## ET Aff—ARB Lab

[ET Aff—ARB Lab 1](#_Toc299287137)

[\*\*1AC\*\* 3](#_Toc299287138)

[Inherency 4](#_Toc299287139)

[Anthro Advantage 5](#_Toc299287140)

[Sovereignty Advantage 9](#_Toc299287141)

[Solvency 12](#_Toc299287142)

[\*\*Inherency\*\* 14](#_Toc299287143)

[Now K 15](#_Toc299287144)

[Lack of Funding 16](#_Toc299287145)

[Lack of Funding 17](#_Toc299287146)

[Inherency Extn. 18](#_Toc299287147)

[$ 20](#_Toc299287148)

[\*\*Sovereignty Advantage\*\* 21](#_Toc299287149)

[Internal Link 22](#_Toc299287150)

[Plan Solves 23](#_Toc299287151)

[Plan Solves UFO Taboo 25](#_Toc299287152)

[ETs challenge sovereignty/securitization 26](#_Toc299287153)

[A2: UFOs don’t exist 28](#_Toc299287154)

[A2: Need to find UFOs 29](#_Toc299287155)

[Sovereignty Inherency 31](#_Toc299287156)

[\*\*Anthro Adv\*\* 34](#_Toc299287157)

[Internal Link 35](#_Toc299287158)

[Internal Link 36](#_Toc299287159)

[SETI Solves 39](#_Toc299287160)

[SETI Solves 40](#_Toc299287161)

[SETI Solves 42](#_Toc299287162)

[Anthro Cards 43](#_Toc299287163)

[Aliens as Humans 44](#_Toc299287164)

[Alien Contact Advantage 46](#_Toc299287165)

[Contact Good—Peace/Unification 48](#_Toc299287166)

[Contact Good—Global Peace 50](#_Toc299287167)

[SETI Key 51](#_Toc299287168)

[Aliens Exist 52](#_Toc299287169)

[Link-SETI finds ETI message 54](#_Toc299287170)

[Contact Good—Peace 56](#_Toc299287171)

[SETI K2 Contact 59](#_Toc299287172)

[SETI Key 60](#_Toc299287173)

[Contact Good—Morality 61](#_Toc299287174)

[\*\*Solvency—US Key\*\* 62](#_Toc299287175)

[United States Only Country Suitable For SETI 63](#_Toc299287176)

[Government needed to avoid craze among people 64](#_Toc299287177)

[Government is key to spur funds 65](#_Toc299287178)

[Private and Government Funding combined 66](#_Toc299287179)

[SETI is key for USFG 67](#_Toc299287180)

[Why the United States Federal Government Should Fund SETI 68](#_Toc299287181)

[Long Term Benefit 69](#_Toc299287182)

[\*\*Solvency—SETI Key\*\* 70](#_Toc299287183)

[SETI Key 72](#_Toc299287184)

[Seti Key to econ 73](#_Toc299287185)

[Seti key-tech 77](#_Toc299287186)

[Seti exploration key 79](#_Toc299287187)

[Laundry list 80](#_Toc299287188)

[Seti key-anthro/sociology 84](#_Toc299287189)

[Seti key-ligit 88](#_Toc299287190)

[Seti key-contact 90](#_Toc299287191)

[\*\*Solvency—Ethics\*\* 92](#_Toc299287192)

[Solvency—Ethics 93](#_Toc299287193)

[SETI Good—Mindset Shift 94](#_Toc299287194)

[SETI Good—Mindset Shift 95](#_Toc299287195)

[\*\*2ACs\*\* 97](#_Toc299287196)

[2AC T—Exploration 98](#_Toc299287197)

[2AC Probe CP 99](#_Toc299287198)

[2AC Communication Impossible 100](#_Toc299287199)

[2AC Tech Too Complicated 101](#_Toc299287200)

[2AC METI CP 102](#_Toc299287201)

[2AC Aliens Evil 103](#_Toc299287202)

[2AC Aliens No Exist 105](#_Toc299287203)

[\*\*Misc\*\* 106](#_Toc299287204)

[Heg Addon 107](#_Toc299287205)

[Racism Addon 109](#_Toc299287206)

[Contact Will Be Quick 110](#_Toc299287207)

[\*\*Neg\*\* 111](#_Toc299287208)

[Discovery Fails 112](#_Toc299287209)

[Aliens Bad 113](#_Toc299287210)

[Aliens Bad—Slavery 115](#_Toc299287211)

[SETI Fails 116](#_Toc299287212)

[METI CP 118](#_Toc299287213)

# \*\*1AC\*\*

## **Inherency**

### Contention 1—Inherency:

### Lack of US funding ends SETI searches

Wenatchee World 4/27, Wenatchee World News, April 27 2011, (Wenatchee World News is a paper located in Washington state.) SETI Institute to shut down alien-seeking radio dishes http://www.wenatcheeworld.com/news/2011/apr/27/seti-institute-to-shut-down-alien-seeking-radio/

SAN JOSE, Calif. — If E.T. phones Earth, he’ll get a “disconnect” signal. Lacking the money to pay its operating expenses, the SETI Institute in Mountain View, Calif., has pulled the plug on the renowned Allen Telescope Array, a field of radio dishes that scan the skies for signals from extraterrestrial civilizations. In a letter last Friday to donors, SETI Institute CEO Tom Pierson said that last week the array was put into “hibernation,” safe but nonfunctioning, because of inadequate government support. The timing couldn’t be worse, SETI scientists say. After millenniums of musings, this spring astronomers announced that 1,235 new possible planets had been observed by Kepler, a telescope on a space satellite. “There is a huge irony,” said SETI Director Jill Tarter, “that a time when we discover so many planets to look at, we don’t have the operating funds to listen.”

## Anthro Advantage

### Contention 2—Anthropocentrism:

### The government’s demonization of ET exploration is a symptom of an anthropocentric metaphsyics that uses fear of otherness in order to maintain exclusive control over the population

Wendt and Duvall 08**,** Alexander Wendt and Raymond Duvall, August 2008, [Wendt is a prominent scholar in the field of IR. He has taught at Yale, Dartmouth and The University of Chicago][Duvall is a professor at the University of Minnesota. He received his PhD from Northwestern University and specializes in the field of social and political relations] Sovereignty and the UFO, [http://ptx.sagepub.com/content/36/4/607.full.pdf+html](http://ptx.sagepub.com/content/36/4/607.full.pdf%2Bhtml), Sage Journal Online

Unlike some objects, however, the UFO might also have subjectivity (ETs). In itself non-human subjectivity need not be a problem for anthropocentric sovereignty. Although modernity is constituted by a general de-animation of Nature, debates about animal consciousness raise anew the possibility that subjectivity is not limited to humans.64 However, while it may generate anxiety, 65 animal subjectivity does not threaten modern rule either physically or ontologically. Superior intelligence enabled humans long ago to domesticate animals, ensuring that any subjectivity they might have will lie safely “beneath” human rule. By virtue of being in the solar system, in contrast, ETs might have vastly superior intelligence, literally “above” human rule, and thus be sovereign deciders in their own right. To our knowledge no ETs have shown themselves, which means the UFO is not unambiguously subjective (either), but the failure of science to justify ruling out the ETH leaves open the possibility, and that clearly does threaten anthropocentrism. As potential subject, then, **the UFO radically relativizes modern sovereignty, disturbing its homologous character with the threat of unimagined heterogeneity, the sovereignty of the fully alien (non-human) Other**. In short, the UFO poses threats to modern rule on both poles of the object–subject dichotomy that constitutes its undecidability, making a decision in favor of one or the other intrinsically problematic. These threats are metaphysical in the sense of raising epistemological and ontological doubts about the whole anthropocentric idea of modern rule, not just its realizations in actually existing states—and it is the absolute taken-forgrantedness of that idea upon which the ability to mobilize modern power depends. From the standpoint of modern rule, therefore, the threat of the UFO is not unlike that of the Christian’s Second Coming, a potential materialization of the metaphysical. It is the triple threat of the UFO that explains states’ very different response to it compared to other disruptions of modern norms. By calling into question the very basis of the modern sovereign’s capacity to decide its status as exception, the UFO cannot be acknowledged as truly unidentified— which is to say potentially ET—without calling into question modern sovereignty itself. Thus, far from being a *deus ex machina* that, through the decision, intervenes miraculously to safeguard the norm, modern sovereignty is shown by the UFO to be itself a norm, of anthropocentrism—and behind this norm no further agency stands. In this way the UFO exhibits not the standard undecidability that compels a decision, but what might be called a “*meta*”-undecidability which precludes it. The UFO is both exceptional and not decidable as exception, and as a result with respect to it the modern sovereign is performatively insecure. The insecurity is not conscious, but operates at the deeper level of a taboo, in which certain possibilities are unthinkable because of their inherent danger. In this respect UFO skepticism is akin to denial in psychoanalysis: **the sovereign represses the UFO out of fear of what it would reveal about itself**.66 There is therefore nothing for the sovereign to do but turn away its gaze from—to ignore, and hence be ignorant of—the UFO, making no decision at all. Just when needed most, on the palisades, the sovereign is nowhere to be found.

### Only being open to the possibility of ET life can solve

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

The UFO threat is different in the challenge it poses to the metaphysics of modern sovereignty, which are fundamentally anthropocentric. Because the contemporary capacity to command political loyalty and resources depends upon it, the assumption of anthropocentrism must be unquestioned if modern rule is to be sustained as a political project. As a condition of their own sovereignty, therefore, before modern states can deal with threats to their physical and ontological security, they must first secure this metaphysic. How is this done? Sovereign decision is no help, since modern sovereignty can only instantiate an anthropocentric metaphysic, not step outside to decide the exception to it. So here modern sovereignty must give way to governmentality, or authoritative procedures to make anthropocentrism “known” as fact. In contrast to past processes of normalization in which the visions of shamans or seers were taken to be authoritative, the standards of knowledge in modern governmentality are primarily scientific. Thus, since there is no scientific evidence for miracles, it is known that God does not intervene in the material world. Similarly, since there is no evidence Nature has subjectivity, it is known not to. Anthropocentrism will be secure until scientific evidence to the contrary comes along.

### SETI’s search for ETI makes it uniquely key to disprove our human uniqueness

Harrison et. al 2000, Albert Harrison, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis), “When SETI Succeeds: The Impact of High-Information Contact”, Foundation for the Future, edited by Allen Tough, Section V, pdf pg. 71

Successive discoveries that the Earth circles the Sun, that the Sun is but one of many billions of stars in our galaxy, and that there are billions of galaxies, coupled with a growing understanding of the origin and evolution of life, **have led to widespread abandonment of the once-prevalent view of humankind as central and unique in the universe** (Dick, 1996; Shklovskii and Sagan, 1966; Shostak, 1998). Over the past four centuries, physical scientists have established that the laws of physics and chemistry are universal in the sense that they apply at all times in all places. Over the past century, biological scientists have followed a similar path and it now appears that the laws of biology also hold for all places and all times (Dick, 1996). If the laws of physics and biology are universal, and if there are many solar systems with habitable planets, then we would expect life, including intelligent life, to evolve again and again. **Recent discoveries of planets in other solar systems and of reliable self-organizing physical processes that may initiate life add to the plausibility of the “many inhabited worlds” hypothesis**. Whereas we have long since refuted the view that humankind occupies a central place in the physical universe, **we have yet to disprove the hypothesis that humankind is the only intelligent** (or technologically advanced**) form of life.** SETI, the scientific search for extraterrestrial intelligence, **involves observational procedures that can disprove human uniqueness by uncovering evidence of equal or superior intelligence.**

### Funding SETI is the necessary first step to chaning the way we relate to eachother

Frank **White** 19**90** [Frank White is the author of The Overview Effect: Space Exploration and Human Evolution. A member of the Harvard College Class of 1966, Frank graduated magna cum laude, and was elected to Phi Beta Kappa. He attended Oxford University on a Rhodes Scholarship, earning an MPhil in 1969. He is the author or co-author of five additional books on space exploration and the future.] The SETI Factor: How the Search for Extraterrestrial Intelligence Is Changing Our View of the Universe and Ourselves]

What is at stake in the Search for Extraterrestrial Intelligence (SETI) is nothing less than our understanding of what it means to be human. SETI challenges us to come to terms with our identity and purpose in this vast universe of which we are a small but important part. Human beings learn and grow by asking questions about the nature of things and setting out to find the answers. The question begins with the small child asking, “Why?”; and, for the truly curious adult, the process never ends. The questions are at the heart of science and exploration, as well as personal growth and social evolution. The bigger the question, the harder it is to find the answer, and the greater the payoff. It’s likely a driving competition—competitors get points for how well they perform on the drives, but there is also a degree-of-difficulty rating. The harder the drive, the more points are awarded.

We form our identities by comparing ourselves to other people and societies. Without an idea of others, there can be no image of ourselves. Without an idea of others, there can be no image of ourselves. “I” am everything that isn’t the “other,” which can be another person, society, the universe, extraterrestrial or God. The more comprehensive our idea of others, the more we can learn about ourselves, and the greater the expansion of our identity. For example, if I ask myself, “What is my role as a citizen of my country?” that is a significant question and it makes me think deeply about myself. If I ask “What is my role as a citizen of planet Earth?” the stakes are higher, and the questioning more profound. But if I ask, “What is my role as a citizen of the universe?” the question has become as broad as it can be and I’ll have to think long and hard to come up with an answer. The search for extraterrestrial intelligence may hold the key to becoming citizens of the universe because it will yield so much knowledge about the nature of the universe itself. In asking how the universe is put together, we are trying to take what is now mysterious and unknown and turn it into useful knowledge. We can’t be good citizens of our country without understanding how our country works, what are its values and traditions. In the same way, we cannot take on this larger citizenship without a vast amount of new knowledge.

### Failure to challenge anthropocentrism guarantees violence—anthropocentrism is the original hierarchy—we need Politics That Can Respect More than Human Life. Their Humanist Politics Dooms Us To a Future That Endlessly Repeats the Oppression of the Status Quo.

Steven Best, Chair of Philosophy at UT-EP, 2007 [JCAS 5.2]

While a welcome advance over the anthropocentric conceit that only humans shape human actions, the environmental determinism approach typically fails to emphasize the crucial role that animals play in human history, as well as how the human exploitation of animals is a key cause of hierarchy, social conflict, and environmental breakdown. A core thesis of what I call “animal standpoint theory” is that animals have been key driving and shaping forces of human thought, psychology, moral and social life, and history overall. More specifically, animal standpoint theory argues that the oppression of human over human has deep roots in the oppression of human over animal.

In this context, Charles Patterson’s recent book, The Eternal Treblinka: Our Treatment of Animals and the Holocaust, articulates the animal standpoint in a powerful form with revolutionary implications. The main argument of Eternal Treblinka is that the human domination of animals, such as it emerged some ten thousand years ago with the rise of agricultural society, was the first hierarchical domination and laid the groundwork for patriarchy, slavery, warfare, genocide, and other systems of violence and power. A key implication of Patterson’s theory is that human liberation is implausible if disconnected from animal liberation, and thus humanism -- a speciesist philosophy that constructs a hierarchal relationship privileging superior humans over inferior animals and reduces animals to resources for human use -- collapses under the weight of its logical contradictions.

Patterson lays out his complex holistic argument in three parts. In Part I, he demonstrates that animal exploitation and speciesism have direct and profound connections to slavery, colonialism, racism, and anti-Semitism. In Part II, he shows how these connections exist not only in the realm of ideology – as conceptual systems of justifying and underpinning domination and hierarchy – but also in systems of technology, such that the tools and techniques humans devised for the rationalized mass confinement and slaughter of animals were mobilized against human groups for the same ends. Finally, in the fascinating interviews and narratives of Part III, Patterson describes how personal experience with German Nazism prompted Jewish to take antithetical paths: whereas most retreated to an insular identity and dogmatic emphasis on the singularity of Nazi evil and its tragic experience, others recognized the profound similarities between how Nazis treated their human captives and how humanity as a whole treats other animals, an epiphany that led them to adopt vegetarianism, to become advocates for the animals, and develop a far broader and more inclusive ethic informed by universal compassion for all suffering and oppressed beings.

The Origins of Hierarchy

"As long as men massacre animals, they will kill each other" –Pythagoras

It is little understood that the first form of oppression, domination, and hierarchy involves human domination over animals. Patterson’s thesis stands in bold contrast to the Marxist theory that the domination over nature is fundamental to the domination over other humans. It differs as well from the social ecology position of Murray Bookchin that domination over humans brings about alienation from the natural world, provokes hierarchical mindsets and institutions, and is the root of the long-standing western goal to “dominate” nature. In the case of Marxists, anarchists, and so many others, theorists typically don’t even mention human domination of animals, let alone assign it causal primacy or significance. In Patterson’s model, however, the human subjugation of animals is the first form of hierarchy and it paves the way for all other systems of domination such as include patriarchy, racism, colonialism, anti-Semitism, and the Holocaust. As he puts it, “the exploitation of animals was the model and inspiration for the atrocities people committed against each other, slavery and the Holocaust being but two of the more dramatic examples.”

Hierarchy emerged with the rise of agricultural society some ten thousand years ago. In the shift from nomadic hunting and gathering bands to settled agricultural practices, humans began to establish their dominance over animals through “domestication.” In animal domestication (often a euphemism disguising coercion and cruelty), humans began to exploit animals for purposes such as obtaining food, milk, clothing, plowing, and transportation. As they gained increasing control over the lives and labor power of animals, humans bred them for desired traits and controlled them in various ways, such as castrating males to make them more docile. To conquer, enslave, and claim animals as their own property, humans developed numerous technologies, such as pens, cages, collars, ropes, chains, and branding irons.

The domination of animals paved the way for the domination of humans. The sexual subjugation of women, Patterson suggests, was modeled after the domestication of animals, such that men began to control women’s reproductive capacity, to enforce repressive sexual norms, and to rape them as they forced breeding in their animals. Not coincidentally, Patterson argues, slavery emerged in the same region of the Middle East that spawned agriculture, and, in fact, developed as an extension of animal domestication practices. In areas like Sumer, slaves were managed like livestock, and males were castrated and forced to work along with females.

