

This is Guns and Butter.

*So, the Thunderbolts Project has a special icon that is an ancient image of the Cosmic Thunderbolt. The Cosmic Thunderbolt provided this beautiful bridge between Plasma Science and the study of ancient myth because the form of that ancient thunderbolt has no connection to lightning. What was it? What was it? They are images of electric discharge in this highly electrified plasma medium through which the Earth and other planets were moving in ancient times.*

I'm Bonnie Faulkner. Today on *Guns and Butter*, David Talbott. Today's show, "Understanding Our Solar History." David Talbott is the founder and director of the Thunderbolts Project. His book, *The Saturn Myth*, helped to inspire the work of several others now joined inspire this collaborative project. In 1996 his work was the subject of a Canadian documentary, *Remembering the End of the World*. More recently he was the co-author with Australian physicist, Wallace Thornhill, of two books, *Thunderbolts of the Gods* and *The Electric Universe*. His full-length documentary series, *Symbols of an Alien Sky*, is available on the Thunderbolts Project You Tube channel. He is currently posting the *Discourses on an Alien Sky* series. *Guns and Butter* co-producer, Tony Rango, spoke with David Talbott about his pioneering work on the origins of ancient cultural themes and symbols.

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**Tony Rango:** David Talbott, welcome!

**David Talbott:** How are you, Tony?

**Tony Rango:** Excellent, thank you. So, can you tell me David, how you first became interested in the ancient stone carvings and symbols?

**David Talbott:** Wow. That does go back a long time, because I was, in the very early stages of my research—starting in late '71-early '72 —one of the things I was looking at were ancient pictographs and the origins of the alphabets, and a special interest in Egyptian hieroglyphs, but I was noticing a certain overlap with images in rock art carvings. So that opened up a field of inquiry where I was really looking for commonalities and what I've called the points of agreement between the ancient cultures. Most significantly was the revelation that was becoming more clear to me that there's an indispensable connection between rock art and storytelling. In other words, even before I took my first interest in rock art, Tony, I was looking for the points of agreement between the different cultures in their story telling and in their early artistic representations of story. So this would be, like, Egyptian carvings and paintings and artistic material from ancient Mesopotamia, and so on, going back to the beginnings of civilization. And I could see there actually is an essential connection between the art and the storytelling, and there are certain forms that actually do begin to stand out. I mean, everyone is familiar with what is called the ancient sun sign—it's just a large circle with a smaller circle inside of it—except that that hieroglyphic image, when it is considered more broadly does exhibit a secondary circle inside the smaller circle. Now that's just a trivial thing until you begin to look more

closely and you see that, well, that's actually a form that doesn't answer to anything in our sky today, and it is global. Well, to see that it's a global image still isn't sufficient to spark any deeper level of interest, but what happened to me personally was, the more I began to look at symbolism of that sort the more I began to see an ancient image becoming increasingly clear by, as I was saying, comparing the stories to this rock art and this ancient pictographic form. It's a global image, and it has contexts that become extremely important. Now, over time, as I was getting more and more attentive to the nuances of ancient mythology, I began to see that this is actually of stupendous importance. It's not an incidental thing. Now, I'm skipping over a lot of territory here, but it will connect with our earlier interview. In the end, I came to concentrate on global evidence for an ancient planetary configuration in which spheres were seen in close proximity and at times in alignment in the ancient sky. And these spheres are identifiable, quite explicitly, as planets; planets that we are familiar with today, but that move on paths vastly different from their placement in the ancient sky. So here was a ground-breaking principle if I was on the right track: the sky has changed. Another fundamental principle was the realization that you can go back to the early astronomical texts and you can identify the planetary bodies in this configuration in the ancient sky. The key players, above all else, were the planet Saturn, originally a towering sphere in the sky, the planet Venus, a very animated, explosively dynamic form seen right in the center of Saturn, and then a smaller, reddish planet identified as Mars. Now, you have to see these things visually to begin to get a sense as to how in their movements they would interact, because these are planets of different colors and radically different sizes; and to discover that they actually, by their proximity to each other, present alignments that can be confirmed in terms of ancient imagery and ancient textual context. For example, is there any reason to believe that the planet Venus was seen in the center of a much larger sphere? Well, once you begin to see that that larger sphere is the ancient sun god, and that in the astronomical texts that ancient sun god is identified as the planet Saturn, you have a starting point. As you begin to then examine the explicit roles of the planet Venus in ancient times, you see that it is identified in the most explicit ways as the central eye, heart, and soul of that ancient sun god, astronomically identified as Saturn. What you are working with are concepts well established by taking themes back to their earliest expressions in the earliest cultures of ancient Egypt and Mesopotamia, and seeing that there's a coherent story. And by following key planetary identifications coming from the birthplace of astronomy in ancient times, ancient Mesopotamia, you have a coherent, integrated story of gods and goddesses; that this story has no other explanation, no explanation whatsoever, Tony, in terms of things witnessed in our sky. Now, how does one explain this? You follow one ancient theme after another, you see them fitting together like the pieces of a jigsaw puzzle, and you can't find a single thing that gives a referent to something seen in our sky today. That was the heart of the dilemma. Now, if that dilemma can register with someone then it opens up a path of discovery where you're not taking your guidance from the way celestial bodies appear in our sky today. You're taking your leads from explicit ancient sources, working with the points of agreement between the different cultures. That was my mission, actually: identify the core of ancient cultural themes--that's themes that recur from one land to another--only to discover that they are all inseparably connected to each other. There are no ancient themes of myth and symbol

