatively more expensive than cold fusion. Secondly, it would be much more massive technology. In other words, they could keep track of it. Thirdly, they're letting it out because now they have a global system in place that they can monitor who's doing what with technology.

I totally agree with you on that.

C. AUSTIN FITTS: Let me turn. The tremendous focus now with everybody getting smart phones with the internet of things and everything getting wired and everything getting connected, it's kind of frightening. A couple of years ago I rented an apartment here in California for a short period and I turned on my Wi-Fi and there were 50 Wi-Fi's.

We're hearing a lot more about computer human interfaces. I think if you look at the technology that's cross-cutting to everything, if we dramatically improve the computer human interface we're now talking and watching machines where people can communicate telepathically with thought with computers. What that means is this internet of things

gets turbo-charged in ways I can't even imagine.

JOSEPH FARRELL: Yes. I think this is also part of the agenda. It's largely part of the surveillance control agenda because if you're directly plugged into the internet via a computer human interface, be it through brain implants or some other technology, this is – in my mind – a scary potential because there is nothing that would stop them from being able to interfere with a person's emotions, their moods, possibly even their decision-making processes.

This is the other thing. If implemented, it wouldn't even have to be on a global scale. Let's assume it was implemented on a regional scale. That particular region would, again, experience a dramatic drop in certain prices for energy, labor, and so on. The other thing it would allow the elite to do is have real-time tracking, which they pretty much do now, but this would be a further step in that direction. It would be real-time tracking of spending and saving behavior patterns, investment patterns, and so on and so forth.

C. AUSTIN FITTS: It's the ultimate insider trading machine.

JOSEPH FARRELL: Exactly. It would be the final step in the ultimate insider trading mechanism.

C. AUSTIN FITTS: I was laughing my head off this weekend. I got the new *Economist*. First of all, the cover is a picture of a dead bird. The bird is on a leash. Angela Merkel is holding the leash and is basically saying, "Europe's economy is dead." That was a little tough, but then I opened it up and they had an editorial proposing that our government needed to be able to access and track everybody's GPS information on their cell phones so that we could protect everyone from Ebola.

JOSEPH FARRELL: Oh, geez! They're milking that one for all it's worth, aren't they?

C. AUSTIN FITTS: It's unbelievable! Ebola can solve every problem. Every agenda can be on the Ebola bandwagon here.

I with think the interface question, the more everything is networked and the more the ease of the interface, the more this is going to get truly interesting.

I know you and Scott de Hart wrote a book about transhumanism. Maybe you could mention what that is and why it comes up in this context.

JOSEPH FARRELL: Transhumanism is this movement of Ray Kurzweil and some others that believe that the human condition is going to be dramatically improved by things like these technological interfaces with computing networks, with artificial intelligence possibly. Other transhumanists are also looking to nanotechnology, implanting little nanobots inside the human body to repair the body at a cellular level. This, in connection with certain genetic therapies, could result in dramatic increases of the human life span. That in itself, if we stop and think about it in terms of its impact on the economy and on finance, would be a huge additional step in making the economy much more efficient.

The reason I say that is, just stop and consider the educational possibilities alone that this would permit. Right now all over the world we have to recycle the sum total of human knowledge every 20 years or so to a new generation. What this has meant effectively in the past is that our major scientists, for example, are known for maybe one or two major discoveries in their lifetime. Think of Einstein and relativity or Heisenberg and quantum mechanics and everything that drives our modern world.

"Just stop and consider the educational possibilities alone that this would permit. Right now all over the world we have to recycle the sum total of human knowledge every 20 years or so to a new generation."

Now let's say that these individuals have a lifespan not of 70 but, let's say, of 140 or even 210 years. That would mean that the process of recycling human knowledge would not have to proceed at as fast a pace. By the same token, it would allow each individual not only to master one

particular subject area, but perhaps many subject areas.

C. AUSTIN FITTS: And integrate.

JOSEPH FARRELL: And integrate. Exactly. This is going to have a huge multiplier effect on human creativity, on human technological progress. One would hope it would have a similar impact on human spirituality.

I point that out because way, way back in the very first book I wrote in all of this alternative series of research was a book called *Giza Death Star*. I pointed out that one of the church fathers, a fellow by the name of John Tillotson said that the reason that death occurred for humanity was that it was death that gave individuals the possibility and opportunity for repentance.

What he meant by that is if you can envision a Mother Theresa or an Albert Schweitzer having literally hundreds of years to do their service for humanity that they did, then obviously it would be very beneficial. But by the same token, the flip side is that if you can imagine a Mao Zedong or a Joseph Stalin or an Adolf Hitler having hundreds of years to do what they did, then the prospects for monstrousness also are multiplied.

This is another technology, again, that has a double-edged sword to it. We're going to have to develop the spiritual wherewithal to handle some of these things.

C. AUSTIN FITTS: I don't know whether you saw Elon Musk's book at MIT. It said, "We should be very wary of artificial intelligence. It was going to let in the demon."

JOSEPH FARRELL: I have. I actually just scheduled a blog about that statement of his for November 12th. I saw that, and I share his concern actually.

C. AUSTIN FITTS: I do, too. I was like, "Go, Elon!"

JOSEPH FARRELL: Exactly!

C. AUSTIN FITTS: I hope Ray Kurzweil reads this.

JOSEPH FARRELL: I hope he does, too.

C. AUSTIN FITTS: Jon Rappoport and I did a Solari Report where we basically got together and did our best to persuade everybody that Ray Kurzweil was completely nuts.

JOSEPH FARRELL: Well, you don't get much of an argument from me.

C. AUSTIN FITTS: One of the things that I find fascinating about the developments is these are happening at a very rapid pace and they are communicated at a very rapid pace because you've basically now got almost everybody – soon to be everybody – now on a smart phone.

One of my big insights that I kept thinking about and talking about when we did the 3rd Quarter Wrap-Up was the fact that if you were sitting in a remote village in Asia or Latin America and you're a teacher and you just want to learn as best you can and as fast as you can to be as productive as you can in whatever your purpose is, they can now access the finest curriculum in the world online at a relatively inexpensive price, but they're not burdened by the 20,000-30,000 hours of curriculum and other requirements and disinformation and testing that you are if you are subject to common core in the US educational system. That means the developed world is struggling under a monstrous handicap of tradition and regulation that a lot of the world, Joseph, can just sit down and say, "Let's learn."

JOSEPH FARRELL: Yes, exactly. This is going to be a huge change, and I looked over the email that you sent me prior to this interview, not only in manufacturing but in education.

C. AUSTIN FITTS: Right.

JOSEPH FARRELL: I think to a certain extent the technology is simply going to overwhelm the whole common core current American system of teacher certification and spend x numbers of hours in a classroom somewhere

and 'learn' a subject for 50 minutes and the bell rings and you rush off like Pavlov's dogs to the next class where you learn another subject entirely disconnected from the first one.

C. AUSTIN FITTS: You can't learn anything in 50 minutes.

JOSEPH FARRELL: You cannot. Integrated learning – or as I prefer to think of it in terms of an older discipline – is going to be analogical thinking. Interdisciplinary thinking is going to come back and it's going to come back big time because of this.

My only hesitation with the technological force that now seems to be driving education is I am extraordinarily skeptical of having everything in ebook form. The reason why is if we go back to the old Soviet Union and the old Soviet encyclopedias, which were somewhat of a joke, during the Stalin era. You would open up a picture of the encyclopedia in one year and there would be during the Stalin era. You would open up a picture of the encyclopedia in one year and there would be Yezhov and Stalin standing together. The next year after Yezhov is purged, of course he's taken out of the picture and all the facts are adjusted accordingly.