In the fifteenth century, when Europeans began the colonization of Africa and Spain introduced the first international slave markets, the metaphors, models, and technologies used to exploit animal slaves were applied with equal cruelty and force to human slaves. Stealing Africans from their native environment and homeland, breaking up families who scream in anguish, wrapping chains around slaves’ bodies, shipping them in cramped quarters across continents for weeks or months with no regard for their needs or suffering, branding their skin with a hot iron to mark them as property, auctioning them as servants, breeding them for service and labor, exploiting them for profit, beating them in rages of hatred and anger, and killing them in vast numbers – all these horrors and countless others inflicted on black slaves were developed and perfected centuries earlier through animal exploitation.

As the domestication of animals developed in agricultural society, humans lost the intimate connections they once had with animals. By the time of Aristotle, certainly, and with the bigoted assistance of medieval theologians such as St. Augustine and Thomas Aquinas, western humanity had developed an explicitly hierarchical worldview – that came to be known as the “Great Chain of Being” – used to position humans as the end to which all other beings were mere means.

 Patterson underscores the crucial point that the domination of human over human and its exercise through slavery, warfare, and genocide typically begins with the denigration of victims. But the means and methods of dehumanization are derivative, for speciesism provided the conceptual paradigm that encouraged, sustained, and justified western brutality toward other peoples. “Throughout the history of our ascent to dominance as the master species,” Patterson writes, “our victimization of animals has served as the model and foundation for our victimization of each other. The study of human history reveals the pattern: first, humans exploit and slaughter animals; then, they treat other people like animals and do the same to them.” Whether the conquerors are European imperialists, American colonialists, or German Nazis, western aggressors engaged in wordplay before swordplay, vilifying their victims – Africans, Native Americans, Filipinos, Japanese, Vietnamese, Iraqis, and other unfortunates – with opprobrious terms such as “rats,” “pigs,” “swine,” “monkeys,” “beasts,” and “filthy animals.”

Once perceived as brute beasts or sub-humans occupying a lower evolutionary rung than white westerners, subjugated peoples were treated accordingly; once characterized as animals, they could be hunted down like animals. The first exiles from the moral community, animals provided a convenient discard bin for oppressors to dispose the oppressed. The connections are clear: “For a civilization built on the exploitation and slaughter of animals, the `lower’ and more degraded the human victims are, the easier it is to kill them.” Thus, colonialism, as Patterson describes, was a “natural extension of human supremacy over the animal kingdom.” For just as humans had subdued animals with their superior intelligence and technologies, so many Europeans believed that the white race had proven its superiority by bringing the “lower races” under its command.

There are important parallels between speciesism and sexism and racism in the elevation of white male rationality to the touchstone of moral worth. The arguments European colonialists used to legitimate exploiting Africans – that they were less than human and inferior to white Europeans in ability to reason – are the very same justifications humans use to trap, hunt, confine, and kill animals. Once western norms of rationality were defined as the essence of humanity and social normality, by first using non-human animals as the measure of alterity, it was a short step to begin viewing odd, different, exotic, and eccentric peoples and types as non- or sub-human. Thus, the same criterion created to exclude animals from humans was also used to ostracize blacks, women, and numerous other groups from “humanity.” The oppression of blacks, women, and animals alike was grounded in an argument that biological inferiority predestined them for servitude. In the major strain of western thought, alleged rational beings (i.e., elite, white, western males) pronounce that the Other (i.e., women, people of color, animals) is deficient in rationality in ways crucial to their nature and status, and therefore are deemed and treated as inferior, subhuman, or nonhuman. Whereas the racist mindset creates a hierarchy of superior/inferior on the basis of skin color, and the sexist mentality splits men and women into greater and lower classes of beings, the speciesist outlook demeans and objectifies animals by dichotomizing the biological continuum into the antipodes of humans and animals. As racism stems from a hateful white supremacism, and sexism is the product of a bigoted male supremacism, so speciesism stems from and informs a violent human supremacism -- namely, the arrogant belief that humans have a natural or God-given right to use animals for any purpose they devise or, more generously, within the moral boundaries of welfarism and stewardship, which however was Judaic moral baggage official Chistianithy left behind.

## Sovereignty Advantage

### Contention 3—Sovereignty:

### In addition to the demonization of research, the government also uses the possibility of evil alien life as a means of consolidating sovereignty

Wendt & Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

It might be argued that these spatio-temporal threats alone can explain the UFO taboo. On this view, by virtue of the possibility that UFOs are ETs, the UFO calls into question the state’s claim to protect its citizens, which it would be unwilling to admit. Because the threat is so grave, the only rational response is to ignore the UFO. States are enabled in this policy by the fact that UFOs do not (yet) interfere with the conditions of life of human populations, and as such have not compelled recognition. However, at least two considerations militate against reducing the UFO threat to spatio-temporal terms. First, states show little reluctance to ignore other existential threats; if immigrants, pandemics, and terrorists are readily securitized, despite states’ inability to secure their populations from them, then why are not UFOs? Second, given that UFOs do not interfere with modern governance, and with no indication that states actually believe the ETH, the UFO would seem cynically to be an ideal securitization issue. Because it leaves physical traces it can be represented as if it were real, justifying the growth of state power, even as states know the threat is imaginary. To be sure states may have other worries—but then all the more reason to stage a UFO threat to bolster their capacities. Thus, Hollywood notwithstanding, in our view the threat of the UFO is not primarily alien invasion or the black helicopters of world government. Challenges to the “physics” of modern sovereignty are necessary conditions for the UFO taboo, but they are not sufficient.

### Modern states securitize themselves through the ‘Epistemology of UFO Ignorance’—SETI key to change space politics

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

In this light a UFO taboo appears quite puzzling. First, if any UFOs were discovered to be ETs it would be one of the most important events in human history, making it rational to investigate even a remote possibility. It was just such reasoning that led the U.S. government to fund the Search for Extra-Terrestrial Intelligence (SETI), which looks for signs of life around distant stars. With no evidence whatsoever for such life, why not study UFOs, which are close by and leave evidence? Second, states seem eager to “securitize” all manner of threats to their societies or their rule. Securitization often enables the expansion of state power; why not then securitize UFOs, which offer unprecedented possibilities in this respect? And finally, there is simple scientific curiosity: why not study UFOs, just like human beings study everything else? At least something interesting might be learned about Nature. Notwithstanding these compelling reasons to identify UFOs, however, modern authorities have not seriously tried to do so. This suggests that UFO ignorance is not simply a gap in our knowledge, like the cure for cancer, but something actively reproduced by taboo. Taking this taboo as a symptom, following Nancy Tuana, we inquire into the “epistemology of [UFO] ignorance,” or the production of (un)knowledge about UFOs and its significance for modern rule. We are particularly interested here in the role of the state, while recognizing the story is also about science. Thus, our puzzle is not the familiar question of ufology, “What are UFOs?” but, “Why are they dismissed by the authorities?” Why is human ignorance not only unacknowledged, but so emphatically denied? In short, why a taboo? These are questions of social rather than physical science, and do not presuppose that any UFOs are ETs. Only that they might be.

### The possibility of ETs challenges modern sovereignty

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

First the argument. Adapting ideas from Giorgio Agamben, supplemented by Michel Foucault and Jacques Derrida, we argue that the UFO taboo is functionally necessitated by the anthropocentric metaphysics of modern sovereignty. Modern rule typically works less through sovereign coercion than through biopolitics, governing the conditions of life itself. In this liberal apparatus of security, power flows primarily from the deployment of specialized knowledges for the regularization of populations, rather than from the ability to kill. But when such regimes of governmentality are threatened, the traditional face of the state, its sovereign power, comes to the fore: the ability to determine when norms and law should be suspended—in Carl Schmitt’s terms, to “decide the exception.” The UFO compels decision because it exceeds modern governmentality, but we argue that the decision cannot be made. The reason is that modern decision presupposes anthropocentrism, which is threatened metaphysically by the possibility that UFOs might be ETs. As such, genuine UFO ignorance cannot be acknowledged without calling modern sovereignty itself into question. This puts the problem of normalizing the UFO back onto governmentality, where it can be “known” only without trying to find out what it is—through a taboo. The UFO, in short, is a previously unacknowledged site of contestation in an ongoing historical project to constitute sovereignty in anthropocentric terms. Importantly, our argument here is structural rather than agentic. We are not saying the authorities are hiding The Truth about UFOs, much less that it is ET. We are saying they cannot ask the question.

### Exploration of ET life is key to subvert the government’s monopoly on ET knowledge

William R.Lyne,“M.F.A. in Studio Arts from the University of Texas at Austin in 1969, and too good turned down the CIA. ”[Space Aliens From The Pentagon](http://www.hiddenmysteries.org/conspiracy/research/ufo-pent.html) ,” 1997(http://www.bibliotecapleyades.net/ciencia/pentagonaliens/pentagonaliens03.htm)

The magnitude by which electricity overcomes the force of gravity, is rivaled only by the magnitude by which the Big Lies of our government and the Trilateralists have overcome our rationality. These IllumiNazi Big Lies about “aliens” are disseminated through all the mass media. Someday there should be justice by public trial and punishment of the traitors who have perverted the instruments of democracy, and are entitled to none of our protections, which they seek to destroy. They who have made war on our Bill of Rights and Constitution should have to defend themselves without their protections. **Without our consent, the Secret Government is consciously waging psychological warfare against us, in violation of our right to government only by our consent. They use movies, T.V., books, magazines, advertising, children’s stories, and all forms of propaganda**, from the cradle to the grave, to criminally undermine and subvert the epistemological underpinnings of rational existence. We have not ‘consented’ to a fraud of which we are unaware.Our government, on behalf of the TC/CFR, has created the whole “alien” scenario, to brainwash us. So what is their purpose? To conceal flying saucer technology from us, and to stretch our credulities so we will believe the Big Lies. **Control is the name of the game, and they have it**. Flying saucer technology would break that control, so we don’t have it. Are we a nation of wimps who will do nothing about it? According to one nutty writer1, the purpose is either to fabricate a phony alien threat, so as to unite the world under a one-world fascist/socialist TC/CFR/Bilderberger/Illuminati dictatorship, or to render the world’s people into subservience to actual aliens with whom they have cut a deal, and he thinks it is all the fault of the Masons. Unfortunately, neither of these conclusions is correct, though the first one contains a germ of truth, in the fabrication of a phony alien threat, but in view of the two purposes I stated above, this wacky theory is perceived as just as misinformational as the crap emitted by the CIA’s or O.N.I.’s covert agents in UFOlogy. The phony ‘alien’ threat was derived from a public speech by Ronald Reagan regarding the effects of an hypothetical alien threat, which in a paranoid’s mind, is the kind of hype to be used to appeal to a bewildered constituency, so they can be unwittingly used to spread the dumb idea that the alien propaganda is intended to scare us into the arms of the NWO, or is a leak from the inside regarding a deal the government has with the aliens. Such wacky propaganda is induced by a shell game: “Will those who have lost track of the real issue please raise their hands.” The real issue is saucer technology. The controllers get their control over us with our money. The TC/CFR bunch have exclusive control over the saucer, since it is the most perfect instrument for ‘world surveillance’, and because its availability to the public would eventually destroy the economic power they now wield over us, through their control over energy, transportation and communications resources which we pay them for every day, so we “can’t have it”. **The plan will work only if they can maintain this exclusivity, which can only be maintained through continued ultra-secrecy and the help of dupes, and anyone else**

### Modern governmentality makes mass killing inevitable—the commandment to “make live” ensures that all life can be destroyed in order to protect the populace.

Mitchell Dean, Professor of Sociology at Macquarie University, 2k1 (“Demonic Societies: Liberalism, biopolitics, and sovereignty.” Ethnographic Explorations of the Postcolonial State, ed. Hanson and Stepputat, p. 55-58)

Consider again the contrastive terms in which it is possible to view biopolitics and sovereignty. The final chapter in the first volume of the History of Sexuality that contrasts sovereignty and biopolitics is titled "Right of Death and Power over Life." The initial terms of the contrast between the two registers of government is thus between one that could employ power to put subjects to death, even if this right to kill was conditioned by the defense of the sovereign, and one that was concerned with the fostering of life. Nevertheless, each part of the contrast can be further broken down. The right of death can also be understood as "the right to take life or let live"; the power over life as the power "to foster life or disallow it." Sovereign power is a power that distinguishes between political life (bios) and mere existence or bare life (zoe). Bare life is included in the constitution of sovereign power by Its very exclusion from political life. In contrast, biopolitics might be thought to include zoe in bios: stripped down mere existence becomes a matter of political reality. Thus, the contrast between biopolitics and sovereignty is not one of a power of life versus a power of death but concerns the way the different forms of power treat matters of life and death and entail different conceptions of life. Thus, biopolitics reinscribes the earlier right of death and power over life and places it within a new and different form that attempts to include what had earlier been sacred and taboo, bare life, in political existence. It is no longer so much the right of the sovereign to put to death his enemies but to disqualify the life—the mere existence—of those who are a threat to the life of the population, to disallow those deemed "unworthy of life," those whose bare life is not worth living. This allows us, first, to consider what might be thought of as the dark side of biopolitics (Foucault 1979a: 136—37). In Foucault's account, biopolitics does not put an end to the practice of war: it provides it with new and more sophisticated killing machines. These machines allow killing itself to be reposed at the level of entire populations. Wars become genocidal in the twentieth century. The same state that takes on the duty to enhance the life of the population also exercises the power of death over whole populations. Atomic weapons are the key weapons of this process of the power to put whole populations to death. We might also consider here the aptly named biological and chemical weapons that seek an extermination of populations by visiting plagues upon them or polluting the biosphere in which they live to the point at which bare life is no longer sustainable. Nor does the birth of biopolitics put an end to the killing of one's own populations. Rather, it intensifies that killing—whether by an "ethnic cleansing" that visits holocausts upon whole groups or by the mass slaughters of classes and groups conducted in the name of the Utopia to be achieved. There is a certain restraint in sovereign power. The right of death is only occasionally exercised as the right to kill and then often in a ritual fashion that suggests a relation to the sacred. More often, sovereign power is manifest in the refraining from the right to kill. The biopolitical imperative knows no such restraint. Power is exercised at the level of populations and hence wars will be waged at that level, on behalf of everyone and their lives. This point brings us to the heart of Foucault's provocative thesis about biopolitics: that there is an intimate connection between the exercise of a life-administering power and the commission of genocide: "If genocide is indeed the dream of modern powers, this is not because of a recent return of the ancient right to kill: it is because power is situated and exercised at the level of life, the species, the race, and the large-scale phenomena of population" (1979a: 137). Foucault completes this same passage with an expression that deserves more notice: "massacres become vital." There is thus a kind of perverse homogeneity between the power over life and the power to take life characteristic of biopower. The emergence of a biopolitical racism in the nineteenth and twentieth centuries can be approached as a trajectory in which this homogeneity always threatened to tip over into a dreadful necessity. This racism can be approached as a fundamental mechanism of power that is inscribed in the biopolitical domain (Stoler 1995: 84—85). For Foucault, the primary function of this form of racism is to establish a division between those who must live and those who must die, and to distinguish the superior from the inferior, the fit from the unfit. The notion and techniques of population had given rise, at the end of the nineteenth century, to a new linkage among population, the internal organization of states, and the competition between states. Darwinism, as an imperial social and political program, would plot the ranking of individuals, populations, and nations along the common gradient of fitness and thus measure eflicienqp6 However, the series "population, evolution, and race" is not simply a way of thinking about the superiority of the "white races" or of justifying colonialism, but also of thinking about how to treat the degenerates and the abnormals in one's own population and prevent the further degeneration of the race. The second and most important function for Foucault of this biopolitical racism in the nineteenth century is that "it establishes a positive

relation between the right to kill and the assurance of life" (Stoler 1995: 84). The life of the population, its vigor, its health, its capacities to survive, becomes necessarily linked to the elimination of internal and external threats. This power to disallow life is perhaps best encapsulated in the injunctions of the eugenic project: identify those who are degenerate, abnormal, feeble\*minded, or of an inferior race and subject them to forced sterilization: encourage those who are superior, fit, and intelligent to propagate. Identify those whose life is but mere existence and disqualify their propagation: encourage those who can partake of a sovereign existence and of moral and political life. But this last example does not necessarily establish a positive justification for the right to kill, only the right to disallow life. If we are to begin to understand the type of racism engaged in by Nazism, however, we need to take into account another kind of denouement between the biopolitical management of population and the exercise of sovereignty. This version of sovereignty is no longer the transformed and democratized form founded on the liberty of the juridical subject, as it is for liberalism, but a sovereignty that takes up and transforms a further element of sovereignty, its "symbolics of blood" (Foucault 1979a: 148). For Foucault, sovereignty is grounded in blood—as a reality and as a symbol—just as one might say that sexuality becomes the key field on which biopolitical management of populations is articulated. When power is exercised through repression and deduction, through a law over which hangs the sword, when it is exercised on the scaffold by the torturer and the executioner, and when relations between households and families were forged through alliance, "blood was a reality with a symbolic function." By contrast, for biopolitics with its themes of health, vigor, fitness, vitality, progeny, survival, and race, "power spoke of sexuality and to sexuality" (Foucault 1979a: 147). For Foucault (1979a: 149—50), the novelty of National Socialism was the way it articulated "the oneiric exaltation of blood," of fatherland, and of the triumph of the race in an immensely cynical and naive fashion, with the paroxysms of a disciplinary and biopolitical power concerned with the detailed administration of the life of the population and the regulation of sexuality, family, marriage, and education.'Nazism generalized biopower without the limit-critique posed by the juridical subject of right, but it could not do away with sovereignty. Instead, it established a set of permanent interventions into the conduct of the individual within the population and articulated this with the "mythical concern for blood and the triumph of the race." Thus, the shepherd-flock game and the city-citizen game are transmuted into the eugenic ordering of biological existence (of mere living and subsistence) and articulated on the themes of the purity of blood and the myth of the fatherland. In such an articulation of these elements of sovereign and biopolitical forms of power, the relation between the administration of life and the right to kill entire populations is no longer simply one of a dreadful homogeneity. It has become a necessary relation. The administration of life comes to require a bloodbath. It is not simply that power, and therefore war, will be exercised at the level of an entire population. It is that the act of disqualifying the right to life of other races becomes necessary for the fostering of the life of the race. Moreover, the elimination of other races is only one face of the purification of one's own race (Foucault 1997b: 231). The other part is to expose the latter to a universal and absolute danger, to expose it to the risk of death and total destruction. For Foucault, with the Nazi state we have an "absolutely racist state, an absolutely murderous state and an absolutely suicidal state" (232), all of which are superimposed and converge on the Final Solution. With the Final Solution, the state tries to eliminate, through the Jews, all the other races, for whom the Jews were the symbol and the manifestation. This includes, in one of Hitler's last acts, the order to destroy the bases of bare life for the German people itself "Final Solution for other races, the absolute suicide of the German race" is inscribed, according to Foucault. in the functioning of the modern state (232).