that are disconnected from any other themes. If somebody mentions to me, let's just say three things, okay? I found that by just going to that archaic, archetypal material, the connections can be identified, and they work in terms of an ancient planetary configuration with these defining figures of Mars, Venus, and Saturn in close proximity in a completely different arrangement in our ancient sky. So that's the heart, then, of a reconstruction that challenges our modern-day assumptions about the ancient world.

**Tony Rango:** Did this inquiry lead to your book, *The Thunderbolts of the Gods*, that you co-authored with Wallace Thornhill?

**David Talbott:** Oh, yes. That's an interesting story unto itself. Now, you know, *Thunderbolts of the Gods* wasn't my first book. My first book was called *The Saturn Myth*. In fact, I was told by the senior editor of Doubleday, when Doubleday was the biggest publisher in the world, that I was being given the biggest advance they had ever given to a previously unpublished, unknown, author; and *The Saturn Myth* was a marginally successful to unsuccessful book in its time. But what happened over years, decades even, is that gradually it began to attract what some would call a cult following, if you know what I mean—people that were just utterly convinced by it, but they're in a terrible minority and have great difficulty finding anybody else to communicate with on the subject. But what has occurred since then is that people who were originally inspired by *The Saturn Myth*, that book, published in 1980, gradually found each other; and one of the results of this was years later, in the mid-90's, the beginnings of the Thunderbolts Project. And The Thunderbolts Project now is a significant force on the Internet; we've had ten million views of our videos. So, there is something beginning to register with people over the long haul, and the Thunderbolts Project is, you might say, the official Internet voice for the Electric Universe and for this study of ancient mythology, and the birth or origins of ancient symbolism. So, how did the Electric Universe come into play on this?

(12:00) This relates to my convergence with Wallace Thornhill, the Australian physicist who began to develop an interest long-distance in my work, and then in late 1996, in connection with a conference we were sponsoring in early January, Wal Thornhill came to this country and lived in my office for thirty days. And he convinced me that the various forms that I had reconstructed by just looking at the points of agreement between the different cultures, that these were electric discharge formations in a highly electrified plasma environment through which the Earth was moving several thousand years ago. So, this became the basis of a really close collaboration between Wal Thornhill and myself; and one of the first results of that collaboration was the book, *Thunderbolts of the Gods*. That book goes back to, like, 2005 or so.

Tony Rango: So this really connected the core images you were finding of the antique world with electric discharge and plasma.