I think the move to ebooks is a huge mistake because it gives the elite the power to delete or add history.

C. AUSTIN FITTS: They can rewrite everything.

JOSEPH FARRELL: They can rewrite everything. Exactly. This is the caution that we have to make sure we understand. There is no substitute for hard copy.

C. AUSTIN FITTS: Right.

JOSEPH FARRELL: That is my bottom line on that.

C. AUSTIN FITTS: I couldn't agree with you more. Occasionally I will get something on ebook form just because I want to check it out. I wanted to review Cheney's book and I didn't want him to get the satisfaction of

me buying a hardback.

JOSEPH FARRELL: I'm with you there.

C. AUSTIN FITTS: Anything that I want to keep I get the hard book. Absolutely.

JOSEPH FARRELL: The other thing that I think this is going to do, and you suggested this in your email with respect to manufacturing, is you pointed out that – and let me read this here. You pointed out, "Increasingly, the real power of Amazon, crowdfunding, and eBay models will be recognized as the ability to harness millions of cooperating entities rather than the old hierarchical model of the corporations as open-source software has done in harnessing of the power of the computer."

If we turn the clock back to the middle ages and look at the way that corporations functioned then, this was very much their model. They would form partnerships for a certain period of time to accomplish certain goals. Once those goals were accomplished, the partnership was dissolved and they came up with new equity or arrangements among the shareholders for the next project.

I think that, too, is going to drive the way that we organize for economic and productive activity in the future. It could become much less the model of the big, huge global megacorporation dictating everything. I think those things might themselves be overwhelmed by the advance of technology, and different models of corporate cooperation are definitely going to evolve as a result of all of this.

"That, too, is going to drive the way that we organize for economic and productive activity in the future."

C. AUSTIN FITTS: It's funny. We just did a wonderful Solari Report on crowdfunding and had Karen Diggs, who is an entrepreneur who has had a wildly successful crowdfunding campaign. In fact, she ended up at the Maker Faire being highlighted by Kickstarter as one of their most

successful entrepreneurs.

I put up a TED speech by Amanda Palmer, who is a performance artist, called The Art of Asking. What Karen and this wonderful speech by Amanda Palmer are describing – because Wall Street keeps poo-pooing this and saying, "It's tiny dollars. It's only $5 billion. It's tiny dollars." What they're missing is you are talking about a much more dynamic, intimate relationship between consumer and producer. It's one that will allow far more producers to operate at much smaller niches.

You're talking about creating economic health for millions of tiny producers in niche markets. I just think that intimacy between producer and consumer is going to produce a remarkable number of things.

I'm beginning to realize around my home, Joseph, I need all these different companies run by small business people to figure out how to protect me and help me deal with corporations.

JOSEPH FARRELL: Yes. You couple this crowdfunding phenomenon with things like niche production and additive manufacturing or 3D printing and, yes, I personally think you're going to see a huge transformation of manufacturing over the next 20 years. In fact, I've been so fascinated with the subject of 3D printing that I went out and bought a 3D printing software program just to see what you can do with it.

I have to tell you that I'm really truly astonished at already what has been achieved in terms of computer aided design.

C. AUSTIN FITTS: Oh, it's remarkable.

JOSEPH FARRELL: It is truly remarkable. I don't mind telling you that I'm stunned at what this program can do.

C. AUSTIN FITTS: And part of it is that you have CAD software and 3D software down to something that is so good but it's so economical. Kids can get on this stuff and start doing it.

You're making this stuff much more accessible to the average person, including the average young person.

JOSEPH FARRELL: One of the things that I've encountered as I've been researching this kind of software and 3D printing is I run again and again into comments by industrial designers and so forth that are looking at the 3D printers coming out now and being made at low costs so that people can actually put these things in their homes. Some of these designers are saying that they've used these things to prototype their designs for actual products.

In other words, the other thing that manufacturing is going to encounter is you're going to have a lot of prototyping being done just by people in their homes. This, again, is going to dramatically change the nature of manufacturing because Gertrude in her garage may have a prototype for a certain part or a certain piece of equipment that works better than anything that a major corporation can do. This is going to dramatically influence not only the patent industry and patent law; it's going to influence manufacturing as well. You're going to have all sorts of people involved with this.

Things are dramatically changing.

C. AUSTIN FITTS: I knew something was up when two years ago I put the article up on the blog. The patent office announced that it was creating regional patent offices. I said, "This is a very good sign."

JOSEPH FARRELL: Yes it is. It is because it's a clear response to precisely these trends that we're talking about in manufacturing with crowdfunding, 3D printing and so on. It's a clear response to that.

It's already transforming the land we live in, but you haven't seen anything yet!

C. AUSTIN FITTS: I want to jump back to do some energy things because I want to talk a little bit about solar. I was just reading an article about the Waltons. They apparently have a big investment for solar, and solar has

been lobbying to stop certain rules that some say would allow the innovation of solar to grab on.

There is a real positioning between different players and trying to grab the solar market shares as it starts to get much more economical. We're watching the cost of the panels come down. One of my partners says it's a little like the semiconductor industry where the curve is coming down.

The other thing is the battery technology is improving.

JOSEPH FARRELL: Dramatically.

C. AUSTIN FITTS: I don't understand a lot about the battery technology, but I understand it's part of what is going to get solar really competitive with the cost of coal to the utilities that are providing the electricity. I don't know what you know about battery technology, but maybe we could just touch on that for a second and what it could literally do to your home.

JOSEPH FARRELL: I'm glad you mentioned battery technology and solar and all that. One of the things that is happening in physics is they are now realizing that the idea of "room temperature" superconductors is becoming closer to reality.

Now, a superconductor – if people don't know what that is – is simply a device usually in a ring where you cool it down to near absolute zero and load it with an electric current. Well, absolute zero resistance approaches zero. So the electric current just stays inside the superconductor, whirling around at incredible speeds with very little loss of power.

If you can bring that phenomenon up to closer to "room temperature" and have the same phenomenon work, then the capacitor technology will improve dramatically because this would mean that you could store current with very little loss over time at relatively much easier to engineer temperatures.

They've been bringing the threshold of the superconducting phenomena

up. Now the thing to note here in what we're talking about is that these technologies in and of themselves are not a big deal. It's when you combine them with other technologies – superconducting batteries, superconducting batteries and solar panels, superconducting batteries and fusion, and those in turn with transportation propulsion systems, and on and on we could go.

In other words, it's not only in the advent of new technology that we're watching things being driven at speeds that we scarcely could have imagined ten to twenty years ago, but it's in the combinations of those technologies with each other that we're seeing things happening at an extremely accelerated pace.

"In other words, it's not only in the advent of new technology that we're watching things being driven at speeds that we scarcely could have imagined ten to twenty years ago…"

C. AUSTIN FITTS: Right.

JOSEPH FARRELL: And this is going to keep continuing. I mean, my word! Like I said, in the next 100-200 years human society is going to dramatically transform itself at every level from transportation to labor and energy costs. Everything is going to change significantly.

C. AUSTIN FITTS: What this means is it should dramatically reduce the cost of heating and providing the energy for a home.