## Solvency

### Contention 4—Solvency:

### Funding SETI is key to successful exploration

Michaud 07, Michael A. G Michaud, 2007 (Author of over one hundred published works, Michael Michaud was a U.S. Foreign Service officer for 32 years before turning full time to writing.  During his diplomatic career, he served as Acting Deputy Assistant Secretary of State for Science and Technology, Director of the State Department’s Office of Advanced Technology, Minister-Counselor for Environment, Science, and Technology at the American Embassy in Tokyo) “Paradigm Shift” in “Contact with Alien Civilization” <http://www.springerlink.com/content/r01697143065120g/fulltext.pdf> pg. 343

Searching for other civilizations helps us to visualize ourselves in the fourth dimension—time. Contact could bring a Copernican revolution not just in the spatial sense but in the historical sense as well. The moment of contact is unpredictable; it could range from tomorrow to the end of intelligent life on Earth. Our nearest neighbors may be many light-years away—a measure of time as well as distance. In a radio dialogue across interstellar space, the gap between question and answer could be centuries. Thinking about our place in time must include a long future. By focusing attention only on the past and the present, argued Tipler, science has ignored almost all of reality.7 **We ourselves will change over time**. **If the search goes on long enough**, Baird foresaw, the definition of humanness may slowly shift to the extent that the organism that initiated the search in the twentieth century may bear little resemblance to the organism that finally tastes success.8

### Recognition of the World Outside of Our Planet is Key

Alfred **Webre**, Yale-trained environmental lawyer, former General Counsel to New York’s Environmental Protection Administration and International director of the Institute for Cooperation in Space, “Politics, Government, and Law in the Universe,” Journal of World Affairs, Summer 20**08** (<http://exopolitics.blogs.com/exopolitics/2008/11/world-affairs-the-journal-of-international-issues-exopolitics-and-a-positive-human-future-by-alfred-lambremont-webre-jd-m.html>)

The full context is that we are not alone in the task of our becoming aware of a larger populated and organised Universe society. A massive operation is underway involving integrated resources of diverse, advanced upper-dimensional Extraterrestrial civilisations, coordinated around an Integrated Plan to facilitate our living planet Earth's shift into a higher dimensional home within Extraterrestrial Civilization. As the science of relations between human civilisations and other intelligent civilisations in the Universe, Exopolitics must accurately access, experience, and analyse reality from the perspective of Extraterrestrial civilisations themselves. Exopolitics is not solely the history of humanity’s response to an Extraterrestrial presence. Exopolitics tracks the nature, intentions, strategy and agenda of the Extraterrestrial civilisations that are interacting with Earth. The science develops field theories of how society, politics, government, and law functions in the larger populated Universe itself. Under the Exopolitics model, the Earth does not exist in a jurisprudential vacuum in outer space. Rather Earth, like all life-bearing planets, is subject to a set of highly regulated criteria under the jurisdiction of galactic or universal governance authorities. “In the Exopolitics model, life-bearing planets such as Earth are members of a collective Universe whole that operates under universal law. Think of Earth as part of a universal commons. Life was planted and cultivated here under the stewardship of more advanced societies, in accordance with the over-all principles of Universe ecology. “Our Exopolitics model holds that, when necessary, universal law applies restrictive measures to a planet when it endangers the collective whole. Universe government can remove a planet from open circulation within Universe society. This fate appears to have happened to Earth in our distant past. Earth has suffered for aeons as an exopolitical outcast among the community of Universe civilisations. “The Exopolitics model holds that Earth is presently isolated from interaction with organised intergalactic civilisation because it is under intentional quarantine by a rational, structured Universe society. There are signs around us, however, of a Universe initiative to reintegrate Earth into interplanetary society. It is possible that Earth may be permitted to rejoin Universe society, under certain conditions, at a future time certain.” From Exopolitics; Politics, Government and Law in the Universe by Alfred Lambremont Webre, JD, MEd (Universebooks) That time of the intentional quarantine of Earth appears to be ending, with stern conditions. This is the end of ordinary politics, or the permanent warfare economy, and the beginning of the New Earth and the New Heaven.

### Plan solves for ETI—radio and optical SETI are the most economical methods

**Tough 2k** [Allen, PhD Professor at the University of Toronto, “When SETI Succeeds: The Impact of High-Information Contact”, July, http://www.futurefoundation.org/documents/hum\_pro\_wrk1.pdf]

Conﬁrmation of extraterrestrial intelligence could come about in any of a number of ways, but given our known laws of nature and current technology, some search procedures seem more promising than others. At present, the favored approaches of most scientiﬁc searchers are radio SETI, which involves using radio telescopes to detect electromagnetic patterns that are of extraterrestrial but intelligent origin, and optical SETI, based on searching other segments of the electromagnetic spectrum for laser communications or signature patterns of energy use. Proponents of these dominant strategies note that moving information around the universe is incredibly more economical than moving matter, and that whereas radio and optical signals move at the speed of light, spaceships or probes can move at but a tiny fraction of that speed . From this perspective , expanding the search means involving more radio telescopes, engaging them in the search a greater percentage of their time, including more areas of the sky in the survey, and scanning a greater number of channels . Radio astronomers could increase the chances of success further by building an observatory on the Moon, and analyzing anomalous data that are normally locked in bottom desk drawers.

### **SETI is essential for the discovery of ET- electromagnetic energy and radio waves could find ET tech**

Michaud ’07 [Michael, Deputy Assistant Secretary of State for Science and Technology, and as Science and Technology Counselor at the American embassies in Paris and Tokyo, “Contact With Alien Civilization”, 2007, page 135-136]

Electromagnetic signals might not be the only evidence of alien technological activities that we can detect. Recent years have seen growing interest in broadening our quest to include a Search for Extraterrestrial Artifacts (SETA). Scot Stride of the Jet Propulsion Laboratory described two predominant hypotheses as to how we can detect extraterrestrial intelligence: a SETI Energy Hypothesis that states that technologically advance civilization uses electromagnetic energy as a means to remotely explore the universe and to detect or communicate with other advanced civilizations, and a SETI Artifact Hypothesis that states that a technologically advanced civilization has undertaken a long-term program of interstellar exploration via transmission of material artifacts. The authors of the SETI 2020 report recognized that we could search for alien artifacts or interstellar spacecraft. SETI has sought signals instead, not because these other approaches are without merit, but simply because in electromagnetic signaling the speed is very high and the cost is very low. We should keep our robotic eyes open for both, Tarter and Chyba proposed. Television journalist and novelist Richard Burke-Ward proposed an ambitious broadening of SETI to look for or contact alien artifacts. The search for alien machines might even be incorporated into the Drake equation. The probability of finding a functioning probe would depend on the prevalence of intelligent species in our galaxy, the likelihood of probes being sent to other stars, and the life spans of the probes (we might qualify this; a dead prove still could be detectable).

# \*\*Inherency\*\*

## Now K

### Now is Key

Lisa M. Krieger 4/27/2011[Kreiger is a writer for Mercury News] <http://www.mercurynews.com/science/ci_17926565?nclick_check=1>. SETI Institute to shut down alien-seeking radio dishes

The timing couldn't be worse, say SETI scientists. After millenniums of musings, this spring astronomers announced that 1,235 new possible planets had been observed by Kepler, a telescope on a space satellite. They predict that dozens of these planets will be Earth-sized -- and some will be in the "habitable zone," where the temperatures are just right for liquid water, a prerequisite of life as we know it. "There is a huge irony," said SETI Director Jill Tarter, "that a time when we discover so many planets to look at, we don't have the operating funds to listen." SETI senior astronomer Seth Shostak compared the project's suspension to "the Niña, Pinta and Santa Maria being put into dry dock. "... This is about exploration, and we want to keep the thing operational. It's no good to have it sit idle.

## **Lack of Funding**

### Lack of US funding killing SETI searches

Wenatchee World 4/27, Wenatchee World News, April 27 2011, (Wenatchee World News is a paper located in Washington state.) SETI Institute to shut down alien-seeking radio dishes http://www.wenatcheeworld.com/news/2011/apr/27/seti-institute-to-shut-down-alien-seeking-radio/

SAN JOSE, Calif. — If E.T. phones Earth, he’ll get a “disconnect” signal. Lacking the money to pay its operating expenses, the SETI Institute in Mountain View, Calif., has pulled the plug on the renowned Allen Telescope Array, a field of radio dishes that scan the skies for signals from extraterrestrial civilizations. In a letter last Friday to donors, SETI Institute CEO Tom Pierson said that last week the array was put into “hibernation,” safe but nonfunctioning, because of inadequate government support. The timing couldn’t be worse, SETI scientists say. After millenniums of musings, this spring astronomers announced that 1,235 new possible planets had been observed by Kepler, a telescope on a space satellite. “There is a huge irony,” said SETI Director Jill Tarter, “that a time when we discover so many planets to look at, we don’t have the operating funds to listen.”

### Thousands of planets left unchecked- 5 million needed to continue search

### **Jha** 4/26, Alok Jha, April 26 2011, (Jha is the science correspondent at the Guardian Newspaper in the UK), “Alien finding institute Seti runs out of cash to operate telescope” Guardian, <http://www.guardian.co.uk/science/2011/apr/26/alien-institute-seti-cash-telescope/print>

In real life, the Seti Institute has spent five decades hunting the skies for radio signals from deep space, possible communications which may indicate we are not alone in the universe. Now it has fallen prey to a very earthly problem: it has run out of cash. The institute's chief executive, Tom Pierson, has announced that there are "serious challenges" in finding operating funds and that from this week the organisation's brand new $50m (£30m) telescope array will be placed into hibernation. "This means that the equipment is unavailable for normal observations and is being maintained in a safe state by a significantly reduced staff," he said in a letter to private donors to the institute. The problems revolve around the operation of the Allen Telescope Array (ATA), a set of radio dishes dedicated to looking for alien signals. Though it was paid for by the Seti Institute, the array, at the Hat Creek Radio Observatory, 300 miles north-east of San Francisco, is managed and operated by the radio [astronomy](http://www.guardian.co.uk/science/astronomy) lab of the University of [California](http://www.guardian.co.uk/world/california), Berkeley. According to Seti senior astronomer Seth Shostak, the facility needs about $2m-$3m a year to function and to keep the scientific research programmes going. **The scientists need an additional $5m to fund a two-year project to listen for possible radio signals coming from the Earth-like exoplanets found by Nasa's Kepler satellite**. Launched in 2009, it has already identified more than 1,000 candidate planets, which the Seti Institute wants to use to narrow its search. The money needed to operate the observatory has until now come from a mixture of private donations, the US National Science Foundation (NSF) and the state government of California. "As it happens, Berkeley's budget is way down – the state of California is in terrible financial circumstances because of the economic downturn," Shostak said. "Consequently, they don't have the money to keep the doors open and pay the electric bills and pay the staff at the antenna. And we don't either, because we run our Seti projects mostly based on private donations, and those are down as well." Funding from the NSF has also been cut, to about a tenth of its former level.

### Funding prevents SETI social science research

Harrison et. al 2000, Albert Harrison, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis), “When SETI Succeeds: The Impact of High-Information Contact”, Foundation for the Future, edited by Allen Tough, Section V, pdf pg. 71

For the most part, social science research is not very expensive, at least, in comparison to research in the physical and biological sciences. This is fortunate because governmental funding for the social sciences has decreased dramatically over the past few decades. This poses two problems. First, even though some work on the “cultural aspects of SETI” can be done on the proverbial shoestring, funding is useful for basic equipment, research assistants, travel for inspecting archives, attending conventions, and so forth. The lack of travel funds is a particular problem, since the major SETI meetings take place at international locations and have registration fees geared to the salaries of aerospace executives and engineers. Social scientists who might be interested in SETI find their energies drawn to more conventional areas where they can get funds to cover research expenses, course releases, and summer salaries. **The lack of funding in the social sciences has drawn many social scientists away from research and to summer teaching, consulting, and other income generating activities**.

## Lack of Funding

### Budget cuts have brought SETI to a halt

Klotz, 11 [Irene, author of Discovery News: Space Diary, Discovery News, http://news.discovery.com/space/search-for-et-suspended.html, Aliens, Call Back Later: SETI Suspended]

Microsoft co-founder Paul Allen provided an initial $25 million for the project, which is known as the Allen Telescope Array. The network eventually is intended to have 350 telescopes. The University of California at Berkeley, the National Science Foundation and several corporate and individual donors provided operating funds. Budget cutbacks by the state of California and the NSF, however, have hit the project hard. Not only was the expansion postponed, now the search for ET itself is on hold.

### Both telescopes and lab’s works put on hold- lack of funding

The San Francisco Chronicle, 11 [My Fox Tampa Bay, SETI Search for Aliens Suspended Due to Budget Cuts, http://www.myfoxtampabay.com/dpps/news/scitech/space/seti-search-for-aliens-suspended-due-to-budget-cuts-dpgonc-20110427-fc\_12942586]

The search for alien life was on hold Wednesday after US government budget cuts forced the SETI Institute (Search for Extraterrestrial Intelligence) to suspend monitoring at its Hat Creek Radio Observatory in northern California. The 42 telescopes at the observatory monitoring the skies for alien communications were put into "hibernation" this week because of a $2.5 million funding shortfall, according to SETI Institute astronomer Jill Tarter. She added that works at the entire laboratory in the remote Lassen National Forest, 214 miles north of San Francisco, was suspended, the San Francisco Chronicle reported.

## Inherency Extn.

### No funding for ET search but possibility exists or SETI at disadvantage because no funding

Harrison 2005, Albert Harrison, 2005, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis) Overcoming the Image of Little Green Men: Astrosociology and SETI, <http://www.astrosociology.com/Library/PDF/submissions/Overcoming%20LGM_Harrison.pdf> pg. 7)

From the perspective of astrobiology and SETI, minimizing the UFO taint has been a constant uphill battle. Countless documentaries on "life in the universe" have included both SETI and UFOlogy, without adequately distinguishing between the two. Careful research and wild claims are intermingled. The inherently conservative nature of science places SETI at a disadvantage against an unruly competitor that stresses sensationalistic but unproven ideas. Initially, NASA – Ames Research Center was the home of SETI, but funding was withdrawn in the early 1990s, when an influential senator objected to using government funding to search for "little green men." While today NASA prohibits the use of funds for finding extraterrestrial intelligence, it does support research on the origin and distribution of life in the universe, and following congressional hearings held in 2002 there is a chance that the US government will, once again, fund the search for ET.

## $

### Cost only 5 million for good search

Standen 5/11, Amy Standen, May 5th 201 (Reporter for the National Public Radio), “If E.T. Phones, Will We Hear? SETI Loses Key Funding” NPR, http://www.npr.org/2011/05/16/136276973/if-e-t-phones-will-we-hear-seti-loses-key-funding

Tarter says she is frustrated by the holdup. "Never before have we known such good potential targets at which to point our telescopes," she says. "And that's what we want to do." Tarter wants to raise $5 million in private money to search the Kepler planets. Columbia astrobiologist Scharf says he thinks that's a bargain. Sure, SETI's a long shot, but science needs long shots. "I think that too often in modern science, we kind of narrow down the vision — what we want to look at — a little too much," Scharf says. SETI, on the other hand, swings for the fences. The money may never pay off, Scharf says, but we'll never know unless we try. "To me, the best argument for SETI is simply that we do not know," he says. "The only real solution is to look, and to look in as broad a way as you can." Tarter, for her part, says she knows she probably won't find ET in her lifetime. Finding SETI a reliable source of funding? That would be achievement enough.

# \*\*Sovereignty Advantage\*\*

## Internal Link

### Alien’s uninformed construction in society represents the fear of the alien in society

Campbell 2001, John Edwards Campbell, ( John Edward Campbell (MS, University of Massachusetts – Amherst, 2001) is a doctoral candidate at the Annenberg School for Communication at the University of Pennsylvania and an instructor in new media at the University of Minnesota. His research examines the commodification of communities in cyberspace as well as the integration of emerging media technologies into the negotiation of everyday life.), [http://ics.sagepub.com/content/4/3/327.full.pdf+html](http://ics.sagepub.com/content/4/3/327.full.pdf%2Bhtml), Alien(ating) ideology and the American media Apprehending the alien image in television through *The X-Files,* International Journal of Cultural Studies, pg. 328

Before engaging with *The X-Files*, however, it is necessary to clarify a key concept in this analysis – the alien image. By invoking the term *alien image*, I refer both to the literal image of the alien identified with alien abductions increasingly depicted in the American media as well as the larger body of fringe discourses it symbolically represents. It is important to keep in mind that this distinct (if only for its banality) image of the alien – often referred to as a ‘gray alien’ in the discourse of ufology – emerged from the descriptions of alien abductees, and was largely introduced to the general public by Strieber’s (1987) best-selling book *Communion*, and the 1989 movie adapted from it.7 The increasing currency of this particular image, and the very fact that it is no longer exclusively associated with any individual author or text (the image of the gray alien now appears in everything from scholarly books on alien abduction to television commercials to web pages selling abduction insurance) transforms it into an icon for an entire body of discourses surrounding ufology: alien abduction, UFO sightings, alien–government conspiracies. In this sense, the alien image functions in line with Barthes’ semiotic conception of myth. Operating on the level of what Barthes refers to as metalanguage (connotation), the alien image is no longer merely the image of *an* alien, but rather the representation of *the* alien in society. **In this respect, the alien image symbolically embodies public fears of the alien(ating) in a techno-global society,** of the failure of democracy, even, of what Dean refers to as ‘indeterminability of the rationality of the public sphere, and hence to the collapse of its very possibility’ (Dean, 1998: 17). Thus the alien image *can* be read as representing a literal belief in alien–government conspiracies, or a more difficult to articulate faithlessness in the American public sphere. In either sense, the alien image, emerging from the margins of popular culture, has developed a powerful iconic presence in the American mainstream.