David Talbott: Yeah, and it brought together a small group of people interested in Plasma Science and another group, independent from that initial group, or that separate group, another collection of folks—it's just a small number of people originally—we might even talk about a couple, three of them—that had this interest in my own work, this reconstruction of the ancient sky. But there was a

strength in that convergence between the study of myth and Plasma Physics, that, it inspired us to use the ancient thunderbolt image as an icon. So, the Thunderbolts Project has a special icon that is an ancient image of the Cosmic Thunderbolt. The Cosmic Thunderbolt provided this beautiful bridge between Plasma Science and the study of ancient myth because the form of that ancient thunderbolt has no connection to lightning. What was it? What was it? This is a huge and interesting field of investigation, and it's really flowered within our group. The ancient thunderbolt stories had zero connection to the behavior of lightning. They are images of electric discharge in this highly electrified plasma medium through which the Earth and other planets were moving in ancient times. One has to be willing to envision a totally different planetary configuration just a few thousand years ago. I don't put a date to it specifically because there are just too many disputes with respect to specifics of ancient chronologies—I mean just simply the dating of events and so on. But the relationship of key events to each other is the heart of reconstruction. In other words, one can identify, let's just say, eight hundred to a thousand world-wide themes of ancient symbolism. People are astonished to discover that there are that many convergences globally, convergences on recurrent themes. This starts with such general ideas as, like, there was once a Golden Age, an earlier time, a different ruled the world, and so on. The planet Venus was previously a great comet. I mean, these are very specific ideas, and there are hundreds of them. But to see that these ideas actually converge and can be illuminated by ancient art work in ancient pictographs and hieroglyphic renderings, this is an amazing inspiration for those who actually bring enough of an attention span to actually get the picture. That's the heart of it for us: sufficient attention span to see that all of these things are connected, and that the Cosmic Thunderbolt in the antique world was a centerpiece of human experience. There's a reason why it looks like an electric discharge in plasma: because it is an electric discharge in plasma. It was what was impacting human imagination around the world.

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**Tony Rango:** Who were some of the scientists that contacted you, and what types of fields were they in?

**David Talbott:** Yeah, very good. I'd like to name a few, at least. And one can, by just going to the [thunderbolts.info](http://thunderbolts.info) website and looking up the conferences for the past four or five years, you'll see dozens of well-qualified people who have taken direct interest in the Thunderbolts Project. But for me, personally, the turning point was when Wal Thornhill took an interest in my work.

He had been following Catastrophist study for decades; I had, in fact, met him at a dinner in 1974 at a Catastrophist conference. But then it was twenty years later that I began to communicate with him further, and in 1997, early in the year when he really persuaded me that Plasma Science offers the answer to the mysteries that I was posing, from that point onward we became very close collaborators. And Wal Thornhill then was the beginning of an outreach that occurred just very naturally and very slowly over following years. But one individual who deserves a very strong

emphasis is Professor Don Scott; he's a retired professor of Electrical Engineering. He saw exactly what we were suggesting; he became a part of the Thunderbolts Project; he then wrote a book called the Electric Sky; he speaks regularly at our conferences. I hope people will look him up because his talks really challenge so many long-standing assumptions in the field of Astronomy. But Don Scott is a perfect example of this convergence between the study of Plasma Physics, Plasma Science, and the ancient human records pointing to events that are just completely unknown in our own time. So, that was Donald Scott. Wal Thornhill and I went on and published *Thunderbolts of the Gods* and *The Electric Universe*; and we began doing film, making our video work together. And the first thing that he worked directly with us on was called...not "Remembering the End of the World"... (laughs). Now, this is good, it's kind of funny; and I'm forgetting for a moment what that first video was called... *Thunderbolts of the Gods*, it was called. And you can look that up on the Internet. It's gotten hundreds of thousands of views; it's rated "Very Good," and that makes a nice introduction of Wal Thornhill and Don Scott and a couple of other people that at that time, around 2005, were beginning to take a really deep interest in the Thunderbolts Project. And since that time, things have just continued to grow very nicely.

**Tony Rango:** We talked a little bit about Anthony Peratt's contribution to your understanding and what he contributed; but, he was rather important in some of the work he did, right?