JOSEPH FARRELL: Absolutely because the other thing implicit in these technologies, too, which is one reason why I think we also see the rush to put in the global surveillance system is that with these kinds of technologies it becomes very conceivable to envision Tesla's old dream of not having a wired together network – a grid. In other words, people will be "off the grid" so to speak. You'll be powering your home, and you'll be making your home with 3D printing.

C. AUSTIN FITTS: There is an extraordinary effort from what I can tell all across the nation to institute regulations which basically require you to keep paying utilities whether you need them or not anymore.

JOSEPH FARRELL: Right.

C. AUSTIN FITTS: And they are trying to bring in the monopoly before this all rolls out.

JOSEPH FARRELL: Yes. I think you are seeing that happen. I think it is going to fail because, again, I think the technology is simply going to overwhelm the regulatory system.

C. AUSTIN FITTS: I have to make a cartoon of Bill Gates being overwhelmed by competing technology.

You are the one guy who can explain this. The particle accelerator at CERN. Explain to us what that is and why it is important.

JOSEPH FARRELL: The CERN accelerator is called the Large Hadron Collider. It's very important in my mind, and I hope people understand that I am not a credentialed scientists; I'm a hack from South Dakota. My opinion here is that of a rank amateur. I'm not a physicist; I'm not a particle physicist or anything remotely close to it.

The Hadron Collider was built precisely in order to find certain particles that were predicted in the standard model of quantum mechanics in things like the Higgs boson and some other particles. This is the reason for its enormous size and its enormous energy.

The interesting thing is that CERN appears both to have announced and then retracted and then obfuscated whether or not it has, in fact, found the Higgs boson. It's a very murky area as far as I can tell.

You recall that when the Collider was turned on initially a couple of years ago they shut it down right away because they claimed that a tear had occurred in one of the big helium cooling rings around these gigantic magnetic rings in the accelerator.

I've always been suspicious of that explanation, Catherine. The bottom line is that they are not finding the particles that the standard model

predicted in the numbers that they should be finding them by now. So what it indicates to me is possibly – and there are some scientists who have already admitted this and have gone back to the drawing board and are talking about truly radical things like throwing out dimensionality from their equations altogether. When I read this, I was gobsmacked because the equations of theoretical physics beginning with general relativity are all based in some form of dimensional analysis.

Einstein put his equations in four dimensions and so on and so forth. So the idea of getting rid of it altogether, I'm just thinking, "My word! Is it that bad?"

They didn't find what they were looking for, and I suspect that the real story is when they turned it on and turned it off so quickly is they found something anomalous that didn't fit the model and it's forcing them to rethink things. Now the reason I think that is that the Chinese have recently announced that they want to build their own version of it, and build it even bigger.

What that is telling me is that they don't trust the information coming out of CERN, so they're going to build one and figure out what is going on and see for themselves. The Hadron Collider I am very skeptical of pronouncements coming out of CERN right now. There has been too much obfuscation of data, and now this business of some physicists wanting to rethink literally everything. That tells me something is afoot.

C. AUSTIN FITTS: There is a lot afoot. One of the things I didn't mention earlier when you brought up Lockheed, I think a lot of the people listening don't understand how important Lockheed may be.

Lockheed is the number one contractor to the US government, both defense and domestic. It's fair to say I think of Lockheed in certain areas as being far more powerful than the US government, but they also have been one of the real leaders in the black budget area, Area 51, and all of that.

If anybody is reverse engineering this kind of technology, UFO

technology, Lockheed has been the leader in that.

This quote came from somebody at Skunk Works, which is the area dealing with UFO technology at Lockheed I'm assuming. We're talking about coming from someone who has had access to extraordinary technology for quite some time.

JOSEPH FARRELL: What quotation are you referring to?

C. AUSTIN FITTS: The one where they announce the fusion. It was mentioned that the fellow worked at Skunk Works.

JOSEPH FARRELL: Yes. Well, Lockheed and the Skunk Works and the black budget. This is another huge story. We touched upon it quite a lot at the Secret Space Conference.

My favorite quotation from Lockheed and the Skunk Works is from the former head of the Skunkworks, the late Ben Rich, who gave several talks after he had retired from Lockheed to his fellow engineers. He said some truly astonishing things. One of the things he said was, "We found an error in the equations, and now we can take ET home."

When I read that, the first time I read it my reaction was, "Whose equation?"

C. AUSTIN FITTS: Maybe that's what they're rediscovering at CERN.

JOSEPH FARRELL: Exactly! That's exactly where I was going with it. The whole idea of getting rid of dimensionality in mathematical physics is to me breathtaking.

The other thing is: Okay, so we have the ability to take ET home. So where is home? How long does it take to get there?

C. AUSTIN FITTS: I'm going to get back to space travel in a second, but that leads us to the idea of terraforming. One of the things that I'll email back and forth with you is this concept we have that we can make a planet

hospitable with terraforming.

Although this is interesting: I just had dinner with a lovely person who said to me when I asked him what he thought the chemtrails was, he said that he thought we were terraforming earth to make it hospitable to non-humans.

JOSEPH FARRELL: Or inhospitable to non-humans.

C. AUSTIN FITTS: Who knows! We're willing.

JOSEPH FARRELL: That one I think could go either way. Let's look at the possibilities here with the new energy technologies that are beginning to be talked about with DARPA's pronouncement that they want the United States to be warp-capable in 100 years.

As I put it in The Secret Space Conference, DARPA doesn't make announcements like that without having done some preliminary proof of concept experiments secretly. In other words, they are hopeful enough that they can do this in that amount of time. Of course, that implies that they've got some sort of long-term black budget project lined up to do precisely that.

"They are hopeful enough that they can do this in that amount of time. Of course, that implies that they've got some sort of long-term black budget project lined up to do precisely that."

How does terraforming fit in? Well, it fits in very easily. If you've got the energy capabilities that fusion might bring and make available, then the engineering – if you've got nanotechnology robotics, additive manufacturing, and so on – developed to the point that you can remotely and robotically begin to terraform planets, then the sky is the limit.

In other words, to my mind it opens up absolutely cosmic vistas of engineering. The thing that people have to get out of their heads with some of these UFOs is that they're so gigantic that they couldn't possibly be human. Well, my response is: Nonsense! If you are capable of

engineering systems on planetary or even stellar scales – which we already have the ability to do with things like HAARP and ionospheric heaters, engineer weather which is a planetary-scaled system – then the idea of terraforming becomes very, very possible.

Again, the sky is the limit here really. I know it sounds like we're talking science fiction, but it reality these are the technologies that are coming out online and these are their potential implications.

C. AUSTIN FITTS: I don't think we're talking about science fiction because I think so much effort has been made over the last 50 years to keep the general public in the dark.

JOSEPH FARRELL: Yes, I agree.

C. AUSTIN FITTS: So if you look at what was going on in the black budget 50 years ago or 60 years ago, it makes sense that we would be 60 years beyond where we were.

JOSEPH FARRELL: Yes. Let's take two examples of what you're talking about here: the Nazi bell, which is a story that I've been investigating for a number of years which supposedly was this technology that the Nazis came up with in World War II that actually levitated. In other words, this device floated right up off the ground. It was a kind of a primitive field propulsion machine.

Well, the story goes that they were doing this – accomplishing this feat – in 1944. Then you have the American inventor, a well-known physicist in the alternative research community by the name of Thomas Townsend Brown who was performing experiments with what he called gravitaters back in the 1920's and 30's, charging up these dielectric components and they would lift. He performed this test in France after the Second World War in vacuum.

In other words, this was not due to ionic wind or any of the nonsense that you often hear attributed. This was a true field propulsion capability. Again, these demonstrations he conducted in the 1950's.