## Plan Solves

### UFO is necessary to counter modern sovereignty’s securitization

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

Modern rule and its metaphysics are extraordinarily resilient, so the difficulties of such resistance cannot be overstated. Those who attempt it will have difficulty funding and publishing their work, and their reputations will suffer. UFO resistance might not be futile but it is certainly dangerous, because it is resistance to modern sovereignty itself. In this respect militant UFO agnosticism is akin to other forms of resistance to governmentality; however, whereas sovereignty has found ways of dealing with them, the UFO may reveal an Achilles heel. Like Achilles, the modern sovereign is a warrior whose function is to protect—in this case, from threats to the norm. Unlike conventional threats, however, the UFO threatens humans’ capacity to decide those threats, and so cannot be acknowledged without calling modern sovereignty itself into question. To what extent that would be desirable is a large normative question which we have bracketed here. But taking UFOs seriously would certainly embody the spirit of self-criticism that infuses liberal governmentality and academia in particular, and it would, thereby, foster critical theory. And indeed, if academics’ first responsibility is to tell the truth, then the truth is that after sixty years of modern UFOs, human beings still have no idea what they are, and are not even trying to find out. That should surprise and disturb us all, and cast doubt on the structure of rule that requires and sustains it.

### Plan key to challenging science and sovereignty

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

As unidentified object the UFO poses a threat of unknowability to science, upon which modern sovereignty depends. Of course, there are many things science does not know, like the cure for cancer, but its authority rests on the assumption that nothing in Nature is in principle unknowable. UFOs challenge modern science in two ways: (1) they appear random and unsystematic, making them difficult to grasp objectively; and (2) some appear to violate the laws of physics (like the 40g turns in the Belgian F-16 case). This does not mean that UFOs are in fact humanly unknowable, but they might be, and in that respect they haunt modern sovereignty with the possibility of epistemic failure. To see how this might be uniquely threatening it is useful to compare the UFO to three other cases of what might be seen as unknowability.

### Both science and politics ignores the possibility of the existence of UFOs—plan is key to change this mindset.

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

One might expect unexplained incidents in NATO airspace to concern the authorities, particularly given that since 1947 over 100,000 UFOs have been reported worldwide, many by militaries. However, neither the scientific community nor states have made serious efforts to identify them, the vast majority remaining completely uninvestigated. The science of UFOs is minuscule and deeply marginalized. Although many scientists think privately that UFOs deserve study, there are no opportunities or incentives to do it. With almost no meaningful variation, states—all 190+ of them—have been notably uninterested as well. A few have gone through the motions of studying individual cases, but with even fewer exceptions these inquiries have been neither objective nor systematic, and no state has actually looked for UFOs to discover larger patterns. For both science and the state, it seems, the UFO is not an “object” at all, but a non-object, something not just unidentified but unseen and thus ignored. The authoritative disregard of UFOs goes further, however, to active denial of their object status. Ufology is decried as a pseudo-science that threatens the foundations of scientific authority, and the few scientists who have taken a public interest in UFOs have done so at considerable cost. For their part, states have actively dismissed “belief” in UFOs as irrational (as in, “do you believe in UFOs?”), while maintaining considerable secrecy about their own reports. This leading role of the state distinguishes UFOs from other anomalies, scientific resistance to which is typically explained sociologically. UFO denial appears to be as much political as sociological— more like Galileo’s ideas were political for the Catholic Church than like the once ridiculed theory of continental drift. In short, considerable work goes into ignoring UFOs, constituting them as objects only of ridicule and scorn. To that extent one may speak of a “UFO taboo,” a prohibition in the authoritative public sphere on taking UFOs seriously, or “thou shalt not try very hard to find out what UFOs are.”

### SETI Research is key to countering the state’s regime of truth

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

One is the UFO itself, which in its persistent recurrence generates an ongoing need for its normalization. Modern rule might not recognize the UFO, but in the face of continuing anomalies maintaining such non- recognition requires work. In that respect the UFO is part of the constitutive, unnormalized outside of modern sovereignty, which can be included in authoritative discourse only through its exclusion. Within the structure of modern rule there are also at least two fissures that complicate maintaining UFO ignorance. One is the different knowledge interests of science and the state. While the two are aligned in authoritative UFO discourse, the state is ultimately interested in maintaining a certain regime of truth (particularly in the face of metaphysical insecurity), whereas science recognizes that its truths can only be tentative. Theory may be stubborn, but the presumption in science is that reality has the last word, which creates the possibility of scientific knowledge countering the state’s dogma.

## Plan Solves UFO Taboo

### **Plan is key to challenging the UFO taboo.**

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

Even that is not enough, however, as attested by the long history of unsuccessful resistance to the UFO taboo to date. The problem is that agnosticism alone does not produce knowledge, and thus reduce the ignorance upon which modern sovereignty depends. For a critical theory of anthropocentric rule, therefore, a science of UFOs ironically is required, and not just a science of individual cases after the fact, which can tell us only that some UFOs lack apparent conventional explanations. Rather, in this domain what is needed is paradoxically a systematic science, in which observations are actively sought in order to analyze patterns from which an intelligent presence might be inferred. That would require money, infrastructure, and a long-term commitment of the kind that to date has been possible only for epistemic authorities, or precisely those actors most resistant to taking UFOs seriously. Still, given the potential disjunction of interest between science and the state, it is possible here for science to play a key role for critical theory. Whether such a science would actually over- come UFO ignorance is unknowable today, but it is only through it that We might move beyond the essentially theological discourse of belief and denial to a truly critical posture.

### Plan key to “seeing” the UFO and breaking the UFO taboo.

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

To this point we have concentrated on the question of “why?” the UFO taboo, in response to which we have offered a structural answer about the logic of anthropocentric sovereignty. However, there is a separate question of “how?” the taboo is produced and reproduced, since structural necessity alone does not make it happen. It takes work—not the conscious work of a vast conspiracy seeking to suppress the truth about UFOs, but the work of countless undirected practices that in the modern world make the UFO “known” as not-ET. Bringing our argument full circle, this is the work of modern governmentality, upon which the normalization of the UFO is thrown back by the absent sovereign. Yet this work too is problematic, because modern governmentality usually proceeds by making objects visible so they can be known and regularized, which in the UFO case would be self-subverting. Thus, what are needed are techniques for making UFOs known without actually trying to find out what they are. One might distinguish at least four such techniques: (1) authoritative representations, like the U.S. Air Force’s claim that UFOs are “not a national security threat,” the portrayal of ufology as pseudo-science, and the science fictionalization of UFOs in the media; (2) official inquiries, like the 1969 Condon Report, which have the appearance of being scientific but are essentially “show trials” systematically deformed by a priori rejection of the ETH; (3) official secrecy, which “removes knowledge” from the system; and finally (4) discipline in the Foucauldian sense, ranging from formal attacks on the “paranoid style” of UFO believers as a threat to mod- ern rationality, to everyday dismissal of those who express public interest in UFOs, which generates a “spiral of silence” in which individuals engage in self-censorship instead.

## ETs challenge sovereignty/securitization

### The possibility of ETs challenges modern sovereignty

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

First the argument. Adapting ideas from Giorgio Agamben, supplemented by Michel Foucault and Jacques Derrida, we argue that the UFO taboo is functionally necessitated by the anthropocentric metaphysics of modern sovereignty. Modern rule typically works less through sovereign coercion than through biopolitics, governing the conditions of life itself. In this liberal apparatus of security, power flows primarily from the deployment of specialized knowledges for the regularization of populations, rather than from the ability to kill. But when such regimes of governmentality are threatened, the traditional face of the state, its sovereign power, comes to the fore: the ability to determine when norms and law should be suspended—in Carl Schmitt’s terms, to “decide the exception.” The UFO compels decision because it exceeds modern governmentality, but we argue that the decision cannot be made. The reason is that modern decision presupposes anthropocentrism, which is threatened metaphysically by the possibility that UFOs might be ETs. As such, genuine UFO ignorance cannot be acknowledged without calling modern sovereignty itself into question. This puts the problem of normalizing the UFO back onto governmentality, where it can be “known” only without trying to find out what it is—through a taboo. The UFO, in short, is a previously unacknowledged site of contestation in an ongoing historical project to constitute sovereignty in anthropocentric terms. Importantly, our argument here is structural rather than agentic. We are not saying the authorities are hiding The Truth about UFOs, much less that it is ET. We are saying they cannot ask the question.

### Materialization of ETs, a superior being, challenges the flawed foundations of modern rule.

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

This “common sense” is nevertheless of immense practical significance in the mobilization of power and violence for political projects. Modern systems of rule are able to command exceptional loyalty and resources from their subjects on the shared assumption that the only potential sovereigns are human. Imagine a counterfactual world in which God visibly materialized (as in the Christians’ “Second Coming,” for example): to whom would people give their loyalty, and could states in their present form survive were such a question politically salient? Anything that challenged anthropocentric sovereignty, it seems, would challenge the foundations of modern rule.

### Modern states securitize themselves through the ‘Epistemology of UFO Ignorance’—SETI key to destroy securitization

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

In this light a UFO taboo appears quite puzzling. First, if any UFOs were discovered to be ETs it would be one of the most important events in human history, making it rational to investigate even a remote possibility. It was just such reasoning that led the U.S. government to fund the Search for Extra-Terrestrial Intelligence (SETI), which looks for signs of life around distant stars. With no evidence whatsoever for such life, why not study UFOs, which are close by and leave evidence? Second, states seem eager to “securitize” all manner of threats to their societies or their rule. Securitization often enables the expansion of state power; why not then securitize UFOs, which offer unprecedented possibilities in this respect? And finally, there is simple scientific curiosity: why not study UFOs, just like human beings study everything else? At least something interesting might be learned about Nature. Notwithstanding these compelling reasons to identify UFOs, however, modern authorities have not seriously tried to do so. This suggests that UFO ignorance is not simply a gap in our knowledge, like the cure for cancer, but something actively reproduced by taboo. Taking this taboo as a symptom, following Nancy Tuana, we inquire into the “epistemology of [UFO] ignorance,” or the production of (un)knowledge about UFOs and its significance for modern rule. We are particularly interested here in the role of the state, while recognizing the story is also about science. Thus, our puzzle is not the familiar question of ufology, “What are UFOs?” but, “Why are they dismissed by the authorities?” Why is human ignorance not only unacknowledged, but so emphatically denied? In short, why a taboo? These are questions of social rather than physical science, and do not presuppose that any UFOs are ETs. Only that they might be.

## A2: UFOs don’t exist

### Uncertainty of existence hasn’t stopped the public and/or scientists before—empirically proven with three reason: quantum theory, God, and psi

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

One is the Heisenberg Uncertainty Principle in quantum theory, which acknowledges inherent limits on the ability to know sub-atomic reality. Since the Uncertainty Principle has not stopped physicists from doing physics, this might seem to undermine our claim that potential unknowability precludes a decision on the UFO as object. Yet, there are known unknowns and unknown unknowns, and here the two cases differ. Quantum mechanics emerged in a highly structured context of extant theory and established experimental results, and is a systematic body of knowledge that enables physicists to manipulate reality with extraordinary precision. With quantum theory we know exactly what we cannot know, enabling it to be safely incorporated into modern science. The UFO, in contrast, emerges in a context free of extant theory and empirical research, and raises fundamental questions about the place of human beings in the universe. That we might never know what we cannot know about UFOs makes their potential objectivity more problematic for the modern project. A different problem is presented by God, whose existence science also declaims ability to know. Once fiercely contested, the notion that God can be known only through faith not reason is today accepted by religious and secular authorities alike. Since God is not potentially a scientific object, science does not consider the question to be within its purview. Miracles are recognized by the Church, but the criteria by which they are made authoritative are not primarily scientific. UFOs, in contrast, leave unexplained physical traces and as such fall directly within the purview of modern science. It is one of the ironies of modern rule that it is far more accept- able today to affirm publicly one’s belief in God, for whose existence there is no scientific evidence, than UFOs, the existence of which—whatever they might be—is physically documented. Perhaps the best analogue to the epistemic threat posed by UFO objectivity is extra-sensory perception or “psi.” Here we have a subtle and elu- sive phenomenon that might be objective, and which raises similar worries about unknowability for the modern episteme. And here too we see tremendous resistance from the scientific community to taking it seriously. Nevertheless, and interestingly, psi research has been undertaken by states, suggesting that potential unknowability by itself does not preclude sovereign decision, if, were the phenomenon to become known, it could serve human purposes.

## A2: Need to find UFOs

### Finding other life forms not necessary. Discussing the UFO Taboo is key to understanding the UFO itself.

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

In the UFO context such anti-realism is problematic, since its political effect is ironically to reinforce the skeptical orthodoxy: if UFOs cannot be known scientifically then why bother study them? As realist institutions, science and the modern state do not concern themselves with what cannot be known scientifically. For example, whatever their religious beliefs, social scientists always study religion as “methodological atheists,” assuming that God plays no causal role in the material world. Anything else would be considered irrational today; as Jürgen Habermas puts it, “a philosophy that oversteps the bounds of methodological atheism loses its philosophical seriousness.”By not allowing that UFOs might be knowable scientifically, therefore, Dean implicitly embraces a kind of methodological atheism about UFOs, which as with God shifts attention to human representations of the UFO, not its reality. Yet UFOs are different than God in one key respect: many leave physical traces on radar and film, which suggests they are natural rather than supernatural phenomena and thus amenable in principle to scientific investigation. Since authoritative discourse in effect denies this by treating UFOs as an irrational belief, a realist moment is necessary to call this discourse fully into question. Interestingly, therefore, in contrast to their usual antagonism, in the UFO context science would be critical theory. In this light Dean’s claim that UFOs are unknowable appears anthropocentrically monological. It might be that We, talking among ourselves, cannot know what UFOs are, but any “They” probably have a good idea, and the only way to remain open to that dialogical potential is to consider the reality of the UFO itself. Failure to do so merely reaffirms the UFO taboo. In foregrounding the realist moment in our analysis we mean not to fore close a priori the possibility that UFOs can be known scientifically; however, we make no claim that they necessarily would be known if only they were studied. Upon close inspection many UFOs do turn out to have conventional explanations, but there is a hard core of cases, perhaps 25 to 30 percent, that seem to resist such explanations, and their reality may indeed be humanly unknowable—although without systematic inquiry we cannot say. Thus, and importantly, our overarching position here is one of methodological agnosticism rather than realism, which mitigates the potential for epistemological conflict with the non-realist political theorists we draw upon below. Nevertheless, in the context of natural phenomena like UFOs agnosticism can itself become dogma if not put to the test, which requires adopting a realist stance at least instrumentally or “strategically,” and seeing what happens. This justifies acting as if the UFO is knowable, while recognizing that it might ultimately exceed human grasp.

### Finding UFOs not key. At least trying to know the UFO is.

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

We have called ours a “critical” theory, in that it rests on a normative assumption that the limits of modern rule should be exposed. In the present context this means that human beings should try to know the UFO. Although we believe the case for this presumption is over-determined and overwhelming, it is not a case we can make here. Nevertheless, it seems incumbent upon us to follow through on the practical logic of our theory, so taking its desirability as given, in conclusion we address the question of resistance to the UFO taboo.

### Militant agnosticism is required to “see” and break the UFO taboo cycle.

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

The kind of resistance that can best exploit these fissures might be called militant agnosticism. Resistance must be agnostic because by the realist standards of modernity, regarding the UFO/ET question neither atheism nor belief is epistemically justified; we simply do not know. Concretely, agnosticism means “seeing” rather than ignoring the UFO, taking it seriously as a truly unidentified object. Since it is precisely such seeing that the UFO taboo forbids, in this context seeing is resistance. However, resistance must also be militant, by which we mean public and strategic, or else it will indeed be futile. The reproduction of UFO ignorance depends crucially on those in positions of epistemic authority observing the UFO taboo. Thus, private agnosticism—of the kind moderns might have about God, for example—is itself part of the problem. Only breaking the taboo in public constitutes genuine resistance.

## Sovereignty Inherency

### The government is using evil Alien propaganda to control society- this propaganda runs through everyday media- This can only go on if we don’t fund SETI and destroy the band of secrecy.