**David Talbott:** He was extremely important. It's a tragic story on the other hand, and sometimes people find it a very dismaying, depressing story to see what happened to Tony as a result of his interest in my own work. But I heard from Tony first in the year 2000, when he was amongst the top two or three plasma scientists in the world, I mean, just respected as that, coming to us from Los Alamos Laboratories; and he headed up major projects at Los Alamos looking at high energy electric discharge in plasma chambers and documenting the evolution, this dynamic, violent evolution, of intensely energetic discharges in plasma chambers, so he knew what plasma discharge formations looked like; and as I was presenting these formations at a conference in 2000, September 2000, with Tony in the audience, and giving a talk at that conference, he realized that what I had reconstructed from this ancient material fit perfectly to the electric discharge formations that he was examining as head of special projects at Los Alamos Laboratories. And this almost instantly changed his life. He expressed confidence higher than I think I've seen from anybody so quickly, but it was based entirely on what he knew that I didn't know. He had been responsible for plasma discharge experiments at Los Alamos about which I had known nothing until that time. And so we began exchanging information; and I was sending him ancient rock-art images relating to the forms that I had reconstructed, and then he was writing back to me exuberant communications saying...in effect he said this: "It's indisputable. These forms are carved on stone by ancient artists. They had to have been witnessing these forms in the sky close to the Earth." So that was the beginning of our collaboration, and it was an incredibly inspiring time, I have to say. I got to know Tony very well, and he ended up speaking at a couple of events for us, and it changed his life completely. He spent three years, three or four years, actually, after that, traveling around the world and documenting rock art formations with specific references to the lines of sight that are implied by the geographic settings,

and so on, with shields on the horizon to prevent the synchrotron radiation, which would be deadly, from striking the people who were carving those rock art images. It's an extraordinary story about Tony Peratt's contribution.

**Tony Rango:** Right, and you've talked about some of these symbols, and one of them was the stick figure with two dots; and you talk about the importance of Plasma scientist Dr. Anthony Peratt from the Los Alamos Laboratories and how it connects with your many decades of research. Can you describe what he found?

**David Talbott:** Well, yes I can. Now, we're just at one disadvantage, and that is that people may not be visualizing what you just referred to there as the stick figure. But this very simple stick figure is global, and what Tony Peratt realized as a result of his convergence with us—I mean, he was the most distinguished Plasma scientist in the country or even in the world at the time I got to know him, and what he saw in my own work had a profound effect on him; and he realized that the formations that I had reconstructed, he had seen in the laboratory as electric discharge formations in plasma chambers. So that basically settled the question for him that there was indeed something really profound on the minds of the ancient sky-worshippers who carved these forms on stone, and so on. And they're very unique looking forms. And he was very familiar with the form in the laboratory, but he was stunned to discover that they are carved on stone around the world. And these are specific enough, and he looked so concretely at the orientations that are implied by the positioning and the presence of geological forms on the horizon that would shield from the profound synchrotron radiation that would have been deadly under the influence of these electrical discharges in the sky close to the Earth. So he spent years, actually, chronicling the global pictographic record of what we call the Stick Man. And this has been published in peer-reviewed journals, and Tony Peratt himself was recognized as a leading expert on electric discharge in plasma, and he was a leading student of **Hannes Alfvén**, the famous Nobel laureate, a founder of modern Plasma Physics. So he was very familiar with the subject, but what caught him by surprise, what astonished him, was that these forms are actually recorded on stone. And he could find no explanation for that apart from the human experience of these intense electric discharges close to the Earth and dominating human imagination, such that cultures invested huge energies in that intricate and time-consuming process of carving these formations on stone. So that was the beginning of an extended conversation that I had with Tony Peratt because he was the one who on the basis of my own work drew my attention to the Stick Man as an expression carved on stone of plasma discharge formations that he had spent years documenting in the laboratory. So that just simply confirmed between us that highly electrical events were occurring close to the Earth in ancient times. And it's a profound misunderstanding of human history to assume that you could just ignore that influence on humanity, because this was in the formative phase of the earliest civilizations worldwide.