So stop and think here, folks, and put it in the context of Ben Rich's statements – the Lockheed Skunk Works. From the 1950's until now you would have had a vast commitment of personnel, you would have had a vast financial commitment in the trillions of dollars over several decades. In other words, what could they have accomplished from those faltering beginnings during the Second World War and after up until today?

When you think of it that way, then, yes, you might be dealing with a technological capability secretly that exists far in excess of what is known publicly. I think what we're really looking at, in other words, with the means that are being pushed with these energy developments and 3D printing and tractor beams and all of this stuff that they are talking about publicly, I think the secret capability of these technologies already exceeds what they are releasing.

They are preparing us, in other words, for huge cultural and social transformation.

C. AUSTIN FITTS: Right. It's interesting. I used to work as a maître de. I used to be in the restaurant business when I was in college and going to school. If it was 30 minutes for a table I would always tell them that it was 45 or an hour because there is nothing more frustrated than a person whose blood sugar is low and you've given them the wrong estimate.

Whenever DARPA says 100 years, I see myself saying, "Oh, it's an hour for a table."

JOSEPH FARRELL: Yes. Exactly.

C. AUSTIN FITTS: Exactly.

JOSEPH FARRELL: That is exactly my thinking, too. I actually – as I put it in the San Mateo conference – I think that announcement was on the conservative side and they deliberately did that. Again, I don't think that they would make these kinds of announcements without having run privately and secretly some proof of concept experiment that indicated to

them the feasibility of the idea.

Again, six of one, half dozen of the other. The point is that they are pushing these things in the public eye right now. Over time these capabilities will improve and so on. I suspect a lot of it will simply be deliberately leaked. I've thought this about 3D printing for some time. It is known that 3D printing has been around for a while, but it's been so costly and in use in various large corporations for so long. Ultimately I think it comes out of the black project's world and that the actual capability is far beyond what we're hearing about.

C. AUSTIN FITTS: Right. I think we're seeing a lot of the stuff that has been reverse engineered now coming to the fore.

JOSEPH FARRELL: It could be. I've always taken the tack. I get that reverse engineering as, "Well, couldn't the Nazis have come up with their bell idea by reverse engineering a crashed UFO?" Well, sure they could, but there is not a great deal of evidence that they did.

C. AUSTIN FITTS: Right.

JOSEPH FARRELL: I think when you look at the physics papers and engineering papers between the wars, it is very clear that some people are already thinking along these lines with just good old human ingenuity.

Put all that ingenuity into a black project world for 50 years and give it trillions of dollars.

C. AUSTIN FITTS: It's important to understand that people working in these areas report that their resources are infinite. It's all the money you want.

JOSEPH FARRELL: Oh, yes. Give them all that money and let scientists do what every scientist really wants to do, and that is to invent something wild and crazy.

C. AUSTIN FITTS: So I wanted to bring up holograms for a second because I did a couple of interviews where I said, "Look, I don't know what is

going on in the air space around us, but what I know is if you add up the costs of all the hardware, it's more than what the industrial plant that we can see and know about can produce." The two do not balance.

I had a lovely and very intelligent subscriber write in and say, "Well, they are all holograms."

I was wondering if you could say a little bit about hologram technology. What is it and why is it important? What is going on there?

JOSEPH FARRELL: Well, holograms are very unique. As most people know, they are done with lasers. The interesting thing about a hologram is it's a three-dimensional image that you can literally clip if you have a hologram imprinted on, let's say, a piece of metal or something. You can literally snip off a little piece of that metal and the entire hologram will be present in the piece of metal that you snip off. This is the really intriguing thing about them. In other words, they have an almost 100% preservation of information in total – both in the total hologram and in any of its pieces. That is one of the very intriguing things about them.

"In other words, they have an almost 100% preservation of information in total – both in the total hologram and in any of its pieces."

But the interesting things about holograms is there has been an important development. I'm so glad you raised this issue. There has been an important development in hologram technology that was announced in the last week by researchers in Japan.

C. AUSTIN FITTS: Really?

JOSEPH FARRELL: Yes. Now, sit down and hold on because what they've done is they've been able to make holograms that are responsive to touch.

C. AUSTIN FITTS: Wow!

JOSEPH FARRELL: Yes. You can actually take your fingers. They've had

holograms of little bouncing balls that you can flick with your finger and the ball will bounce or split apart into more balls and so forth.

In other words, they are able now to program holograms with 3-dimensional responses to the environment around them. That is a huge leap because if this is the case, then this is a step away from going back to our Star Trek replicator idea and 3D printing. It's a step away from actually being able to say, "Can we make a hologram and 3D print it simply through the manipulation of photons and electromagnetic energy." In other words, can we convert it into an actual object?

We've taken another little step on the technology tree to all of those wild and wooly science fiction things that we watched back in the 1980's.

C. AUSTIN FITTS: Right. Didn't Wernher von Braun tell Carol or someone that they were going to use hologram technology to stage the alien invasion?

JOSEPH FARRELL: Well, he didn't exactly say that. What he said to Dr. Rosen – and I'm assuming that you are referring to her von Braun affidavit that she released back in the late 1980's. What von Braun told her was that there would be a certain progression for the argument to weaponize space – to put weapons in space. The first stage in that process would be the communists, and then the next stage would be – interestingly enough – terrorists, and then the next stage would be asteroids, and the final stage that we would be using as a justification for weaponizing space would be extraterrestrials.

So he didn't really touch upon holograms. There is a school of thought out there – and I'm not a subscriber to it – that says, "Yes, they can stage all of this by projecting holograms in the atmosphere." That would be extremely complicated to do. You would have to use things like optical phase conjugation and so on and so forth to do it, but it is at least theoretically conceivable. It would require an enormous amount of energy.

C. AUSTIN FITTS: One of my favorite science fiction books, and I love

William Gibson, was *Mona Lisa Overdrive*. In *Mona Lisa Overdrive* one of the stories is there was a young girl who is Japanese. Her father is a Yakuza boss. He sends her to London to keep her safe and he gives her a digital personal assistant – this little digital tool. Inside of it is a hologram that pops out. It's a British butler dressed perfectly with a British accent. It pops out as a hologram, and it can answer any question and do anything you need.

I remember reading it and saying, "I want one of those."

JOSEPH FARRELL: That's not far off in my opinion. I mean, if the Japanese are producing environmentally responsible holograms already…

C. AUSTIN FITTS: You and I got a big chuckle when the Japanese came out and said they were going to cut back on semiconductors and start manufacturing more for space. Remember? Including the space elevator. They said they would have a space elevator up by 2050.

Of course, the Japanese talk a lot about doing solar plants in space, capturing these giant solar farms that are in space and then deliver the energy back here on Earth.

JOSEPH FARRELL: That is another interesting story. Let me comment on that one because I followed that one rather closely on the blog site.

The Japanese first came out and said that they wanted to put solar panels around the equator of the moon.

C. AUSTIN FITTS: Really? I didn't see that one.

JOSEPH FARRELL: Oh, yes. I blogged about that a few months ago. I thought, "Gee, they're going to beam all this microwave power back to Earth." Well, the US Air Force had this project in the 1960's that I talk about in *Covert Wars and Breakaway Civilizations* where they wanted to do the same thing. They wanted to put up these satellites and collect all this microwave power from the sun, beam it to the Earth in the form of microwaves, and use that as a power source. The problem was that the

microwave collectors here on Earth would literally toast the region of about 140 square miles where nothing living could live in these microwave collection areas.