William R.Lyne,“M.F.A. in Studio Arts from the University of Texas at Austin in 1969, and too good turned down the CIA. ”[Space Aliens From The Pentagon](http://www.hiddenmysteries.org/conspiracy/research/ufo-pent.html) ,” 1997(http://www.bibliotecapleyades.net/ciencia/pentagonaliens/pentagonaliens03.htm)

The magnitude by which electricity overcomes the force of gravity, is rivaled only by the magnitude by which the Big Lies of our government and the Trilateralists have overcome our rationality. These IllumiNazi Big Lies about “aliens” are disseminated through all the mass media. Someday there should be justice by public trial and punishment of the traitors who have perverted the instruments of democracy, and are entitled to none of our protections, which they seek to destroy. They who have made war on our Bill of Rights and Constitution should have to defend themselves without their protections. **Without our consent, the Secret Government is consciously waging psychological warfare against us, in violation of our right to government only by our consent. They use movies, T.V., books, magazines, advertising, children’s stories, and all forms of propaganda**, from the cradle to the grave, to criminally undermine and subvert the epistemological underpinnings of rational existence. We have not ‘consented’ to a fraud of which we are unaware.Our government, on behalf of the TC/CFR, has created the whole “alien” scenario, to brainwash us. So what is their purpose? To conceal flying saucer technology from us, and to stretch our credulities so we will believe the Big Lies. **Control is the name of the game, and they have it**. Flying saucer technology would break that control, so we don’t have it. Are we a nation of wimps who will do nothing about it? According to one nutty writer1, the purpose is either to fabricate a phony alien threat, so as to unite the world under a one-world fascist/socialist TC/CFR/Bilderberger/Illuminati dictatorship, or to render the world’s people into subservience to actual aliens with whom they have cut a deal, and he thinks it is all the fault of the Masons. Unfortunately, neither of these conclusions is correct, though the first one contains a germ of truth, in the fabrication of a phony alien threat, but in view of the two purposes I stated above, this wacky theory is perceived as just as misinformational as the crap emitted by the CIA’s or O.N.I.’s covert agents in UFOlogy. The phony ‘alien’ threat was derived from a public speech by Ronald Reagan regarding the effects of an hypothetical alien threat, which in a paranoid’s mind, is the kind of hype to be used to appeal to a bewildered constituency, so they can be unwittingly used to spread the dumb idea that the alien propaganda is intended to scare us into the arms of the NWO, or is a leak from the inside regarding a deal the government has with the aliens. Such wacky propaganda is induced by a shell game: “Will those who have lost track of the real issue please raise their hands.” The real issue is saucer technology. The controllers get their control over us with our money. The TC/CFR bunch have exclusive control over the saucer, since it is the most perfect instrument for ‘world surveillance’, and because its availability to the public would eventually destroy the economic power they now wield over us, through their control over energy, transportation and communications resources which we pay them for every day, so we “can’t have it”. **The plan will work only if they can maintain this exclusivity, which can only be maintained through continued ultra-secrecy and the help of dupes, and anyone else**

### Currently, modern sovereign power decides the “states of exception”. Plan is key to confronting sovereignty.

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

 Modern governmentality directs attention away from sovereign power and toward the socially diffuse practices by which it is sustained. Yet as Agamben reminds us, sovereignty remains important, because every regime of governmentality has outsides, even while exceeding the capacity for regularization. This outside is both external, in the form of actors not subject to normalization, and internal, in the form of people’s capacity to do otherwise (hence their need to be “governed”). Ordinarily these limits do not severely threaten modern rule, but some exceed the capacity for regularization. Schmitt calls such situations “states of exception”: “any severe economic or political disturbance requiring the application of extraordinary measures,” including abrogation of law by those who govern in its name. Extending and modifying Schmitt’s analysis, Agamben emphasizes a “zone of indistinction” between the juridical order and the state of exception, which is neither fully in nor outside the law. Thus, while sometimes constitutionally recognized, the state of exception is “not a special kind of law,” but necessarily transcends the law. In Sergei Prozorov’s terms, the state of exception is a “constitutive outside” or “excess” to law that is the latter’s condition of possibility. As such, for Agamben (if not for Schmitt) a state of exception is always potentially there, even when not actually in force, permanently contaminating the law. On the other hand, the state of exception also belongs to the law, since it is by the latter’s limits and/or failure that it is known. States of exception cannot be declared willy-nilly, but must make sense within the regime of truth they would uphold. Thus, law and the exception are co-constitutive rather than mutually exclusive. “Sovereign is he who decides the exception.” Like the state of exception it decides, sovereignty is both outside and inside law. On the one hand, it is the ability to found and suspend a juridical order. To that extent sovereignty transcends the law, its decisions seeming to come out of nowhere, like a “miracle.” In saying this Schmitt emphasizes sovereignty’s omnipotence, if not to realize its intentions then at least to decide them. However, even Schmitt recognizes that sovereign decision is not literally a miracle, but has conditions of possibility. Among Agamben’s contributions is in showing that those conditions include the very corpus of law that is to be suspended in the decision of the exception. In this way sovereignty is also inside and limited by law.

### States securitize themselves against UFOs

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

It might be argued that these spatio-temporal threats alone can explain the UFO taboo. On this view, by virtue of the possibility that UFOs are ETs, the UFO calls into question the state’s claim to protect its citizens, which it would be unwilling to admit. Because the threat is so grave, the only rational response is to ignore the UFO. States are enabled in this policy by the fact that UFOs do not (yet) interfere with the conditions of life of human populations, and as such have not compelled recognition. However, at least two considerations militate against reducing the UFO threat to spatio-temporal terms. First, states show little reluctance to ignore other existential threats; if immigrants, pandemics, and terrorists are readily securitized, despite states’ inability to secure their populations from them, then why are not UFOs? Second, given that UFOs do not interfere with modern governance, and with no indication that states actually believe the ETH, the UFO would seem cynically to be an ideal securitization issue. Because it leaves physical traces it can be represented as if it were real, justifying the growth of state power, even as states know the threat is imaginary. To be sure states may have other worries—but then all the more reason to stage a UFO threat to bolster their capacities. Thus, Hollywood notwithstanding, in our view the threat of the UFO is not primarily alien invasion or the black helicopters of world government. Challenges to the “physics” of modern sovereignty are necessary conditions for the UFO taboo, but they are not sufficient.

### Modern sovereignty is unable to make a “decision” about UFOs.

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

An unknown that incorporates the possibility of ETs confounds this metaphysical certainty, creating a situation in which its status as exception cannot be decided. We develop this suggestion using Derrida’s concept of “undecidability,” while arguing that the particular form undecidability takes in the UFO case disrupts its usual operation. Something is undecidable when it “does not conform to either polarity of a dichotomy, (for example, present/absent, cure/poison, and inside/out- side),” but is both at once. Perhaps confusingly, undecidability does not mean a decision cannot be made, but that a decision on which side of the binary an undecidable belongs is compelled. Undecidability is a “condition from which no course of action necessarily follows,” yet which requires a decision to resolve oscillation between dichotomous poles. The UFO is undecidable in this sense, and thus compels decision. However, to “decide” an exception it would seem necessary for the sovereign first to acknowledge the existence of a disturbance in its field of visibility and try to determine what the disturbance is. “Decision,” in other words, suggests an effort to know potential threats rather than merely reenact the norm, if only to make better decisions—yet states have made no meaningful effort to know the UFO. Disturbances may be acknowledged, but then states have mostly abjured a scientific standpoint in favor of public relations on behalf of the established regime of truth, re-affirming that We already know what these (unidentified) objects are (not). The effect is to constitute the UFO as un-exceptional, but not by “deciding.” This suggests that we need to look more closely at the moment of transition from undecidability to the decision, or what Derrida calls the “logic of the palisade,”59 which in this case does not seem to be automatic. More specifically, we propose that the UFO compels a decision that, by the modern sovereign at least, cannot be made. The reason is the particular character of the UFO’s undecidability, at once potentially objective and subjective, each pole of which poses a metaphysical challenge to anthropocentric rule.

# \*\*Anthro Adv\*\*

## Internal Link

### Ideas of ET observation makes us reevaluate society

### Tough 95, Allen Tough, 1995, (Professor at University of Toronto. He has contributed to the fields of [Adult Education](http://en.wikipedia.org/wiki/Adult_Education), [Futures Studies](http://en.wikipedia.org/wiki/Futures_Studies), and [SETI](http://en.wikipedia.org/wiki/SETI)) “Positive Consequences of SETI Before Detection”, http://www.astrosociology.com/Library/PDF/Positive%20Consequences%20of%20SETI%20Before%20Detection.pdf

Photographs of the whole earth from the early space missions gave us a fresh perspective. A more recent photograph from even further away in our solar system gives us the sense of being a small fragile planet--a pale blue dot surrounded by space. SETI provides a third fresh perspective by encouraging us to think about how extraterrestrials might perceive us. As we view ourselves through the "eyes" of distant extraterrestrials, this fresh perspective leads in turn to a fresh way of looking at our society's values, goals, priorities, and foibles. Three aspects of SETI stimulate this fresh perspective by encouraging us to put ourselves **"in the shoes"** of remote extraterrestrials. (a) In order to choose search strategies, scientists must first think through the likely characteristics of whoever is out there, and their likely behaviour toward all other civilizations--in particular toward us since they may somehow be aware of our existence or even have some information about us. (b) During the past few years, at astronautics and SETI meetings, some attention has focused on what we should do about sending a reply after we detect a signal. Such thinking inevitably requires attention to how "they" might react to various sorts of replies that we might send. (c) In general, the whole SETI enterprise stimulates a wide variety of people to begin thinking more seriously about who might be out there and how they might view our society. **By thinking about how a remote civilization might view us, we gain a fresh perspective on our own civilization**. Various specific implications may occur to us. **We may wonder why our society places such emphasis on differences among people when, compared to any extraterrestrial species, we are all quite similar and should feel deeply connected**. We may see more sharply the importance of such priorities as ensuring our long-term survival and flourishing, caring about future generations, accumulating significant knowledge, protecting that knowledge from potential catastrophes, developing a set of universal goals and laws that might apply throughout the galaxy, and reducing our worst foibles and errors (warfare, population growth, environmental degradation). Surely extraterrestrial would wonder why we have not shifted our attention, resources, and efforts toward these key priorities.

## Internal Link

### Politicians infiltrate the scientific community ignoring any discover of Aliens so they can maintain their Power and anthropocentricity

Harrison, 11 [Albert A. Harrison, 2011, (Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis), “After Contact-then What?”, Springer-Verlag Berlin Heidelberg, <http://www.springerlink.com/content/hh8pg40g5l3qk630/fulltext.pdf> pg. 504]

Roberto Pinotti expects contact will create a “crisis of authority” and that Earth’s super powers would quickly be reduced to the status of “Andorra, Monaco, and the Republic of San Marino” (Pinotti, 1990, p. 163). He adds “today’s establishment worldwide would have everything to lose from any form of contact with ETI, since it would be the first victim in a frontal collision between different civilizations” (1990, p. 164). Alexander Wendt and Raymond Duvall (2008) argue that the mere prospect of extraterrestrial intelligence threatens terrestrial political systems. **Government is highly anthropocentric and not receptive to the idea of ETI**. In the old days, Nature and God helped rule, but today, nature is “assumed to lack the cognitive capacity and/or subjectivity to be sovereign, and while God might have ultimate sovereignty, even most religious fundamentalists grant that it is not exercised directly in the temporal world” (Wendt and Duvall, 2008, p. 1). All terrestrial governments rest on an assumption of people governing people. **The prospect of extraterrestrial sovereignty poses a “metaphysical threat” which leads to denial and refusal to look closely for extraterrestrial life**. Seth Shostak and Donald E. Tarter offer opposing views of Government’s reaction to a SETI detection. Shostak is convinced that it is a matter for scientists, and the discovery of that dial tone at a distance will be so remote and irrelevant to politics and everyday life that the entire matter will be left to scientists (Shostak, 2009). The search is “safe” because we will not reveal our presence to them, and there is no easy way for them to get here from there. Donald **Tarter takes the contrary position that scientists are deluding themselves if they think that Government would ignore the discovery (Tarter, 2000**). **As long as SETI remains little more than an exercise the government can afford to treat the activity with benign neglect**. Following an actual discovery, no national leader would risk leaving the matter entirely within the hands of the scientific community. To gain control, authorities will debrief scientists, demand that they sign security oaths, send government agents to monitor signals and hire government analysts try to make sense of the situation. Any hint of danger in the signal itself, or any public unrest, will strengthen government regulation. Decide for yourself if the same governments that spend billions on intelligence gathering, monitor phone calls and computers, fight cyberterrorism and make old ladies take off their shoes before getting on an airplane will be able to ignore evidence of a technologically advanced extraterrestrial civilization

### We view Extraterrestrial Life as the other and therefore a threat to our sovereignty and anthropocentricism and therefore deny the existence without scientific basis

Wendt and Duvall 08**,** Alexander Wendt and Raymond Duvall, August 2008, [Wendt is a prominent scholar in the field of IR. He has taught at Yale, Dartmouth and The University of Chicago][Duvall is a professor at the University of Minnesota. He received his PhD from Northwestern University and specializes in the field of social and political relations] Sovereignty and the UFO, [http://ptx.sagepub.com/content/36/4/607.full.pdf+html](http://ptx.sagepub.com/content/36/4/607.full.pdf%2Bhtml), Sage Journal Online

Unlike some objects, however, the UFO might also have subjectivity (ETs). In itself non-human subjectivity need not be a problem for anthropocentric sovereignty. Although modernity is constituted by a general de-animation of Nature, debates about animal consciousness raise anew the possibility that subjectivity is not limited to humans.64 However, while it may generate anxiety, 65 animal subjectivity does not threaten modern rule either physically or ontologically. Superior intelligence enabled humans long ago to domesticate animals, ensuring that any subjectivity they might have will lie safely “beneath” human rule. By virtue of being in the solar system, in contrast, ETs might have vastly superior intelligence, literally “above” human rule, and thus be sovereign deciders in their own right. To our knowledge no ETs have shown themselves, which means the UFO is not unambiguously subjective (either), but the failure of science to justify ruling out the ETH leaves open the possibility, and that clearly does threaten anthropocentrism. As potential subject, then, **the UFO radically relativizes modern sovereignty, disturbing its homologous character with the threat of unimagined heterogeneity, the sovereignty of the fully alien (non-human) Other**. In short, the UFO poses threats to modern rule on both poles of the object–subject dichotomy that constitutes its undecidability, making a decision in favor of one or the other intrinsically problematic. These threats are metaphysical in the sense of raising epistemological and ontological doubts about the whole anthropocentric idea of modern rule, not just its realizations in actually existing states—and it is the absolute taken-forgrantedness of that idea upon which the ability to mobilize modern power depends. From the standpoint of modern rule, therefore, the threat of the UFO is not unlike that of the Christian’s Second Coming, a potential materialization of the metaphysical. It is the triple threat of the UFO that explains states’ very different response to it compared to other disruptions of modern norms. By calling into question the very basis of the modern sovereign’s capacity to decide its status as exception, the UFO cannot be acknowledged as truly unidentified— which is to say potentially ET—without calling into question modern sovereignty itself. Thus, far from being a *deus ex machina* that, through the decision, intervenes miraculously to safeguard the norm, modern sovereignty is shown by the UFO to be itself a norm, of anthropocentrism—and behind this norm no further agency stands. In this way the UFO exhibits not the standard undecidability that compels a decision, but what might be called a “*meta*”-undecidability which precludes it. The UFO is both exceptional and not decidable as exception, and as a result with respect to it the modern sovereign is performatively insecure. The insecurity is not conscious, but operates at the deeper level of a taboo, in which certain possibilities are unthinkable because of their inherent danger. In this respect UFO skepticism is akin to denial in psychoanalysis: **the sovereign represses the UFO out of fear of what it would reveal about itself**.66 There is therefore nothing for the sovereign to do but turn away its gaze from—to ignore, and hence be ignorant of—the UFO, making no decision at all. Just when needed most, on the palisades, the sovereign is nowhere to be found.

### Ignoring and denying the existence of aliens makes them non-objects rather than objects

### Wendt and Duvall 08, Alexander Wendt and Raymond Duvall, August 2008, [Wendt is a prominent scholar in the field of IR. He has taught at Yale, Dartmouth and The University of Chicago][Duvall is a professor at the University of Minnesota. He received his PhD from Northwestern University and specializes in the field of social and political relations] Sovereignty and the UFO, [http://ptx.sagepub.com/content/36/4/607.full.pdf+html](http://ptx.sagepub.com/content/36/4/607.full.pdf%2Bhtml), Sage Journal Online

One might expect unexplained incidents in NATO airspace to concern the authorities, particularly given that since 1947 over 100,000 UFOs have been reported worldwide, many by militaries.9 However, neither the scientific community nor states have made serious efforts to identify them, the vast majority remaining completely uninvestigated. The science of UFOs is minuscule and deeply marginalized. Although many scientists think privately that UFOs deserve study,10 there are no opportunities or incentives to do it. With almost no meaningful variation, states—all 190+ of them—have been notably uninterested as well.11 A few have gone through the motions of studying individual cases, but with even fewer exceptions these inquiries have been neither objective nor systematic, and no state has actually looked for UFOs to discover larger patterns.12 For both science and the state, it seems, the UFO is not an “object” at all, but a *non*-object, something not just unidentified but unseen and thus ignored.13 **The authoritative disregard of UFOs goes further, however, to active denial of their object status.** Ufology is decried as a pseudo-science that threatens the foundations of scientific authority,14 and the few scientists who have taken a public interest in UFOs have done so at considerable cost. For their part, states have actively dismissed “belief” in UFOs as irrational (as in, “do you believe in UFOs?”), while maintaining considerable secrecy about their own reports.15 This leading role of the state distinguishes UFOs from other anomalies, scientific resistance to which is typically explained sociologically.16 UFO denial appears to be as much political as sociological— more like Galileo’s ideas were political for the Catholic Church than like the once ridiculed theory of continental drift. In short, considerable *work* goes into ignoring UFOs, constituting them as objects only of ridicule and scorn. To that extent one may speak of a “UFO taboo,” a prohibition in the authoritative public sphere on taking UFOs seriously, or “thou shalt not try very hard to find out what UFOs are.”17 Still, for modern elites it is unnecessary to study UFOs, because they are known to have conventional—i.e., non-ET—explanations, whether hoaxes, rare atmospheric phenomena, instrument malfunction, witness mistakes, or secret government technologies. Members of the general public might *believe* that UFOs are ETs, but authoritatively We *know* they are not. In the next section we challenge this claim to knowledge. Not by arguing that UFOs are ETs, since we have no idea what UFOs are—which are, after all, *un*identified. But that is precisely the point. Scientifically, human beings do not know that all UFOs have conventional explanations, but instead remain ignorant.

### Modern sovereignty propagates the notion of otherization. States are afraid of the possibility of ETs because it will challenge Anthropocentrism.