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**David Talbott:** Well, actually, Tony, maybe I ought to just say a word about Peratt, just to put him into context. Tony Peratt, PhD., Los Alamos Laboratories. I got to know him when he was really at the height of his career as an internationally distinguished expert on electric discharges in plasma; and our good fortune was that our work actually converged in ways that stunned both of us. And he had been very attentive to the electro-dynamics of discharge activity at Los Alamos that was being developed, in fact, under classified project activity under the Atomic Energy Program; and plasma instabilities were his strongest calling card, you might say. And it was particularly encouraging to us that he could recognize the electro-dynamics of the formations that I had reconstructed on the basis of human testimony: pictures and carvings on stone around the world, ancient sacred practices relating back to what was mythically recalled as the age of gods and wonders. Well, what did all of this mean? What we found was that we had a common understanding of the electrical phenomena from two different vantage points: one, laboratory science; the other, human experience of intense electrical activity in the ancient sky. So that was the basis of a kind of collaboration. And Tony came to Portland more than once, and I met him close to Los Alamos more than once. And Tony grew very, very inspired by this relationship, which ended, sadly, when he came under attack surreptitiously from people who actually were colleagues of his, including a superior or two, the details of which I cannot reconstruct on the basis of what I learned about it. But I can tell you that he was forced out of any further communication with us once the nature of our collaboration began to be known around the Los Alamos community. There's more to that story, but, in a sense, it all becomes irrelevant. The fact is he made a terrific contribution, and he was ultimately discouraged by peers from contributing further to our joint work. So that's just a kind of a symbol of the nature of scientific controversy, and so on, in these days. And it's a terribly dismaying story to hear what occurred as a result of his interest in our work. It was a terrible thing to behold, and he was effectively shut down. And he disappeared. I mean, I don't mean by that we don't know whether he's alive or not; I'm just saying, he was a leader in the Plasma Physics field, internationally recognized; many people felt he was the most distinguished plasma scientist in the world at the time I got to know him. So this was not a small matter. But the fact is that his involvement with us began to draw attention from others. And we have a few inquisitors who circle around our...they're kind of like wolves; and they went after Tony tong and hammer. And the result was that Tony was effectively shut down. It's a tragedy. It's a scandal. I mean, I just can't...I still get so emotional over this, Tony, that I have a hard time speaking clearly about it; because it was the most dismaying event in my adult life, to just see that this could actually happen to an individual with incredible promise, on the one hand, and then this terribly disappointing outcome, where things that should have been achieved were just basically closed off.

**Tony Rango:** We've made some plasma a number of times. It's not a solid, liquid or gas, but it's been called the fundamental state of matter. Can you characterize what plasma is and describe it a little bit?

**David Talbott:** Well, plasma is simply a collection of atoms that are not entirely neutral; in other words, they may be containing more than one or less than one of their normal **atoms**, making them not neutral; and so you have this environment of charged particles in which, number one, you get a

very high level of conductivity. So plasma is virtually a perfect conductor. Well, what does that tell us, then, about the charged particle environment between planets, and between stars, and between galaxies? It is a sea of plasma, conductive plasma. That means it is capable of conducting electric currents across intergalactic space, down into the interstellar space within galaxies, and down into the interplanetary space between planets of our solar system. We tended, up until very recent times, to completely ignore the role of plasma in space and in particular the role of electric currents across interplanetary, interstellar, and intergalactic distances. As we've begun to look more carefully at this potential for electric current transmission across great distances we see that the behavior of those electric currents stands out at all scales of observation. They produce exotic formations in the sky that point directly to plasma behavior. And that plasma behavior can be compared to the behavior of charged particles in the terrestrial sky, the sky of our Earth just a few thousand years ago. Let's just say about three thousand B.C. human beings on Earth were living beneath an incredibly dynamic plasma environment very close to the Earth, the upper atmosphere of the Earth being directly involved in that; and those formations can be examined with great care and attention to these global patterns that will give us the explanation for the entire sweep of ancient mythology, symbolism, the primitive religions, and so on. We just came into the twenty-first century without an adequate understanding of things experienced by our ancestors at the birth of civilization. And yet all of the defining forms of the early civilizations can be accounted for in terms of what they were responding to with fear and reverence and awe at the time of the monumental civilizations beginning to emerge, with the birth of the civilizations themselves.