The Japanese want to do this with the moon. I thought that what they are really saying is, "We want to turn the moon into a death star." Sure enough, within about three days, China responded to that story by saying, "Oh, yeah. Let's put a bunch of solar panels on the moon and turn it into a death star." In other words, the Chinese weren't fooled.

The Japanese then switched the idea from the moon to orbiting satellites to do the same thing. In other words, what they're talking about, folks, is weapons in space.

C. AUSTIN FITTS: Space weapons. Yes. Well, the challenge of many of these technologies is they can be used for good and they can be used for evil. I think the hard thing in contemplating any of them is you look at some of the more gruesome aspects or applications and it really does get kind of scary.

JOSEPH FARRELL: Oh yes.

C. AUSTIN FITTS: I wanted to talk about something that is less exciting but that I think is going to have a big impact, and that is what some people call 'big data' – moving data into the cloud.

It's not a nice process, but we're watching a process both using economics as well as a whole world of dirty tricks to force everybody to keep their databases in big server forms called 'the Cloud'. What this does do is this gives the ability to integrate and develop and do all sorts of applications because you have access to the information.

So if you have everybody's health information in digital databases that is all sucking into one big combination of databases that can be mined and harvested relationally, the sky is the limit. I'm out here in Silicon Valley right now. They're planning on reengineering $1.6 trillion out of labor costs in healthcare once they get their hands on all this data.

We're seeing a wide number of applications in many fields, but maybe if you could talk a little bit about big data and what it means.

JOSEPH FARRELL: As far as I'm concerned, again, I'm very skeptical of moving. In fact, I keep all of my data on my personal computer right here on my computer and I back it up on discs so I don't use the Cloud.

What this represents to me is what we talked about before. We think of the current NSA spying program as being the ultimate insider trading mechanism. Well, like we said before, you haven't seen anything yet because if you have all this data moving to the Cloud, then what it gives the elite who control the actual computers all of this data is on, it gives them a huge advantage in terms of market manipulation, in terms of watching real-time financial transactions.

I mean, think of Swift and add to that everybody posting their data – be it creative data, be it financial data, be it their online purchases and what have you. Think of all of that added to this. It gives them an enormous capability to manipulate markets, to plan responses to public opinion, to drive public opinion.

Again, this is going to have an enormous effect on our culture. This is why I say if you really want to store your data, buy the hard copy. If you're buying ebooks, shift to books. The hard copy is the testament.

"This is going to have an enormous effect on our culture. This is why I say if you really want to store your data, buy the hard copy."

Something that even bothers me more, Catherine, and this will hit home with you from your background, is this idea that we see happening in this country where we see mortgage titles are being moved into an electronic database form. The opportunity is there for one thing for fraud on an enormous scale. It's magnified.

C. AUSTIN FITTS: Mind-boggling!

JOSEPH FARRELL: The other thing that happens as a result of this, as we are

discovering from various localities from around the country, is when these systems are implemented and you move all of this mortgage data into the Cloud, then local governments begin to lose revenue from the fees that they charge on registration of deeds and titles and so on.

This is, in my opinion, another strike against localities. They are trying to drive this because, as you suggested before, the technology itself tends to be localizing and decentralizing. They are pushing this move as – in my opinion – a counter to these trends that are emerging from the technology. They want to move everything into these electronic databases. My response is: Don't let them do it.

C. AUSTIN FITTS: I have to tell you just a little tidbit I discovered today. One of our latest Solari Reports is called 'Successful Home Buying' and I was able to interview the top writer on how to go about buying a home. It's quite extraordinary. He's somebody with very deep knowledge.

In one of his books he was pointing out that it's a very niche thing and you have to make sure you know what the market in the neighborhood is doing vis-à-vis other neighborhoods.

I don't know if you remember Gary Webb's *Dark Alliance*, but there's one point where Ricky Ross – who is dealing all the drugs in south central L.A. – has millions of dollars of cash under his bed and he doesn't know what to do with it. Somebody says, "Oh my God! You don't know? You buy real estate."

So Ross goes out. And, of course, it's the thing that started me on the pathway I'm on now. We were publishing maps that showed the defaulted FHA mortgages in south central L.A. and it scared the bejesus out of a whole bunch of people because they were using the mortgages to launder the money and to lever the fraud – because with mortgage fraud $100,000 of drug profits can turn into $1,000,000 of fraudulent Ginnie Mae securities.

JOSEPH FARRELL: Yes.

C. AUSTIN FITTS: Anyway, I'm reading this book and it says, "For example, in the early 1990's with the California recession Beverly Hills real estate was down 20-30% but south central L.A. was up."

JOSEPH FARRELL: Oh my word!

C. AUSTIN FITTS: Clearly he had no idea what he was saying. You never know. There it is – another nugget!

So let me turn to robotics because I try regularly to follow what is going on in robotics and the adoption of robotics. Of course, for me one of the most interesting questions about robotics is: If we go through this next round of automation that is expected with digital technology and healthcare and then do robotics, particularly in the retail sectors, what is it going to do to incomes?

Incomes have been steadily falling in part because of automation. I have to confess to you, Joseph, when I get online and I watch these different robotic soldiers I just think, "Oh my God!" Between the drones and the robotic soldiers, what in the world is life on planet Earth going to be like?

JOSEPH FARRELL: Well, it's going to be hideous if they don't build in safeguards. I mean, it's not only robotic soldiers we have to worry about. I'll go even further. It's robotic police. It's robotic medical professionals. Imagine nurses being replaced with robots, "You will take this vaccine now."

C. AUSTIN FITTS: Right.

JOSEPH FARRELL: The ultimate goal of common core in my opinion is to offshore the teaching profession. It's a huge strike against the teacher's unions and so on and so forth, and ultimately it turns them into nothing more than classroom monitors to make sure that everybody is watching their computer screens properly and filling out answers to tests. Ultimately that can be replaced with a robot.

In other words, the emergence of robots is, to me, one of the most disturbing trends technologically that we have coming down the pike. It could end up with a truly Orwellian state of culture and society, and an ultimately dehumanizing state of culture and society.

I think, again, the solution here is that people have to understand that these technologies, like it or not, are coming down the line and that they have to insist on adequate safeguards. We're right back with the advent of robotics. We're right back to Isaac Asimov's novel *I,Robot* that was popularized in the movie with Will Smith. They had to build programming safeguards into these machines that under no circumstance will they harm a human being and so on and so forth and all the complications that that gives.

That is one development that I think is, more than the others, a potential negative in all of this technology.

C. AUSTIN FITTS: I must say my favorite science fiction program on robotics is Battlestar Galactica where the robots get together and say, "Let's destroy the humans."

JOSEPH FARRELL: Yes.

C. AUSTIN FITTS: And, you know, that could happen. I think that is part of what Musk is saying with this demon.

JOSEPH FARRELL: Yes. I do, too. It's a real and present danger.

C. AUSTIN FITTS: Here's the question. If chemtrails are full of these particles – these metallic particles that can turn us into transistors – and everyone has a device full of entrainment and is getting filled with vaccines to make them easy to entrain, which one are you more afraid of, entrained humans or robots?

JOSEPH FARRELL: I'm actually more afraid of entrained humans.

C. AUSTIN FITTS: Me too.

JOSEPH FARRELL: The reason being that I have this theory that the human person – the human mind and memory – is actually a non-local phenomena. In other words, it's not entrapped in our bodies.