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

Throughout this contestation, however, one thing is taken for granted: sovereignty is the province of humans alone. Animals and Nature are assumed to lack the cognitive capacity and/or subjectivity to be sovereign; and while God might have ultimate sovereignty, even most religious funda- mentalists grant that it is not exercised directly in the temporal world. When sovereignty is contested today, therefore, it is always and only among humans, horizontally so to speak, rather than vertically with Nature or God. In this way modern sovereignty is anthropocentric, or constituted and orga- nized by reference to human beings alone. 1 Humans live within physical constraints, but are solely responsible for deciding their norms and prac- tices under those constraints. Despite the wide variety of institutional forms taken by sovereignty today, they are homologous in this fundamental respect. Anthropocentric sovereignty might seem necessary; after all, who else, besides humans, might rule? Nevertheless, historically sovereignty was less anthropocentric. For millennia Nature and the gods were thought to have causal powers and subjectivities that enabled them to share sovereignty with humans, if not exercise dominion outright. Authoritative belief in non-human sovereignties was given up only after long and bitter struggle about the “borders of the social world,” in which who/what could be sovereign depends on who/what should be included in society. In modernity God and Nature are excluded, although in this exclusion they are also re- included as the domesticated Other. Thus, while no longer temporally sovereign, God is included today through people who are seen to speak on Her behalf. And while Nature has been disenchanted, stripped of its subjectivity, it is re-included as object in the human world. These inclusive exclusions, however, reinforce the assumption that humans alone can be sovereign. In this light anthropocentric sovereignty must be seen as a contingent historical achievement, not just a requirement of common sense. Indeed, it is a metaphysical achievement, since it is in anthropocentric terms that humans today understand their place in the physical world. Thus operates what Giorgio Agamben calls the “anthropological machine.”

### Government tries to control and regulate our perceptions of space in attempt to “anthropomorphise the Other”

Griffin and Acimovic 11, David Griffin and Natasha Acimovic, June 2011, (David Griffin established the UK network of the global exopolitics initiative in 2006) (Acimovic received a degree in Creative writing and the English Language focusing on how language and how it constructs identity. She is now a lecturer at the British College and focuses her work the impact of the alien Other on language and symbolic communication forms) “How Academia Processes the ET Contact Issue and Some Implications for the UFO Community”, Exopolitics Journal, http://www.exopoliticsjournal.com/vol-3/vol-3-4-Griffin-Acimovic.pdf

One pattern that emerges after a period examining how our terrestrial species will engage more advanced, visiting cultures is the conditioned human desire to anthropomorphise the Other and to formulate boundaries around its associated ‘high strangeness’. Right from the post-Roswell initiation of the US National Security state – the various actors tasked with shaping and steering the public response to the issue were aware of what needed to be done to keep the issue of visiting intelligences under control. In the mid 1960s, academic at Colorado University Robert Low issued a memo related to his involvement with the forthcoming Condon Report1 stating: “The trick would be, I think, to describe the project so that, to the public, it would appear a totally objective study but, to the scientific community, would present the image of a group of non-believers trying their best to be objective but having an almost zero expectation of finding a saucer." This careful and covert steering of the Condon Committee was not an isolated direction - several other committees and reports were infiltrated so as to ensure a firm grasp of the perception of the wider exopolitical issues. This policy was made even more effective as we progressed through the post-wardecades by a complicit media. Great Britain used its D-Notice framework – essentially allowing the government or military to prevent publication of an issue and the USA managed to infiltrate and control vast media monoliths by stationing intelligence assets in editorial teams news outlets.2 As we shall see, it’s not just upper government groups that are imposing a framework of ‘imposed ignorance’ or as one academic paper we’ll review terms it an ‘authoritative disregard’ onto wider society – this process has, since the era of the major reports such as Condon and Robertson, become the staple approach for the majority of institutions that come into contact with the issue.

## SETI Solves

### Free ourselves from the idea of anthropocentrism

Paul **Davies** [“Hello... Are we alone in the Universe?”, March 4, 2010, physicist, cosmologist and astrobiologist at Arizona State University http://www.timesonline.co.uk/tol/news/science/eureka/article7039709.ece?token=null&offset=0&page=1]

I’ve been associated with SETI one way or another for most of my career, and have enormous admiration for the astronomers who operate the radio telescopes and analyse the data, as well as for the technical staff who design and build the equipment. I hope the eerie silence is indeed due to the fact that the search has been limited. But I also think that there is only a very slender hope of receiving a message from the stars at this time, so alongside “traditional SETI”, of the sort pioneered by Frank Drake, we need to establish a much broader programme of research, a search for general signatures of intelligence, wherever they may be imprinted in the physical Universe. And that requires the resources of all the sciences, not just radio astronomy. There is, however, another factor that has to be addressed. By focusing on a very specific scenario — an alien civilisation beaming detectable so-called narrow-band (sharp-frequency) radio messages to Earth — traditional SETI has become stuck in something of a conceptual rut. Fifty years of silence is an excellent cue for us to enlarge our thinking about the subject. Crucially, we must free SETI from the shackles of anthropocentrism, which has hampered it from the very beginning. How could something as bold and visionary as SETI become conservative? In my opinion, the way forward is to stop viewing alien motives and activities through human eyes. Thinking about SETI requires us to abandon all our presuppositions about the nature of life, mind, civilisation, technology and community destiny. In short, it means thinking the unthinkable.

### Humans need to get used to the idea of other planets with life on them

Steven J. Dick [United States Naval Observatory “Other Worlds: The Cultural Significance of the Extraterrestrial Life Debate” http://www.jstor.org/stable/1576349 , 1996, pp. 133-137]

Since 1961, the idea of cosmic evolution has been encapsulated in the famous Drake Equation [10]: N= R\*f nefff L, where each symbol on the right side of the equation represents a factor on the way to the number of communicating civilizations in the Galaxy (N). The first three factors are astronomical, estimating respectively the rate of star formation, the fraction of stars with planets and the number of planets per star with environments suitable for life. The fourth and fifth factors are biological, estimating the fraction of suitable planets on which life has developed and the fraction of those life-bearing planets on which intelligence has evolved. The last two factors are social, estimating the fraction of cultures that are communicative over interstellar distances and the lifetime (L) of communicative civilizations. The uncertainties, already shaky enough for the astronomical parameters, nevertheless increase as one progresses from the astronomical to the biological to the social. Depending on whether you are an optimist or a pessimist, the number of civilizations in our galaxy may be estimated at 100 million or 1, the latter number representing our own Earth. (If the pessimists are not careful, they will prove that life does not exist on Earth!) But the significance of the Drake Equation was not that it gave any definitive answer, nor even that it was a tool around which an uncertain discussion could focus, but that it was the very embodiment of the concept of cosmic evolution. This was a concept that the United States National Aeronautics and Space Administration (NASA) SETI program wholeheartedly embraced as a unified research program [11]. Although that program has now lost its federal funding, cosmic evolution from the Big Bang to intelligence is still the guiding idea for astronomical research. SETI, I would suggest, even more than the controversy over terrestrial biological evolution that forms a subset of cosmic evolution, has spread this attitude of cosmic evolution into popular culture.

## SETI Solves

### The Plan will help people accept ‘outsiders’- SETI involves overcoming anthropomorphism

Harrison, Albert A. "The Future of SETI: Finite Effort or Search without End?" Futures 41.8 (2009): 554-61. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology. He has written on habitability requirements for extended duration missions, and the integration of social and technical subsystems to meet advanced mission requirements.

In the late 1990s a privately funded Contact Planning Group developed a broad spectrum of planning scenarios and outlined multiple strategies for managing relations with nonhuman intelligence [2]. The framework for this planning involved three critical uncertainties (familiarity of the intelligence, the speed with which contact unfolds, and the favorableness of the anticipated net effects), five societal sectors (government, business, religion, science, and the media), and four response strategies (cooperation, adaptation, containment, and defense). Each strategy includes shaping public perceptions of the situation, maintaining social cohesion and international stability, and assembling and positioning the resources to mount an effective response.

The most challenging (perhaps foolhardy) task is forecasting the likely nature of extraterrestrial organisms and societies [1,41,42]. As we think about ‘‘the other,’’ anthropomorphism runs rampant, and science fiction themes of angels, devils, and emotionally sterile robots dominate thinking. Some scientists have tried ‘‘reverse engineering’’ to identify the requirements for interstellar communication and then work backwards to identify the behavioral and societal pre-requisites. A certain level of interest in the universe, gregariousness, intelligence, and the ability to launch interstellar communications, are prerequisites for them to make their presence known to us. Yet another strategy is to seek principles of behavior that are ‘‘universal’’ or ‘‘deep’’ in the sense that they hold true across species, cultures, and historical epochs. That is, our knowledge of biosocial entities on Earth gives us a good starting place for organizing our thinking about life everywhere [1,41].

### Plan solves- Constraints of SETI

Harrison, Albert A. "Thinking intelligently about extraterrestrial intelligence: An application of living systems theory." Behavioral Science 38.3 (1993): 189. Academic Search Premier. EBSCO. Web. 19 July 2011. Harrison has written on habitability requirements for extended duration missions, and the integration of social and technical subsystems to meet advanced mission requirements.

Traditionally, both animal behaviorists and anthropologists have urged us to be wary of projecting human characteristics onto non-human entities, and of using human vantage points to form evaluations of them, in part because anthropomorphism and ethnocentrism lead us to confuse self-generated mirror images with reality, and in part because such visions often have a strong evaluative component that leads to unscientific thinking and egocentric behaviors. At the same time, if we discourage speculation we may overlook potentially helpful intellectual frameworks, ignore useful hypotheses derivable from empirical findings on Earth, and abandon a useful exercise that could better position us to understand extraterrestrial intelligence. Furthermore, as cognitive ethologists (e.g. Griffin, 1992; Ristau, 1991ab) are discovering, extrapolation from human experience ("critical anthropomorphism") may offer a good starting point for understanding nonhuman creatures (Burghardt, 1991).

The present review is constrained by: (1) known continuities in the universe; (2) common requirements for life and societies as determined from theory and data; and (3) the constraints imposed by a microwave search, which effectively remove non-technological extraterrestrial societies from our grasp. Whereas we may not be able to forecast alien intellects, personalities, and cultures in any detail, an analysis of known continuities and constraints helps us eliminate highly improbable creatures, narrow the range of possibilities, and identify useful working hypotheses.

Living Systems Theory (LST) provides the conceptual framework for the present discussion (J.G. Miller, 1955ab, 1978, 1986, 1991; J. G. Miller & J. L. Miller, 1990; J. L. Miller & J. G. Miller, 1993). LST disassembles systems of different sizes and complexity and analyzes them in terms of parallel structures and processes. It provides a useful set of categories and dimensions for analyzing extraterrestrial organisms and civilizations, and for comparing them with their human counterparts. Although novel, this paper is not the first application of Living Systems Theory to "life in space" as earlier papers have applied LST to projected manned space missions (Harris, 1992, 101-111; J. G. Miller, 1991).

### Plan key to challenging Anthropocentrism of modern sovereignty.

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

Unlike some objects, however, the UFO might also have subjectivity (ETs). In itself non-human subjectivity need not be a problem for anthropocentric sovereignty. Although modernity is constituted by a general de-animation of Nature, debates about animal consciousness raise anew the possibility that subjectivity is not limited to humans. However, while it may generate anxiety, animal subjectivity does not threaten modern rule either physically or ontologically. Superior intelligence enabled humans long ago to domesticate animals, ensuring that any subjectivity they might have will lie safely “beneath” human rule. By virtue of being in the solar system, in contrast, ETs might have vastly superior intelligence, literally “above” human rule, and thus be sovereign deciders in their own right. To our knowledge no ETs have shown themselves, which means the UFO is not unambiguously subjective (either), but the failure of science to justify ruling out the ETH leaves open the possibility, and that clearly does threaten anthropocentrism. As potential subject, then, the UFO radically relativizes modern sovereignty, disturbing its homologous character with the threat of unimagined heterogeneity, the sovereignty of the fully alien (non-human) Other. In short, the UFO poses threats to modern rule on both poles of the object–subject dichotomy that constitutes its undecidability, making a decision in favor of one or the other intrinsically problematic. These threats are metaphysical in the sense of raising epistemological and ontological doubts about the whole anthropocentric idea of modern rule, not just its realizations in actually existing states—and it is the absolute taken-for grantedness of that idea upon which the ability to mobilize modern power depends. From the standpoint of modern rule, therefore, the threat of the UFO is not unlike that of the Christian’s Second Coming, a potential materialization of the metaphysical.

### Funding SETI key to destroying Anthropocentrism

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

The UFO threat is different in the challenge it poses to the metaphysics of modern sovereignty, which are fundamentally anthropocentric. Because the contemporary capacity to command political loyalty and resources depends upon it, the assumption of anthropocentrism must be unquestioned if modern rule is to be sustained as a political project. As a condition of their own sovereignty, therefore, before modern states can deal with threats to their physical and ontological security, they must first secure this metaphysic. How is this done? Sovereign decision is no help, since modern sovereignty can only instantiate an anthropocentric metaphysic, not step outside to decide the exception to it. So here modern sovereignty must give way to governmentality, or authoritative procedures to make anthropocentrism “known” as fact. In contrast to past processes of normalization in which the visions of shamans or seers were taken to be authoritative, the standards of knowledge in modern governmentality are primarily scientific. Thus, since there is no scientific evidence for miracles, it is known that God does not intervene in the material world. Similarly, since there is no evidence Nature has subjectivity, it is known not to. Anthropocentrism will be secure until scientific evidence to the contrary comes along.

### Alien debates are good because they force us to question ontology and our epistemology (can cause understanding)

Kracher 06, Alfred Kracher, June 2006 (Alfred Kracher is staff scientist at the Ames Laboratory (United States Department of

Energy), Iowa State University, Ames) META-HUMANS AND METANOIA: THE MORAL DIMENSION OF EXTRATERRESTRIALS, Wiley Online Library, <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9744.2005.00741.x/pdf> pg. 330

Aliens, extraterrestrial beings with humanlike intelligence, present us with a peculiar problem: They have been, and continue to be, of great help to us pedestrian Earthlings, even though we cannot be sure that they even exist. Debates about the existence of other worlds and of intelligent extraterrestrial beings have throughout the course of history been of significant help in advancing our knowledge and our understanding of nature, including human nature, and thus understanding of ourselves. No other objects of debate pose quite the same kind of ontological conundrum. For example, not everyone agrees on whether elementary particles such as quarks are “real,” but this is a matter of one’s epistemological position; scientists generally agree about the evidence. Also, some people think fairy stories and myths are important, whereas others dismiss them simply as lies; there is little doubt, however, about the ontological status of fairies as creations of our imagination. It is only with aliens that we have the peculiar problem of having a mythology (or perhaps multiple mythologies) about a potentially real object without being able to prove or disprove its existence. One interesting consequence of this strange ontological status is that aliens, when considered as metaphor, have a peculiar appeal across a range of epistemological attitudes. Rationalists, who tend to dismiss the significance of myth, cannot write off aliens altogether; after all, they might really exist. On the other hand, many of those disenchanted with science put their hope in aliens that are more “spiritual” than those suspect individuals in the white coats who might mess up the world. The peculiar status of aliens as objects of both science and mythology can to some extent serve as a point of contact between such otherwise incompatible views.

## SETI Solves

### Not acknowledging aliens shows our need to confirm the norm and is stabilizing the anthropocentric rule

Wendt and Duvall 08, Alexander Wendt and Raymond Duvall, August 2008, [Wendt is a prominent scholar in the field of IR. He has taught at Yale, Dartmouth and The University of Chicago][Duvall is a professor at the University of Minnesota. He received his PhD from Northwestern University and specializes in the field of social and political relations] Sovereignty and the UFO, [http://ptx.sagepub.com/content/36/4/607.full.pdf+html](http://ptx.sagepub.com/content/36/4/607.full.pdf%2Bhtml), Sage Journal Online

An unknown that incorporates the possibility of ETs confounds this metaphysical certainty, creating a situation in which its status as exception cannot be decided. We develop this suggestion using Derrida’s concept of “undecidability,”55 while arguing that the particular form undecidability takes in the UFO case disrupts its usual operation. Something is undecidable when it “does not conform to either polarity of a dichotomy, (for example, present/absent, cure/poison, and inside/outside),” but is both at once.56 Perhaps confusingly, undecidability does not mean a decision cannot be made, but that a decision on which side of the binary an undecidable belongs is *compelled.* Undecidability is a “condition from which no course of action necessarily follows,”57 yet which requires a decision to resolve oscillation between dichotomous poles. The UFO is undecidable in this sense, and thus compels decision. However, to “decide” an exception it would seem necessary for the sovereign first to acknowledge the existence of a disturbance in its field of visibility and try to determine what the disturbance is. “Decision,” in other words, suggests an effort to *know* potential threats rather than merely reenact the norm, if only to make better decisions—yet states have made no meaningful effort to know the UFO. Disturbances may be acknowledged, but then states have mostly abjured a scientific standpoint in favor of public relations on behalf of the established regime of truth, re-affirming that We already know what these (unidentified) objects are (not). The effect is to constitute the UFO as un-exceptional, but not by “deciding.”58 This suggests that we need to look more closely at the moment of transition from undecidability to the decision, or what Derrida calls the “logic of the palisade,”59 which in this case does not seem to be automatic. More specifically, we propose that the UFO compels a decision that, by the modern sovereign at least, cannot be made. The reason is the particular character of the UFO’s undecidability, at once potentially objective and subjective, each pole of which poses a metaphysical challenge to anthropocentric rule. On the one hand, UFOs appear indeed to be objects, not necessarily in the narrow sense of something hard and tangible, but in the broader sense of natural processes that produce physical effects. The effects are subtle and elusive, which means that UFOs are not unambiguously objects, but radar anomalies and other physical traces suggest something objective is going on. As unidentified object the UFO poses a threat of unknowability to science, upon which modern sovereignty depends. Of course, there are many things science does not know, like the cure for cancer, but its authority rests on the assumption that nothing in Nature is in principle unknowable. UFOs challenge modern science in two ways: (1) they appear random and unsystematic, making them difficult to grasp objectively; and (2) some appear to violate the laws of physics (like the 40g turns in the Belgian F-16 case). This does not mean that UFOs are in fact humanly unknowable, but they might be, and in that respect they haunt modern sovereignty with the possibility of epistemic failure. To see how this might be uniquely threatening it is useful to compare the UFO to three other cases of what might be seen as unknowability.