**Tony Rango:** And you mentioned, we talked about, that these were carved in stone, so it had to be rather important, not just something you would jot down as a note, but something significant in their life, that they would take the time to etch it into stone.

**David Talbott:** Yeah, that's good, Tony. And the thing that has to be emphasized in that connection is that there actually wasn't much else on their minds other than eating and sleeping, and so on. The early civilizations were obsessed with this experience. There was nothing they cared about more. And you only have to look with eyes wide opening at what was on the minds of our early forebears to see that all of the traditions that have come to us with roots in the immediate pre-civilized world are those traditions, are reflective of a human experience that has to be progressively illuminated by careful, cross-cultural comparison, because the whole story is there. All that is required is the thoughtfulness of a good detective who knows how to look to independent human experience to see how it fits with other independent human experience. You know, a good detective wanting to solve a mystery, he gathers the testimony from independent observers, and what does he look for? He looks for unusual points of agreement. And he knows that—short of, you know, deliberate conspiracy to deceive him—he knows that can't be accidental. So those unusual points of agreement become the bedrock for reconstructing an event based on independent human testimony. Well, what happens if you have global experiences of sweeping catastrophe and formations in the sky that have very detailed configurations and sequences of events, but the different cultures are interpreting them in wide-ranging mythic forms? Well, if you just are looking for some sense of this underlying integrity,

and it is there, you will find the ways to bring that into the light of day. That's what we've done: reconstructing formations seen in the ancient sky. And the proof is everything that we would need. The proof is that it works. In other words, letting the things mean what they say, once you get to the underlying form you have a coherent picture of the ancient sky, down to innumerable details. And suddenly a thousand global symbolic traditions and myths all fit together. It's like the pieces of a jigsaw puzzle. Once you see that there is a fit, you know you can put that sucker together. Just take the time to work with the fits that are inherently in what you are working with. We are working with the points of agreement between all of the early cultures.

**Tony Rango:** A lot of your research is focused on historical documentation of the instability of our solar system. What are we finding today, with the various space probes, satellites and telescopes, that confirm that?

**David Talbott:** Well... Man alive, that's a huge subject. The question is, what is the cause, what was the cause, of the stupendous scarring of planets, of rocky bodies in the solar system? Now, I took a special interest in Venus because Immanuel Velikovsky had suggested that Venus was, in early historical times, a comet. It was the celebrated Great Comet. It was, you might say in mythic terms, the mother of all comets, in the sense that all of the ancient beliefs about comets trace to the human experience of this Great Comet, Venus. And Velikovsky said that the planet Mars was anciently associated not just with planetary instability, not just with terrestrial catastrophe, with but with what one might call the Cosmic Thunderbolt. Velikovsky was amongst the first to suggest that electrical activity generated in an environment of planetary instability, where electric discharges were actually passing between planets, that Cosmic Thunderbolt was fundamentally electrical; and the great electrical arcs that passed between planets in near approaches scarred the surfaces of these bodies. And when you see great trenches, like the Valles Marineris on Mars, which would stretch from San Francisco to New York, you can be very confident on the basis of what we know factually that that huge gouge was created by electric discharge. And all of the signature features that you would look for to verify an electric discharge will be seen in the Valles Marineris, including the dendritic ridges that flowed down the canyon walls and produce this massive, repeated pattern of dendrite forms that have no explanation in standard Geology—no explanation whatsoever. But it's not a coincidence that in the laboratory you can get those forms with electric discharge to rocky surfaces, and to dusty, rocky material. It's a big subject, no doubt about that. But it's a subject that is now open for interdisciplinary discussion. The formation of craters on planets, which we always assumed were due to impacts over billions of years. The formations of craters can be more accurately replicated in the laboratory by electrical discharge activity. This subject has now been open for discussion within Electric Universe community for, maybe, twenty years. And anyone who wants to follow the relationship between the electric universe and geologic forms on the planets and on moons will find abundant material on the [thunderbolts.info](http://thunderbolts.info) website. (43:00)

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**Tony Rango:** And you've actually done some experimentation to prove some of these theories, haven't you?