C. AUSTIN FITTS: Right. It's in the field.

JOSEPH FARRELL: It's in the field and our bodies kind of act like radio transmitters that are tuned to a certain thing. That means that you can never, like it or not, by any technological means completely eradicate that individual sparkle or whatever you wish to say, but you can certainly pervert it. You can certainly influence it to such a degree that an individual will start doing things that they normally wouldn't do. That is what I find very frightening.

I agree with you about the spraying the metallic particles and so on. I have a friend who suffers from the disease that doesn't exist, Morgellons disease. He has had those lesions examined by a pathologist in a laboratory. What she discovered was that these lesions were full of plastic crystals that were growing little antennas in these lesions.

The interesting thing is when the electromagnetic garbage in the air is particularly intense, on those days he can feel it because the pain of those lesions increases dramatically.

So, yes, I think we are looking at huge entrainment technologies that we have to be extraordinarily skeptical of.

"The interesting thing is when the electromagnetic garbage in the air is particularly intense, on those days he can feel it because the pain of those lesions increases dramatically."

C. AUSTIN FITTS: Right. I've told you this before. One of my favorite moments on The Solari Report was with Dr. Gwen Scott who is an expert on Morgellons disease. I had reorganized our briefing into my proposal to what we would do – the ten action steps you can take to protect yourself against chemtrails.

She listened to me very politely and she said, "Well, dear, you forgot the

most important one."

I said, "What is that?"

She said, "Grace. If you look at what is going on, we should be dead. But we're not. So something else is happening."

JOSEPH FARRELL: I totally agree with that. There is a spiritual component in all of this that seems to be entering the field. It does seem to be blocking a lot of these attempts. This is what I keep telling people. If you're the praying sort, pray against some of these phenomenon that are of concern to you. If you're not the praying sort, then think about it. But put the intentionality out there because there is an underlying spiritual or physical medium that isn't part of the material world. Quantum mechanics tells us as much.

Quantum mechanics also tells us that much of physics is observer-based. In other words, to put it in the most simple terms, you cannot measure the position and momentum of an electron at the same time so you predetermine the outcome of an experiment before you actually perform it depending on what you are looking for.

C. AUSTIN FITTS: Right.

JOSEPH FARRELL: This has led to all sorts of philosophical conundrums within the realm of physics, but the basic bottom line here is that there is a correspondence between human intention and physical reality. You've talked with Dr. William Tiller, I know, on your show many times. He has documented the same type of thing in response to material effects of intention.

Dr. Emoto in Japan who recently passed unfortunately.

C. AUSTIN FITTS: Oh, no. I didn't know that.

JOSEPH FARRELL: Yes, he recently passed away. He did all sorts of work on the same sort of area. It's a very, very important thing. I do agree with

you. I think there is a certain amount of what Western theology would call 'grace'.

C. AUSTIN FITTS: I'm always telling people, "Don't worry about getting away from the bad guys. Worry about getting under that grace."

JOSEPH FARRELL: Absolutely.

C. AUSTIN FITTS: There are a few other developments I want to pick your big brain on. Cities. Megacities. There is no doubt we are moving more and more people into these huge 10,000,000 or more megacities, yet the technology to make it possible for us to share cars and share lawnmowers and stuff is exploding.

Tell us what you think about cities and architecture and megacities.

JOSEPH FARRELL: Oh, boy! That is a really good one. I have to be honest: I'm torn. Part of me looks at the technology and the way the elite seems to be driving things, and it does seem that they want to concentrate as much of the population of the world as they can into these big, huge cities. Even in China's case these big self-contained arcologies – these huge buildings where each building is kind of a little city to itself.

The idea of arcologies actually comes out of an Italian architect in the 1970's or 80's. I forget what his name was right off the top of my head, but he actually published a whole book of these big, huge buildings that were self-contained cities. He coined the term 'arcology'.

I actually see another trend here that is possible, and that is that the technology that we see already that is already out there and available makes the human requirement for big cities obsolescent. I look at the big megalopolis's – the Los Angeles-San Diego corridor or Houston or Chicago – these big, huge cities and they really are obsolescent responses to a 20th century model of manufacturing and distribution of goods and so on. In other words, we don't need them anymore. We can have a much more dispersed population over a much wider area, and I think technology may drive things in that direction.

Again, the response to the elites is to try to force people into bigger and bigger cities when, in fact, the actual drive of the technology – to me – seems to be implying that we should do the exact opposite.

C. AUSTIN FITTS: Right.

JOSEPH FARRELL: I lead pretty much a self-contained life. I do most of my shopping and so on for my books online and I don't go out that much to bookstores or things like that.

There is nothing I can do in a big city that I couldn't do in Spearfish, South Dakota in that respect. I think a lot of people are going to find themselves in that position even more so as 3D printing and some of these ideas come online.

Let me add one more thing to that consideration, and that is the military way of looking at things. Let's go back to the period of the mid 1940's. Let's go back to about 1943 during World War II when the allied bombing campaign over Germany is reaching its height. Well, what were Albert Speer's thoughts as Armaments Minister to the bombing campaign?

Well, the first thing he did was he dispersed manufacturing. He localized it. He took a lot of manufacturing out of the big industrialized areas like the Ruhr and dispersed all of it all over Germany, and many times in underground factories. Then he instituted modular building processes so that by the end of the war the Germans were actually producing terribly advanced submarines modularly inland, and then they would simply ship the parts of the submarine to a port facility where they would be welded together and off they would go.

They were doing this with tanks, with aircraft, everything, so that by the height of the Allied bombing campaign in 1944 that was also the height of German war production during the war.

In other words, I think that one reason why they are pushing the meme of getting everybody into 3D printing is I'm looking at it from the

military point of view. What does that do? Well, it disperses manufacturing and therefore it becomes much more difficult to target for a potential enemy, be that enemy on world or off world.

So it could be that we are looking at a different push by the elite, and that may be to get people out of the big cities and into smaller towns and villages and so on in order to disperse any potential targets. The key there is to keep the communications networks open.

"It could be that we are looking at a different push by the elite, and that may be to get people out of the big cities and into smaller towns and villages and so on in order to disperse any potential targets."

You pointed out recently Warren Buffet buying railroads and so on. That may be a real clue as to what is going on.

C. AUSTIN FITTS: There is no doubt about it. If you look at the effort to bring manufacturing back plus do the 3D, the combination is you are building a manufacturing and industrial juggernaut. It's very decentralized and it's very redundant. It's very innovative and it's flexible. You add to that all the space ports that they are building around the country, and you are beginning to see quite a base for a push into space. That's what it looks like to me.

Okay, so I just have to quickly ask you: Maglev trains and high speed trains. We now see the Chinese proposing to build a train all the way to the United States. Underground trains, the Japanese saying they will help finance it. Are we finally going to get high speed trains above ground?

JOSEPH FARRELL: That is a catchy question. That is a trick question. I think ultimately you are going to have to have some sort of energy efficient ground-based mass transportation system simply because with this dispersed manufacturing base you are going to have to have the ability to move lots of material very quickly from one region to another.

The catch here is above ground. That I don't know because for the

Chinese plan to be practical it will have to be underground obviously. It will have to be under the ocean at some point.

That, to me, makes sense, particularly from a military point of view. If you have all of this moving underground, then it becomes a much more difficult situation from a military standpoint to interdict any of that.