### Anthropocentrism in modern sovereignty gives states power over subjects.

Alexander Wendt & Raymond Duvall ’08 [Professor Wendt has research and teaching interests in international relations theory, global governance, political theory, and the philosophy of social science at Ohio State University. Raymond Duvall is Professor of Political Science at the University of Minnesota. He regularly teaches courses on international relations theory, global governance, productions and performances of international hierarchy, and critical international political economy.] ‘Sovereignty and the UFO.*’* Political Theory. Volume 36 Number 4.

Modern sovereignty is anthropocentric, constituted and organized by reference to human beings alone. Although a metaphysical assumption, anthropocentrism is of immense practical import, enabling modern states to command loyalty and resources from their subjects in pursuit of political projects. It has limits, however, which are brought clearly into view by the authoritative taboo on taking UFOs seriously. UFOs have never been systematically investigated by science or the state, because it is assumed to be known that none are extraterrestrial. Yet in fact this is not known, which makes the UFO taboo puzzling given the ET possibility. Drawing on the work of Giorgio Agamben, Michel Foucault, and Jacques Derrida, the puzzle is explained by the functional imperatives of anthropocentric sovereignty, which cannot decide a UFO exception to anthropocentrism while preserving the ability to make such a decision. The UFO can be “known” only by not asking what it is.

## Anthro Cards

### Researchers create internal logic to arrive at the desired result of dismissing aliens

Griffin and Acimovic 11, David Griffin and Natasha Acimovic, June 2011, (David Griffin established the UK network of the global exopolitics initiative in 2006) (Acimovic received a degree in Creative writing and the English Language focusing on how language and how it constructs identity. She is now a lecturer at the British College and focuses her work the impact of the

alien Other on language and symbolic communication forms) “How Academia Processes the ET Contact Issue and Some

Implications for the UFO Community”, Exopolitics Journal, Google Scholar, http://www.exopoliticsjournal.com/vol-3/vol-3-4-Griffin-Acimovic.pdf

**What we find by isolating both these frameworks or in Robert Anton Wilson’s term “reality tunnels” is that both claim to have an objective hold on the ET issue [or an objective reason for dismissing it!**] but on closer examination they in fact simply create their own internal logic of rationality for arriving at their desired conclusions. The UFO research community one would assume to be the closest to the phenomenon itself and thus have the best insight. In fact we find that even after several decades of experience, UFOlogy either fails to agree on an overall concept or allows itself to be diverted off into numerous branches supporting different scenarios [Extra-terrestrial hypothesis, ultra-terrestrials, time travelling entities etc] which fail to catalyse the epistemological base of the very collective exploring it. The issue of contact is a case in point. Although we have a vast data-sphere of contactee or experiencer accounts spanning from the 1950s ‘space brothers’ era through to the more recent abduction paradigm, research of this issue appears to be sidelined in favour of continued attention to ‘lights in the sky’ type sightings. Mediated experience continues to be favoured over direct experience – whether those mediating are news agencies, military groups or even an ‘acceptable’ ring of researchers from within the UFOlogical field itself. Why does the very community aligned with those who have unmediated contact appear to have created a hierarchy of “evidence efficacy” which appears to sideline some aspects of how we interact with the alien Other and promote others as ‘legitimate’?

## Aliens as Humans

### Alien aspects reflect human nature

Kracher 06, Alfred Kracher, June 2006 (Alfred Kracher is staff scientist at the Ames Laboratory (United States Department of

Energy), Iowa State University, Ames) META-HUMANS AND METANOIA: THE MORAL DIMENSION OF EXTRATERRESTRIALS, Wiley Online Library, <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9744.2005.00741.x/pdf> pg. 330

Human moral agency is rooted in human self-reflexivity. We are able to watch ourselves think and act and assess potential consequences of our actions. This is an exercise of imagination, and carrying it out requires a kind of conceptual toolbox. Some of the truly indispensable tools are metaphors that illuminate the nature of this peculiar relationship that we have to ourselves when we are both watcher and watched. The *watching self* is of course already a metaphor. We might call this imaginary observer a *meta-human*, in the same sense that a meta-theory is a theory about theories. Closely associated with the metaphor of watching is the one of looking down from above. Getting an *overview* from a higher standpoint is such a commonplace experience that we hardly notice metaphors of altitude in this context. We talk about an *overseer* (*supervisor* in Latinized form) who directs others, and religious leaders are *bishops,* from the Greek word for “looking down on.” Guthke (1990) begins his investigation into aliens in science, philosophy, and literature with the ultimate icon of this self-reflexivity: the images of Earth taken from space by astronauts. This is, in a way, the extraterrestrial’s view of the human situation. The metaphor of looking down from above is linked with yet another one, namely, that we are *on a journey,* and that morality demands that we *go in the right direction.* **We need, as it were, a map, which is itself a device that schematically depicts a landscape as seen from above. If we have lost our way, we have to *turn back.* Such a change of direction, the *metanoia*, or rethinking of where we are headed, is possible only as a result of watching ourselves on the journey, of picturing our path on the moral map**. Ever since the seventeenth century, when John Bunyan wrote *The Pilgrim’s Progress,* the journey as metaphor of spiritual development has been a popular device of religion-inspired fiction.2 Lewis’s consciously Bunyanesque The Pilgrim’s Regress ([1933] 1981) even contains an imaginary map as frontispiece, just like countless fantasy and science fiction novels that unfold in imaginary worlds. Fictional extraterrestrials who come from outer space obviously fit the image of watching from above most closely and therefore are in many ways the ideal meta-humans. This is attested by the many science fiction stories that make implicit or explicit moral points. Moral philosopher Judith Barad, for example, has made a detailed study of the ethical positions and issues in the Star Trek television series (Barad and Robertson 2000). A recurrent topic of many episodes is how to arrive at reasoned moral judgments, both by us humans about aliens and by aliens about us. Taken at face value, these are judgments about each other (the aliens might, for example, stand for another culture here on Earth), but the aim of the stories often is to reflect on our own morality. **The most interesting metaphors are therefore the ones that are valid both ways, meaning that they allow us to evaluate our own attitudes and actions as well as make reasoned judgments about one another**. For much of the history of Christianity God-images presumably have played this role of watching from above. However, we obviously cannot see ourselves the way God sees us, and trying to imagine God’s viewpoint has its dangers. **Whatever its merits as a means of reflecting on our own conduct, judging others as if we could ourselves assume God’s viewpoint is alarmingly prone to abuses**. If we persist in trying to put ourselves into God’s place we should end up not godlike but rather insane with megalomania. For this reason Christian storytellers often have employed an intermediary— a metaphorical watcher who knows God’s viewpoint but is not identical with God. Such supernatural watchers in older stories come to resemble the aliens in modern ones. Thus the aliens in some contemporary stories are clearly the angels of old transplanted into a science fiction milieu.3 Developing adequate metaphors of reflection is very important because of the complexity of moral reasoning. This complexity constantly drives us to unwarranted simplifications either in the direction of moral dualism or toward a denial of the pervasive nature of evil. My hypothesis that aliens capture our imagination primarily through their moral function as meta-humans (rather than, for example, their scientific interest) suggests the necessity for an analysis that links their artistic function with moral complexity and epistemological sophistication. Inventing a story about aliens can help to concretize a complex scenario and to some degree resist the temptation to oversimplify.

### Aliens are reflections of our imagination and embody our ideas

Kracher 06, Alfred Kracher, June 2006 (Alfred Kracher is staff scientist at the Ames Laboratory (United States Department of

Energy), Iowa State University, Ames) META-HUMANS AND METANOIA: THE MORAL DIMENSION OF EXTRATERRESTRIALS, Wiley Online Library, <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9744.2005.00741.x/pdf> pg. 330

What good is imagination if it does not lead to practical results? In a way, the source of the problem here is the illusion that imagination is unconstrained. But in reality it is precisely by finding useful and valid constraints that we can put our imagination to work to do something useful. Creativity is more than imagination. Psychologist Rollo May (1975) has called creativity a passion for form. Creative solutions are obtained by giving shape to things imagined. Aliens are particularly useful here, because the aliens we imagine (in fiction, philosophy, or movies) **give form to certain ideas—they embody them, in the literal sense of the word—and this can let us discover problematic consequences of these ideas or at least come to see them more clearly**. There are, then, two complementary limitations to our imagination, which may be summarized thus: We do not and perhaps cannot imagine everything that is possible in our world (Haldane’s limit), and We can and do imagine things that are impossible or entirely useless in our real world (Loos’s limit). Both limitations affect the use of imaginary aliens in moral argument.

# \*\*Alien Contact Advantage

## Contact Good—Peace/Unification

Contact with ET will unify humankind- perception of threat will motivate humans to cooperate

Michaud ’07 [Michael, Deputy Assistant Secretary of State for Science and Technology, and as Science and Technology Counselor at the American embassies in Paris and Tokyo, “Contact With Alien Civilization”, 2007, page 292-293]

A remote detection might have a temporary unifying effect, suggested a group of scholars, if political leaders capitalized on the new mood and moved toward greater international cooperation, conciliation, and resolution of differences. However, in the absence of an imminent threat or prospect of immediate gain for humanity, there is little reason to expect that any new sense of shared human destiny would last long enough to cause enduring political change. Regis, questioning the argument that contact would inspire unity among humans, pointed to a historical parallel. The discovery of the Americas did not have anything like the effect on Europeans that SETI advocates insist that discovery of extraterrestrials will have on us. It did not make differences between Europeans more trivial; it did not serve as an integrating influence among them; it did not make them more tolerant and peace-loving. What if we find no others? Consistently negative results of SETI programs might reinforce a belief that Humankind is unique. Some believe that this will convince humans of the importance of ending conflict among themselves to preserve their species. Direct contact might have a greater unifying impact, stimulated by fear. If there were a perception of potential threat, nations might be motivated to work together for the common defense.

### **Contact will bring greater stability- new ideas will lead to social change**

Michaud ’07 [Michael, Deputy Assistant Secretary of State for Science and Technology, and as Science and Technology Counselor at the American embassies in Paris and Tokyo, “Contact With Alien Civilization”, 2007, page 293]

Even in the case of remote contact, information-rich messages could cause a discontinuity. We might be flooded with new ideas and new ways of doing things; that influx could drive social change. As MacGowan and Ordway put it, new social science and operational science information would accelerate social evolution. By implication, they would be destabilizing. Alien technologies and ideas about the forms and purposes of economic organization could suggest new opportunities for innovation and growth, or less damaging prosperity. They also could disrupt our economies by undermining independent initiative and the spirit of invention, forcing massive readjustment and unemployment, and threatening existing economic institutions. Rubin foresaw that shortcuts to advanced technology might carry such unintended negative consequences as displaced workers, overpopulation, psychological stress, and social unrest if people came to believe that their governments were powerless or irrelevant.

### There are two possible types of contact – and both would bring about an abundance of advances.

Tough, 11 [Allen, Professor Emeritus at the Ontario Institute for Studies in Education, University of Toronto, SETI, Past, Present, and Future]

When SETI succeeds, two types of contact are possible: 1. One possibility is simply evidence that another advanced intelligence exists somewhere in the Universe, with little information about its characteristics and no dialogue. One example is evidence of a Dyson sphere or some other major astroengineering project many light-years away, with no additional information about its creators. Another example is a radio message that arrives from many light-years away but is not successfully decoded even after many years of effort. 2. The second possibility is contact that yields a rich storehouse of knowledge about the alien intelligence and its history, technology, science, values, social organization, and so on. This could occur through an encyclopedic radio or optical message that we manage to decode. Because of recent progress in nanotechnology, artificial intelligence, and space exploration, we now realize that close-up contact with a small but super-smart probe is at least as likely a scenario. In fact, by monitoring our telecommunications, the probe will likely have learned our languages and be able to communicate with us quite effectively: no decoding necessary! We might well receive practical information and advice that helps our human civilization to survive and flourish. Possible examples include technology, transportation, a new form of energy, a new way of producing food or nourishing ourselves, a feasible solution to population growth, more effective governance and social organization, fresh views on values and ethics, and inspiration to shift direction dramatically in order to achieve a reasonably positive future. The message might also bring home to people the importance of eliminating warfare or at least eliminating weapons of extraordinary destruction. Viewing ourselves from an extraterrestrial perspective might be very useful in reducing our emphasis on differences and divisions among humans, and instead seeing ourselves as one human family. We might gain new insights and knowledge about deep major questions that go far beyond ordinary practical day-to-day matters. Topics in an encyclopedia-like message or close-up dialogue could include astrophysics, the origin and evolution of the Universe, religious questions, the meaning and purpose of life, and answers to philosophical questions. We might receive detailed information about the other civilization (which might be deeply alien to us) and about its philosophies and beliefs. Similar information could be provided about several other civilizations throughout our Galaxy, too. We might even receive a body of knowledge accumulated over the past billion years through contributions by dozens of alien civilizations throughout the Galaxy. What sorts of consequences will contact have for our religious ideas and institutions? Some religions may be deeply shaken by contact, or at Afterword522 least need to re-examine their set of beliefs. It seems clear, however, that humanity’s religions have already flourished over many centuries despite a variety of scientific discoveries that conflict with religious views. And several religions have already incorporated the idea of extraterrestrial life. Although some religious leaders may denounce an extraterrestrial dialogue, most will surely embrace it as further evidence of God’s infinite greatness. Richly detailed information from an alien civilization might transform our view of ourselves and our place in the Universe, even our ultimate destination. We might gain a much deeper sense of ourselves as part of intelligent life and evolving culture throughout the universe – or at least part of a galactic family of civilizations. We might develop a deeper sense of meaning and connectedness to a Universe filled with biology and intelligence. A new cosmotheology or global/cosmic ethic might arise, or a powerful secular movement of altruistic service to the Universe and its long-term flourishing.

### Benefits outweigh risk in a contact scenario.

Angelo, 85 [Joseph, Author, The Extraterrestrial Encyclopedia: Our Search For Life in Outer Space]

Of course, we cannot assume that contact with an alien civilization is without risk. Four general risk categories have been discussed. Many individuals now feel that the potential benefits (also previously described) far outweigh any possible concerns. Simply to listen for the signals radiated by other intelligent life does not appear to pose any great danger to our planetary civilization. The real hazard issue occurs if we decide to respond to such signals. Perhaps a planetary consensus will be necessary before we answer an “interstellar phone call”. It is also interesting to note here, however, that our ultrahighfrequency (UHF) television signals are already propagating far out into interstellar space and will possibly be detectable to some 25 to 50 light-years’ distance. Are aliens tonight examining a decades-old episode of Gunsmoke as a message from Earth?

## Contact Good—Global Peace

### Contact with aliens creates global alliance

Tarter 2000, Donald E Tarter, 2000, (Donald E. Tarter is Associate Professor of Sociology at the University of Alabama in Huntsville) “Security Consideration in Signal Detection”, Pergamon, http://www.sciencedirect.com/science?\_ob=MImg&\_imagekey=B6V1N-412S314-M-1&\_cdi=5679&\_user=1458830&\_pii=S0094576500000382&\_origin=&\_coverDate=06%2F01%2F2000&\_sk=999539989&view=c&wchp=dGLzVlb-zSkWl&md5=0320c060902666b73666730204d8c8e8&ie=/sdarticle.pdf)

First, governments will want to ascertain if there is any possible threat to the security of the nations of Earth. The second driving force will be the realization that this is a discovery which affects all nations of Earth, so all have a legitimate interest in its proper management. It is likely that almost every national leader will instruct their security agencies to promptly initiate communication and coordination with other nations to better understand this matter. This will produce a most unusual global alliance of national security agencies. For the first time in history, we humans will be able to cast our suspicions and concerns not upon one another but upon the non-human presence somewhere out there. No national leader is likely to be prepared to risk leaving this matter entirely within the hands of the scientific community. All are likely to agree that this discovery needs a high level of international governmental management and co-ordination.

### Alien Contact Brings World Peace

Fresh is Back, Harvard Educated Blogger, “Aliens for World Peace,” July 20th, 2009 (<http://freshisback.com/2009/07/20/aliens-2/>)

**I am sorry for all of these threats to humanity: for our divisive politics, for the wanton hate in the world**, and for a tumbling economy that would drive thieves after three-wheelers. **But, I have a solution. A solution that will boost our economy, bring people together, and elevate our relations with countries around the world:** Bring on the aliens. **Yes, aliens. Imagine flying saucers, little green men, and Joan Rivers’ face. I’m serious here. It seems that most of the world’s troubles derive from our human nature to seek a common enemy. So, think about it: The guys running Area 51 call up their alien pals and say, “Come on in!”** Thousands of alien spaceships fly through the hole in the ozone layer created by global warming. These aliens are smart (since they have spaceships) and angry (since they’ve been on a very, very long road trip with no rest stops). **Bound together by fear, and a renewed belief in our collective humanity, we shed our ideological differences and stand hand-in-hand with our human neighbors** as we watch the fireworks above. Of course, this is assuming that the aliens actually want to attack us. Instead, **if they are coming in peace, then it would seem rather inhumane to mercilessly eliminate them**… But **if aliens can bring us (human) world peace, then I say, bring us the aliens.**

## SETI Key

### SETI is key to Proper Exopolitics—don’t Have to Find Anything—The Very Search That We are Attempting to reunite Ourselves With the Universe is enough

Alfred Webre, Yale-trained environmental lawyer, former General Counsel to New York’s Environmental Protection Administration and International director of the Institute for Cooperation in Space, Exopolitics: Politics Government and Law in the Universe, 2005 (<http://ebookee.org/Exopolitics-Politics-Government-and-Law-in-the-Universe_514119.html>)

The Search for Extraterrestrial Intelligence (SETI) program could be an important interactive step in reaching out to join interstellar society. But SETI has its conceptual limitations. Universe society knows full well that Earth is populated. The deliberate isolation of our planet is understood and enforced throughout the Universe. But SETI’s very existence is a plus for Earth. SETI proves that humanity is at a developmental stage where it can acknowledge interaction with other intelligent civilizations. SETI embodies our first institutional steps to reach out to fellow civilizations in the Universe. These civilizations already know, of course, that we are in enforced isolation. SETI’s true significance is that humanity can exhibit rational social behaviour in outer space.