**David Talbott:** Yes, and that experimental work is still in its infancy; but even in the early phases of experimental work—I mean, even when it was just an individual tinkering in his garage—the first level of home grown experiments was incredibly encouraging to us. Now, some of the things that are coming out of this will be actually quite ambitious. And I might just mention the Safire Project in that connection. I mean, everything that is being discussed within the Electric Universe community continually focuses our attention on the nature of stars, and the relationship of stars to planets, and the electrical environments that create stars, and the electrical environments that create planets as satellites of stars, and the effects of catastrophic interactions of planetary bodies in the past. So experimental work to look at the nature of a star, for example, and the electrical environment that we have long proposed is essential to understanding the behavior of our own sun; that work is actually now being advanced substantially with funding behind it. The Safire Project, which many people in our group, of course, are aware of and vitally interested in, is looking experimentally at the environment of our sun. So, to what extent can the defining features of our sun be created in the laboratory by electric discharge.

**Tony Rango:** The Safire Project, which stands for the Stellar Atmospheric Function in Regulation Experiment; that's what you're referring to, right?

**David Talbott:** [laughs] Okay, you had to be reading that, because no one ever remembers that, Tony.

**Tony Rango:** That's correct. All I remember is you've basically created a sun in the lab.

**David Talbott:** Yeah, so—a star in a jar. Well, this is actually so inspiring. I mean, it's been sufficiently inspirational that substantial funds have gone into development of the Safire Project to basically determine to what extent can electrical activity account for the anomalous features of the sun today. The anomalous features. Well, all the features of the sun, when investigated closely, are anomalous in this sense: they don't follow from the model of a thermonuclear core. So, you can look at the acceleration of the charged particles from the sun out past the planets; you can look at the anomalous rotation atmospherically; you can peer down into the empty space, so to speak, of a sun spot and see the differential rotation by elevation of the different plasma layers of the sun. None of this actually fits the idea of an internally driven solar body. Everything is directing our attention to the influences of an external electrical environment on the sun to create these anomalous features. And here's the scale of the enigma: I do not find any historic instances of peer-reviewed research posing this question: "Is it possible that the sun is responding in some way we have not yet recognized,

responding in some way to an external influence?” Well, yes. The influence is the electrical environment of the heliospheric domain. It is, in fact, producing all of those anomalous features of the sun. And many people in the Electric Universe are very confident in saying that the sun wouldn't exist without this external electrical input. It is being driven by a much larger heliospheric environment. That's an environment reaching out beyond Pluto to the boundary of the heliosphere, where you see all these indications of electrical transactions between this environment and the galactic arm of the Milky Way in which we are situated. So this is a completely different picture of the cosmos in which the electrical transactions between different scales of physical phenomena are absolutely essential to understanding the phenomena. And the sun is a beautiful example to test...project is exploring the ways to verify similarities of an electrical phenomenon in a jar, in a vacuum chamber, specifically an anode at the center of an electric discharge, to show that the features of the sun appear in connection with the behavior of that anode, in the jar, in the vacuum chamber, its activity driven by the surrounding electrical current input. So we're inspired by this, actually, to continue the research of the Safire Project. It's independent, independently financed and independently managed project in which we have this huge interest simply because they're posing the question that we feel is essential to be asked. I have no influence on the directions of the project or the management of the project whatsoever. But the interest in electrical phenomena, and the possibility of explaining our sun down to its most fundamental features through electrical transactions between the sun and its larger environment; that's a stupendous potential impact on the future of the space sciences.

**Tony Rango:** The European Space Agency's Rosetta Mission has also been out, sending images back of Comet 67P. Is there some interesting things they're finding that they can't explain that the Electric Universe community not only can explain but might expect?