I'm thinking, yes, we are going to see some sort of mass transportation, but the other thing I am thinking that we're going to see come down the line in possible technologies and investment opportunities is tremendous public expansion of the knowledge of the underground drilling technologies that they already have available, not to mention huge expansion in the capability of those technologies.

Let me give you an example. The old method of drilling a tunnel was to take these big machines with their diamond-head cutters and literally chew their way through a bunch of rock, and then the slag would be conveyer-belted out the rear and hauled off by dump trucks.

The current boring technology that is probably in use in the black projects world – and other countries have this; the Germans certainly do – is a plasma boring machine which uses a nuclear reactor to literally melt their way through the rock and quite literally vaporize it. What this does is as they melt their way through the rock, the rock as it cools hardens into this kind of green glaze in many cases, and that actually strengthens the tunnel. That hardened glaze becomes a very, very hard surface that is much more capable of supporting the weight of a much larger tunnel.

I think if they're going to do this maglev business, it's going to be in conjunction with some boring technology that will begin to make its way into the public eye in a major way that we're not seeing happen yet, but eventually I think it will.

C. AUSTIN FITTS: Right. Eventually the public is going to realize this. There has been quite an infrastructure investment. It's just not been one they've seen.

JOSEPH FARRELL: Right. Exactly. To be very frank, maglev technology has been around for quite some time.

C. AUSTIN FITTS: For a long, long time.

JOSEPH FARRELL: A long, long time, as has this boring technology. I suspect, like many people out there, that there is already a hidden rail network of some sort underground between the various defense installations and corporations involved with black projects. In fact, there are stories out there if you research them to the effect that they've had these tunnel systems for quite some time between Area 51 and Helendale, California and various places in the Midwest connected with this secret research. So it wouldn't surprise me to see that we're going to see more of that go public.

C. AUSTIN FITTS: Two of the little more out-there technologies before I end. I want to talk about the financial system and end on that, but two other 'out-there's'. One is portals. You open the door on Earth and step through the door and you're on the moon.

JOSEPH FARRELL: Yes.

C. AUSTIN FITTS: Is it feasible?

JOSEPH FARRELL: Well, that is iffy. In the standard model a wormhole is subject to what is called the Schwarzschild limit. Basically, to put it country simple, what that means is that a wormhole is a billion times tinier than tiny. It requires an enormous amount of energy – an energy requirement that we can't publicly meet. It would be so tiny that it would be impossible to send objects through it. You would have to send information through it and then reassemble it Star Trek replicator-like on the other end.

I think we're a long way off from being able to do that. That said, that is just the standard model. In my book *Secrets of the Unified Field: The Philadelphia Experiment, The Nazi Bell, and the Discarded Theory* I pointed out a paper by some American physicists and engineers whose

last names are Corrum and Daum who pointed out that within the idea of torsion rather than wormholes you might be able – just possibly – to get some sort of teleportation effect on a large object not subject to the Schwarzschild limit by way of a phenomena of resonance. Again, that would require enormous amounts of energies but it would at least allow you the possibility of sending objects through something like that.

That is the alternative fringe area of physics. I tend to be currently skeptical of stories out there that you step into this chamber here and you walk out of the chamber on Mars, but, again, we're dealing with a black projects world and people like Ben Rich and others have said that we have things in the Nevada desert that would make George Lucas envious. So who knows!

C. AUSTIN FITTS: Who knows! Okay. Time travel. Do they have it?

JOSEPH FARRELL: Do we have it? Let me give a background before I give my answer. Time travel is – in my mind – intimately related to the possibility that, again, you can go online at www.phys.org and pull up papers that talk about temporal cloaking of little microwave vents.

In other words, what they've done is they've taken certain things – events – and literally cloaked them. They have removed them from a little local time stream.

This has been done. It has already been done on the laboratory bench. In other words, what they're telling you is that we have the capability to engineer the fabric of space-time on a laboratory bench.

That is a huge one. The same thing – if you stop and think about it – is true with any sort of invisibility technology. In other words, if something is rendered invisible, then you are removing it from a person's ability to react to it in the environment. In other words, you are already influencing the time stream. You are influencing the decision making processes involved in the time stream.

Do they have that sort of capability in technology? With those caveats in

mind, my answer would be yes.

C. AUSTIN FITTS: Well, it's the one technology I have trouble envisioning.

JOSEPH FARRELL: It's very, very hard to envision it. Time travel in the sense that most people think of – traveling backwards in the past or forwards into the future – is not really what I'm talking about here. But the fact that we're already doing this is kind of, again, the first step in the technology tree that might eventually lead to that possibility.

C. AUSTIN FITTS: So we come out of the bailouts in 2009. I'm subject to a whole world of financial people who keep saying, "Oh, it's the end of the world. It's the end of the world." The Fed starts to print enormous amounts of money and everyone is saying, "They can't do this. We'll have hyper-inflation." But, of course, we're not because we're securitizing the whole planet. All that money is being spread over a much wider asset base.

This kind of technology is steadily being introduced. New technology is very deflationary. So whether it's the deflation of globalizing labor or deflation of new technology or simply the enormous capacity to soak up money of literally bringing the entire planet into the securitization process, this is an unprecedented change. We've never had anything like this, and once you securitize the entire planet and flip the currency model, I'm assuming it won't happen again – or at least not for another 500 years.

"Whether it's the deflation of globalizing labor or deflation of new technology or simply the enormous capacity to soak up money of literally bringing the entire planet into the securitization process, this is an unprecedented change."

As Ed Sullivan used to say, "This is really, really big." And yet I'm surrounded by financial people who keep predicting the collapse of the dollar and the collapse of the economy.

JOSEPH FARRELL: Right.

C. AUSTIN FITTS: And I despair explaining to them, "You don't understand. We had a coup. They won. They're reinvesting trillions of dollars in the most advanced technology in the world and completely reinventing the whole planet."

JOSEPH FARRELL: Right.

C. AUSTIN FITTS: So you see that. Why can't I explain that to them?

JOSEPH FARRELL: I have the same difficulty, Catherine. You and I have discussed this. I have discussed this with some other people.

I can go all the way back to Richard Nixon taking us off of Bretton Woods. I recall that even there were the financial analysts who were predicting that the sky was going to fall any day now because of this. They were predicting the same thing under Reagan saying, "We're going to have hyperinflation. The dollar is going to collapse." On and on. I've heard this for 40 years.

It's like predicting the rapture. It's the Chicken Little syndrome, and my bottom line is this: When I look at people like that, I can think of certain financial advisors – and I'm sure you can, too. I won't mention names. They appear to be looking at the picture from an incredibly narrow database be it bullion prices or the amount of quantitative easing that's taking place or the amount of dollars in circulation, the amount of US securities held by foreign governments, what have you. They're looking at such a narrow database.

I have to be honest. I've never talked with any of these people. I don't encounter them in my work. So I don't know how my proposal would work with them, but it seems to me that what they have to understand is that first of all, their theories and their models are based on forms of economics and finance modeling that are, at best, 19th Century in their origins.

In other words, they are trying to apply industrial revolution principles to what is going on now, and it simply isn't working. At some point they

have to be made to realize that if your model has been predicting this collapse for these particular reasons that go all the way back to Bretton Woods and Ronald Reagan and what have you, then maybe it's time that they reexamined the assumptions of their model.

C. AUSTIN FITTS: There's something else in that. We have the videos up on the blog now. You've got them in your membership areas. I say, "Listen to Joseph's first, and then listen to mine, and then listen to Joseph's second."

What you will hear is that there was a hidden and covert financial system, and what happened in 2009 was it overwhelmed and took over the whole system. You cannot explain the financial system without having that history and integrating that history into your analysis. You just can't.

JOSEPH FARRELL: Exactly. That's my other point here with these 19th Century models because back then they were not dealing with models of nation states that had big, huge covert operation projects that were being funded or had to be funded over several decades. The first time we saw the emergence of that model – that financial structure – in human history was during World War II. We saw it specifically with the enormous black projects that were put into place in Nazi Germany and in this country that had to be funded.

In both cases, that funding came out of doctoring the books. It came out of erecting fraudulent systems of finance using – quite literally – counterfeiting. In this country's case, in 1947 it came out of the decision to keep all the Axis loot secret to obfuscate the actual amounts of bullion that governments said or estimated were in existence in the world. So you're right.

The other thing that these people have to be made aware of is not only are they working on too narrow a data set in terms of the public system of finance, but the other thing they are completely ignoring is this vast, huge system that you've pointed out is connected with the Exchange Stabilization Fund that I think is connected to this Axis loot and to the

bearer bonds scandal. No one is paying attention to that adequately in my opinion.

C. AUSTIN FITTS: Right.

JOSEPH FARRELL: So they simply have to be challenged on the assumptions of their models. They have to be brought up.

C. AUSTIN FITTS: I bring this up because it is that group of people who control the most powerful technology. The technology we've been talking about today, particularly in the Anglo-American world, is controlled from the money – whether they own it or they invest in it. It is them who are driving this technology, and you have to see that as one sort-of integrated shift to move process. Without that, you can't begin to even see the governance or investment system on planet Earth.

The question, of course, in my mind is: Where are they going, and what is next?

JOSEPH FARRELL: This is the other part of the problem of their analytical model. That is, there is a certain segment of financial analysis out there that keeps harping on, "The central banking model is flawed, it's corrupt, it's falling apart, it's failed." This is coming out of largely the Austrian school of economics.

I don't have any problem with the Austrian school of economics per se other than they are forgetting that there is this huge hidden system of finance.

C. AUSTIN FITTS: Right.

JOSEPH FARRELL: They are forgetting that one of the consequences of that system was that it put intelligence agencies – the national security intelligence apparatus – directly into banking. I've even entertained publicly many times the speculation that while everybody is mad at the banksters, they might really want to turn their attention to the financial technocrats in the national security structure who are managing a global

economy that is based on international drug trade, that is based on all of this hidden system of Axis loot, and how that has been re-hypothecated over the years creating enormous liquidity and leverage in the financial system.

Until they look there, they are not going to be able to figure out why their models aren't working.

"Here's why I don't get mad at them: I don't yet know what they are dealing with. In other words, to judge somebody you have to understand if you were in their shoes, what would you do?"

C. AUSTIN FITTS: Here's why I don't get mad at them: I don't yet know what they are dealing with. In other words, to judge somebody you have to understand if you were in their shoes, what would you do?

Since it was my partner's former partner, James Forrestal, who argued for transparency, I'm assuming I would have argued for transparency as well. But given that the decision was made to be non-transparent, we do not yet know what they are dealing with and why they are behaving the way they are behaving.

I think, to me, that is essential to understand. The reason I get so mad at the finance guys is that they are so smart, and we could really use their help in figuring out what is really going on. As long as they keep in those little narrowly confined circles, they are just going to go around and around. It's like a gopher digging deeper and deeper.

JOSEPH FARRELL: I agree with you about not being too ready to condemn or judge the elite on this score because, as I attempted to point out at that Secret Space conference, after World War II they were really confronted with an enormous threefold threat. They had to deal with the Communist bloc. In my opinion, they became immediately aware that there was this post-war Nazi thing that they hadn't initially factored into their calculations but was still operative. Finally, they had this UFO problem that was just gigantic, but they didn't want to talk about it. It's clear that they didn't want to talk about it.

Their strategic planning then had to take into consideration all three things and deal with them in a long-term strategic manner. Therefore, yes, they opted for non-transparency because there was something that occurred to them in dealing with all of this that they determined that, "For now, we had better keep this a secret."

I agree with you. I wish the finance guys – at least one of them – would break ranks. I keep hoping and praying that one of them would.

C. AUSTIN FITTS: One did. I did!

JOSEPH FARRELL: I know you did, but I mean besides you. I know you did, but it would be nice if you had an ally out there is what I'm saying.

I keep hoping that some of these people will wake up and think, "Okay, we've been making these predictions for years and they keep not happening, so there is something wrong with the model. What is it?"

I'm with you. This is the reason why I've been spending so much time in the recent books talking about this hidden system of finance. Like you, I think this is a material omission. We've got to wake some of these people up so that they can put their expertise to use and try to figure out where the money trail has gone, what it has gone for, and what the indications are of the motivations behind these people that the money did this. I think that if we can do that, then we've got a huge step forward in terms of our modeling of what we think is going to happen in the future.

C. AUSTIN FITTS: It's really funny. I think I told you because there are times when you and Jon Rappoport truly keep me sane. I was at a conference in October 2013 and I gave a big speech.

It was a lot of finance guys saying, "It's all going to collapse. Things are terrible." I got up and said, "Well, here is what we have: the legacy systems and this breakaway civilization. They stole $40 trillion and now they are resource rich. They have new technology and their building forward is going to be quite dazzling. Then the legacy systems are going to have to grind down their liabilities to everybody else."

When it was all over, the crowd was just stunned and they didn't know what to say. Finally somebody raised their hand and said, "I'm one of your subscribers. Could you explain what the black budget is, because I don't think there is anybody else here who has ever heard that term?"

I thought to myself, "Oh, no. This is going to be a big shock."

JOSEPH FARRELL: This is our principle problem for our future. We have to redouble our efforts and make people aware not only of what the black budget is and how it works – and there have been numerous books on it – but they have to start reaching a wider audience.

We also have to show them that in addition to that you've got this huge harvesting mechanism that you've described. In addition to that, you've got this hidden system that I think was put into place. So you've got an enormous financial system here that nobody is paying attention to.

C. AUSTIN FITTS: Right. It's quite astonishing.

JOSEPH FARRELL: It really is.

C. AUSTIN FITTS: The matrix has a financial system.

JOSEPH FARRELL: Absolutely.

C. AUSTIN FITTS: It's clear that this technology means that the financial system is going to evolve. For another conversation on another day, new currency shift to equity. There is lots going on – very deflationary pressures, particularly from the energy. But we're talking about reinventing the financial system with the technology, so it's going to be wild.

Well, Joseph, I can't thank you enough. This has been very, very informative and very helpful, and I would just encourage all of our Solari Report subscribers and all of Joseph's members – you've heard us talk a lot about these developments – to just go online and go to Wikipedia and start reading about each one of them. There is a wealth of

information, and these are things that are going to be impacting our individual lives. I would encourage you to get to know about them.

Let's make sure we use this technology in the service of love and peace instead of some of the more dire ones being proposed.

JOSEPH FARRELL: Hear, hear!

C. AUSTIN FITTS: Any comments or summary you would like to make before we close, Joseph?

JOSEPH FARRELL: No, I just want to thank you for having me back on. I wish everybody happy holidays in the coming months – Thanksgiving and Christmas and Hanukkah and so on. We'll see you in the next quarterly.

C. AUSTIN FITTS: Yes you will. Have a wonderful day, Joseph.

JOSEPH FARRELL: You too, Catherine. Thank you for having me back on.