**David Talbott:** Not that the factors would include the bi-polar morphology. I mean, two narrow lobes connected by that narrow neck on 67P. Well, here's the puzzle: it's not the first time we've seen such a form in space; I mean, it's a rather typical form of comets and asteroids, and even some planetary satellites out in the Jovian and Saturnian system. This form is seen in the laboratory as well as a very specific configuration, taken by material blasted...I mean, we see these forms on the surfaces that are blasted by electric discharge. Two spherical objects fused together in this neck joining the two of them. And we do have in our presentation of the Electric Comet—that's one of the video presentations that's accessible to anybody, just look up the electric comet—you'll see examples of this kind of morphology that are so far from anything that would ever be expected under the assumptions of planetary evolution and so on, conventionally. But in an electrical environment, these double lobes are business as usual. So, yes, Comet 67P is going to give us a tremendous amount of relevant data for appreciating the electrical influences from which comets were born. Now, the Electric Universe has a position about the growth of comets; it's very simple and not yet adequately appreciated by cometary scientists let's say: comets were born by this electrical activity that's electrical action on the surface of planets due to the electrical exchanges between planets in the more ancient past. So, planets in their converging movements of orbits produced stupendous

electrical activity; that activity was recorded by ancient peoples around the world, and its effects can be seen on all of the planets; and moreover, its effects show up spectacularly on Comet 67P. What was the greatest surprise to scientists that began to gaze at the surface of that comet, 67P? The surface is just littered with rubble! This is supposed to be a dirty snowball that accumulated at the most remote regions of the sun's influence, in this deep freeze; and then it just kind of wandered in—maybe it was disturbed way out there in the Oort Cloud, and wandered in—and now we see this surface with this enigmatic rubble. It's strewn from one end of the comet to another. Now, if that body was born out of electrical discharge activity on the surface of a planet, would we expect the sort of rubble fields that we see? Absolutely so. The dirty snowball model offers nothing by way of an explanation of anything we see in connection with 67P. We do have material available to people on the Electric Comet; Wal Thornhill and I both participated in the development of a book called *The Electric Comet*; it was a few years ago; it's been updated regularly now because I'm publishing a series of videos on the Electric Comet, right now, and another episode in that series will be available shortly. I just hope people will come to the Thunderbolts Project on You Tube and actually update themselves on some of these questions; because the Electric Comet is going to open up a huge avenue for us within the sciences to talk about the role of electricity in events in space; I have no question about that any longer—it's happening even as I speak here. Scientists are beginning to take much more interest in the electrical dimensions of comet activity. And we say that comets are discharging electrically; they're moving closer to the sun, falling gravitationally toward the sun; and moving into a different electrical environment. And under those stresses they discharge electrically. That's such a simple proposition, and it's so readily susceptible to investigation. This is a proposal that is so eminently testable. It's only necessary that we ask the question; and if you ask that question: "Is a comet discharging electrically?" I mean, if it is, all of comet science is changed. But that would only be the beginning, because you'd then have to then look at the planetary history more carefully; and if it's discharging—it's moving through an electric field of the sun—well, how strong is that electric field? But, what enigmas of the sun would be resolved if you pose that question and actually look for answers that would explain the comet's discharge activity and also explain the unresolved anomalies of solar behavior? It's an electric field of the sun. Well, that just has such a transformative potential on scientific imagination, but the questions have to be posed. (55:50)

**Tony Rango:** David Talbott; thank you very much!

**David Talbott:** Thanks, Tony, very much.

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*You've been listening to David Talbott interviewed by Tony Rango. Today's show has been "Understanding Our Solar History." David Talbott is the founder and director of the Thunderbolts Project. His book, The Saturn Myth, helped to inspire the work of several others now joined in this collaborative project. In 1996, his work was the subject of a Canadian documentary, Remembering the End of the World. More recently he was the co-author with Australian physicist Wallace Thornhill of two books: Thunderbolts of the Gods and The Electric Universe. His full-length*

*documentary series, Symbols of an Alien Sky is available on the Thunderbolts Project You Tube channel. He is currently posting the Discourses on an Alien Sky series. For more information on Electric Universe theory, visit [thunderbolts.info](http://thunderbolts.info). That's [thunderbolts.info](http://thunderbolts.info). Guns and Butter is produced by Bonnie Faulkner, Yaro Mako and Tony Rango. Visit us at [gunsandbutter.org](http://gunsandbutter.org) to listen to past programs, comment on shows, or join our email list to receive our newsletter that includes recent shows and updates. Email us at [faulkner@gunsandbutter.org](mailto:faulkner@gunsandbutter.org). Follow us on Twitter at [gandbradio](https://twitter.com/gandbradio).*