Programs like SETI are a starting point for interactive Exopolitics. To search for extraterrestrial intelligence, we must first acknowledge Earth as a quarantined planet in an interstellar society. In order to achieve open contact with intelligent extraterrestrial civilizations, a complete transformation of SETI’s conceptual framework must occur. Scientists Frank Drake and the late Carl Sagan founded SETI in the 1960s. SETI’s concept of the Universe is in some sense founded on the famous Drake Equation. This equation, as set out by Frank Drake and SETI, is: N = R\* fp ne fl fi fc L N is said to equal the total number of intelligent, communicating civilizations in our galaxy, the Milky Way. According to Drake, these are those “whose electromagnetic signals and/or emissions are detectible.” As “N” turns out to be a relatively large number, it is this equation that is thought to justify the search for extraterrestrial intelligence. Drake hesitates to estimate precisely how many civilizations there are in the Milky Way galaxy. In arriving at the total number of planets with intelligent, communicating civilizations on them in the Milky Way galaxy, he lists the following factors in his nowfamous Drake equation: (R\*) the Rate of formation of stars suitable for development of intelligent civilization; (fp) the fraction of the R\* stars which have planets; (ne) the number of planets in each such (fp) solar system that are suitable for life; (f1) the fraction of these (ne) planets on which life actually develops; (fi) the fraction of these (f1) life-bearing planets on which intelligent life develops; (fc) the fraction of planets with intelligent life on which a

technological civilization develops and releases signals of its existence into space; and (L) the length of time these intelligent civilizations release such signals into space.

Drake himself admits that the result of this equation is highly problematical. The entire formula is based on only one sample – that of the intelligent civilization of Earth. Thus, the result is apt to be either a human projection of evolution on Earth, or a total speculation about evolution elsewhere in the Universe. There are no factors in the equation on which SETI is based that reflect the true and practical determinants of human communication with Universe civilizations. The Drake equation and the present SETI program do not contain a factor which states “Earth in quarantine; communication not permitted.”

SETI can search galaxy after galaxy for signals from extraterrestrial civilizations, without apparent response, and conclude its efforts have gone unrecognized by intelligent civilizations. Yet nothing could be further from the truth. SETI is not fundamentally flawed; it is just incomplete in terms of its approach. Interstellar civilizations are busy monitoring us to see whether the conditions for response and dialogue have been met. SETI’s task is not just scientific communication. Rather, its true task is exopolitical. How do we humans present ourselves where higher intelligence would want to communicate? How do we begin the dialogue to end the quarantine and resume an open membership in interplanetary society?

## Aliens Exist

### Mediocrity- means intelligence exist and can communicate with us.

Project Cyclops: a Design Study of a System for Detecting Extraterrestrial Life. Moffett Field, CA: NASA/Ames Research Center, 1971

It will be seen that in their totality argue that the Galaxy contains a tremendous number of planets on which life could start, and evolve, and that there is nothing special about Earth to favor it over the others. Sagan refers to this as the "assumption of mediocrity." It is important to note that the assumption of mediocrity does not imply that living systems elsewhere will have compositions and forms identical to those of Earth. Indeed, such a coincidence would be too improbable to expect. Nor does it imply that life began on every suitable planet, or that it evolved inevitably to possess intelligence and technological prowess. It does imply that the basic processes of stellar, chemical, biological, and cultural evolution are universal and, when carried to fruition, lead to technologies that must have close similarities to ours today and in the future. Regardless of the morphology of other intelligent beings, their microscopes, telescopes, communication systems, and power plants must have been at some time in their history, almost indistinguishable in working principles from ours. *To* be sure there will be differences in the order of invention and application of techniques and machines, but technological systems are shaped more by the physical laws of optics, thermodynamics, electromagnetics, or atomic reactions on which they are based, than by the nature of the beings that design them. A consequence of this is that we need not worry much over the problem of exchanging information between biological forms of separate origin. For we share with any intelligence we might contact a large base of technology, scientific knowledge, and mathematics that can be used to build up a language for conveying subtler concepts.

### Mediocrity principle proves life in universe

Project Cyclops: a Design Study of a System for Detecting Extraterrestrial Life. Moffett Field, CA: NASA/Ames Research Center, 1971

We have outlined the development of technologically competent life on Earth as a succession of steps to each of which we must assign an a priori probability less than unity. The probability of the entire sequence occurring is the product of the individual (conditional) probabilities. As we study the chain of events in greater detail we may become aware of more and more apparently independent or only slightly correlated steps. As this happens, the a priori probability of the entire sequence approaches zero, and we are apt to conclude that, although life indeed exists here, the probability of its occurrence elsewhere is vanishingly small. The trouble with this reasoning is that it neglects alternate routes that converge to the same (or almost the same) end result. We are reminded of the old proof that everyone has only an infinitesimal chance of existing. One must assign a fairly small probability to one's parents and all one's grandparents and (great) grandparents having met and mated. Also one must assign a probability on the order of 2--46 to the exact pairing of chromosomes arising from any particular mating. When the probabilities of all these independent events that led to a particular person are multiplied, the result quickly approaches zero. This is all true. Yet here we all are. The answer is that, if an entirely different set of matings and fertilizations had occurred, none of "us" would exist, but a statistically undistinguishable generation would have been born, and life would have gone on much the same. It is not important that the particular sequence of events leading to intelligent life on Earth be repeated elsewhere, but only that some sequence occur that leads to a similar end result. Thus, the key question is not whether the precise conditions causing a particular sequence are replicated elsewhere, but whether the forcing functions are present and whether enough alternate routes exist. The origin and evolution of life would appear to be favored if a planet provides a wide variety of environments-that is, a range of values for every important parameter. Since all planets will have a range of climate from poles to equator, most will have tilted axes and therefore seasons, and many will have both seas and land and therefore solar tides, we can expect the variety of environments found on Earth to be common. For all we know, life on Earth may have had serious setbacks and been forced to re-evolve (refs. 12, 14). If this is true, the genesis time on many planets may have been much shorter than four billion years.

### Aliens exist- conditions for life on earth throughout Universe

Harrison, Albert A. "Thinking intelligently about extraterrestrial intelligence: An application of living systems theory." Behavioral Science 38.3 (1993): 189. Academic Search Premier. EBSCO. Web. 19 July 2011. UC Davis, Social Psychology. Harrison has written on habitability requirements for extended duration missions, and the integration of social and technical subsystems to meet advanced mission requirements. Recently he has begun writing on SETI

CONTINUITIES IN THE UNIVERSE Extraterrestrial creatures, like terrestrial creatures, live in an orderly Universe. It is constructed of the same building blocks and governed by the same natural laws. As far as we can tell, the same physical laws prevail throughout the Universe, and Russian SETI experts expect a similar equivalence of laws governing life (Davoust, 1991, 31). The same general assumptions and methods that make it possible to conduct scientific studies of humans should be equally forceful when applied to sophonts.

ISOTROPISM AND UNIFORMITY As Ferris (1992,17) points out, the Universe is isotropic and uniform. This means that, in whichever direction we happen to look, the Universe looks pretty much the same. Spectrographic analyses of heavenly objects and, closer to home, studies of meteorites confirm that the same basic materials that are found on Earth are found elsewhere. These include not only the same elements that constitute living matter, but also heavy hydrocarbons and amino acids that are life's more complex building blocks (Davoust, 1991, 1-19; Ponnaperuma, Honda & Navarro-Gonzalez, 1992; Seielstad, 1989, 209). For example, with the exception of helium, the six most abundant elements in the Universe are those that constitute living matter: carbon, nitrogen, oxygen, sulfur, and phosphorous (Ponnaperuma et al., 1992). Organic molecules have been identified in at least fifty galaxies (Davoust, 1991, 73), and scientists have found tiny extraterrestrial structures that resemble fossilized bacteria on Earth (Hoyle & Wickramsinghe, 1991).

## Link-SETI finds ETI message

### Proper funds can find ETI in 25 years

UPI 10, UPI,staff writers at Space Daily, August 16 2010, (UPI is a creditable group for international publishing), “Scientist: SETI Success within 25 years?” Space Daily, <http://www.spacedaily.com/reports/Scientist_SETI_success_within_25_years_999.html>

The search for extraterrestrial intelligence could yield proof of its existence within 25 years, a U.S. scientist involved in the quest says.  Speaking at the SETI Con convention in Santa Clara, Calif., Seth Shostak -- senior [astronomer](http://www.spacedaily.com/reports/Scientist_SETI_success_within_25_years_999.html) at the Search for Extraterrestrial Intelligence Institute in Mountain View, Calif. -- said, "I actually think the chances that we'll find ET are pretty good," [SPACE.COM](http://SPACE.COM/) reported Monday.  "Young people in the audience, I think there's a really good chance you're going to see this happen," he said.  **The SETI search will take a giant step forward when the Allen** [**Telescope**](http://www.spacedaily.com/reports/Scientist_SETI_success_within_25_years_999.html) **Array, a network of radio dishes under construction in northern California, is fully operational**, Shostak said. By 2015, the array should be able to scan hundreds of thousands of stars for signs of extraterrestrial intelligence, he said.  Detecting an alien signal within 25 years is one thing, but figuring out the message could take much longer, [Shostak](http://www.spacedaily.com/reports/Scientist_SETI_success_within_25_years_999.html) said.  An alien civilization would likely be as technologically advanced compared to us as Homo sapiens are to our hominid relatives Neanderthals, he said.  "We could give our digital television signals to the Neanderthals, and they'll never figure it out. And they're not stupid," he said

### SETI expects message at the least

Squeri, Lawrence. "When ET Calls Is SETI Ready." Journal of Popular Science 37.3 (2004): 478-96. Lawrence Squeri is professor of history and department chairman at East Stroudsburg University of Pennsylvania. He is researching a book on SETI.

The SETI community has given much thought to the receipt of a signal of apparent extraterrestrial origin. First, scientists at the receiving radio telescope should inform colleagues at other radio telescopes around the world. If there is universal agreement to the signal’s legitimacy, an announcement is made to the media. But receipt of a signal will by no means begin a conversation. The signal may be indecipherable; humanity will know only that it is not alone in the vast universe. Perhaps, after years of patient work, code breakers will decipher part of the signal. In the best scenario, the message is easily understood, perhaps because the extraterrestrials have thoughtfully included hints on how to understand their message.

Even in this best scenario, a phone conversation is out of the question. The vast distances of space can make radio waves seem slow. At the speed of 186,000 miles per second, a radio signal would require 4.5 years to reach Alpha Centauri, one of the closest stars to the sun. If the message comes from a very distant star system, it may have been sent centuries ago. If extraterrestrials have not found a faster means of communication that they are willing to share, we have to settle for digesting their initial message, knowing fully well that they may no longer exist or that their civilization may have changed drastically over the ages. The extraterrestrial message has been compared to an ancient manuscript from a lost civilization on Earth. It provides the thought processes of beings we will never see.

### Odds of contact are high

Project Cyclops: a Design Study of a System for Detecting Extraterrestrial Life. Moffett Field, CA: NASA/Ames Research Center, 1971

To have a 63 percent chance of success we must search lip target stars. If the search takes r years per star, the mean search time will be r rT Ls- - (17) P FLr where we have written L r for L to indicate the length of the radiative phase. If interstellar communication is not an already established reality in the galaxy and various races, like ourselves, make sporadic attempts at both searching and radiating, we might assume that Lr=L s in (17) and obtain Pr rT Ls\_>\_ Taking r = 1000 sec ---3X 10-s years, we find Ls > 560 years (18) which means we might have to search 100 to 10,000 stars, requiring only from 1 day to 4 months, depending on F. If interstellar communication already exists and its participants have good reason to continue it, the acquisition of our first contact may be far easier than we would otherwise expect. We thus come to the viewpoint that interstellar communication is a phenomenon with some of the attributes of life itself. It is difficult to explain how it got started, but once started it tends to perpetuate itself. Just as for life itself, interstellar communication is unlikely to have originated in any single trial (by some earlier race), but there have probably been millions of attempts over billions of years only one of which needs to have been successful to start the whole process. We can think of many situations that may have triggered interstellar communication initially: 1. A race realizes its primary star is nearing the end of its main sequence lifetime and simply transmits This represents a truly formidable effort, but one we might be willing to make if we were sufficiently convinced of the existence of extraterrestrial intelligent life, of the potential value of contact, and of the validity of our search technique. On the other hand, if interstellar communication already exists, the situation is likely to be very different as a result of what Von Hoerner (ref. 26) has called the "feedback effect." The radiative history of a typical civilization might then be as depicted in Figure 2-11. After an initial search phase of duration S, during which the civilization radiates a beacon signal, with probability Pr, contact is established for reasons that will soon become clear. The civilization then finds itself part of a galactic community that shares the obligation to facilitate acquisition by other civilizations. This might mean radiating a beacon for a fraction o of the time for a very long period L. (Or such beacons might be established for reasons we are completely unable to foresee or under- stand.) The radiative phase would then have an effective duration: Lr = prS + eL (19) 2. 3. its history and knowledge with no hope of reply. Detection of these messages would provide other races with the existence-proof of other life needed to justify a prolonged search. Planetary systems exist for which ne > 1, and advanced life on one planet discovers reasonably evolved life on another planet, thus encouraging the effort at contact with other planetary systems. The random distribution of stars places two or more advanced cultures fortuitously close to each other so that first efforts quickly bear fruit. Perhaps leakage signals are detected first. This situation is more likely in dense regions such as star clusters or the galactic nucleus. t f(t) \_s 1----\_ Ls = \_ F years (20) 6 Figure 2-11. Radiative history of a civilization assuming interstellar communication exists. We might, not unreasonably, expect eL to be as great as 108 years. Taking r = 3× l0--s years we then find from (17) 3X 10-a 27The imaginative reader will have no difficulty adding We postulate that interstellar communication, having now a reality for countless races. We postulate also that participation in this linked community of intelligent beings confers advantages that greatly outweigh the obligations. We view the qualifications for admission as a combination of technical prowess, which the Cyclops study shows we have, plus faith that the expectation of success justifies the effort, which we may or may not have -yet.

## Contact Good—Peace

### Aliens will be nice

Shermer, Michael. "The Myth of the Evil Aliens." Scientific American 304.6 (2011): 89. Military & Government Collection. EBSCO. Web. 15 July 2011. Michael Shermer is publisher of Skeptic magazine

I am skeptical. Although we can only represent the subject of an N of 1 trial, and our species does have an unenviable track record of first contact between civilizations, the data trends for the past half millennium are encouraging: colonialism is dead, slavery is dying, the percentage of populations that perish in wars has decreased, crime and violence are down, civil liberties are up, and, as we are witnessing in Egypt and other Arab countries, the desire for representative democracies is spreading, along with education, science and technology. These trends have made our civilization more inclusive and less exploitative. If we extrapolate that 500-year trend out for 5,000 or 500,000 years, we get a sense of what an ETI might be like.

In fact, any civilization capable of extensive space travel will have moved far beyond exploitative colonialism and unsustainable energy sources. Enslaving the natives and harvesting their resources may be profitable in the short term for terrestrial civilizations, but such a strategy would be unsustainable for the tens of thousands of years needed for interstellar space travel.

In this sense, thinking about extraterrestrial civilizations forces us to consider the nature and progress of our terrestrial civilization and offers hope that, when we do make contact, it will mean that at least one other intelligence managed to reach the level where harnessing new technologies displaces controlling fellow beings and where exploring space trumps conquering land. Ad astra!

### ETI solves- teach us their secret to survival

Shuch, H. Paul. "The Search for Extraterrestrial Intelligence." Futurist 37.3 (2003): 52. Military & Government Collection. EBSCO. Web. 18 July 2011. (H. Paul Shuch serves as executive director of the SETI League, an international alliance of amateur and professional radio-astronomers and others engaged in circuit design, software development, and grassroots SETI research.)

I've skipped over that other alternative: that we could well encounter a civilization just a little bit more advanced than ours--one that, in its recent history, has beaten its exo-swords into exo-plowshares. One that has learned, in generations not too remote, to harness its planet's resources in an environmentally responsible way, to embrace genetic engineering with compassion and reason, to ensure the survival of its species through cooperation rather than conflict. These are lessons we need to learn if we are to survive the next thousand years or so and thus to reach their level. If we're incredibly fortunate, their transmissions might contain their own social and cultural history, including a glimpse into their crossroads and crises. But even lacking such details, a signal received from such a society will testify to life's capacity for survival against long odds. We would do well to learn from their example.

Part of that example is in the medium itself. If beings from a modestly advanced civilization choose to fling photons our way, then we can conclude that they have deemed it safe to do so. Here, too, we might do well to learn from their example by abandoning our planetary paranoia and beginning to transmit warm greetings to other young civilizations near our point on the developmental continuum. Should the phone happen to ring, etiquette demands we answer it pleasantly.

### Technology Adv- ETI have more than enough resources and will share

Harrison, Albert A. "Thinking intelligently about extraterrestrial intelligence: An application of living systems theory." Behavioral Science 38.3 (1993): 189. Academic Search Premier. EBSCO. Web. 19 July 2011. UC Davis, Social Psychology. Harrison has written on habitability requirements for extended duration missions, and the integration of social and technical subsystems to meet advanced mission requirements. Recently he has begun writing on SETI

Technology. High technology is a given, since any society that we will contact through a SETI-like search must have a level of technological sophistication that is at least equal to our own. However, it is more likely that we will contact a society that is far more advanced than ours, since there is a better chance that an old and highly developed (rather than a young and emerging) civilization will overlap ours in time (Drake & Sobel, 1992, 160). Thus, the expectation is that some of their technology may strike us as "magic." Perhaps nanotechnology, just emerging on Earth, will be highly developed. This allows the creation of complex materials and devices by means of the careful assemblage of individual atoms and molecules (Peterson, 1991).

A few societies may have progressed to interstellar transportation, either through the development of advanced propulsion systems or finding ways to make a voyage tolerable. Possibilities of varying degrees of plausibility include: (1) faster than light travel, in defiance of Einstein's theory of relativity (Birch, 1984; Herbert, 1988, 41-59); (2) the use of" cosmic wormholes" or other shortcuts through the universe (Forward, 1986; Halpern, 1992); (3) cryonic suspension or some other form of suspended animation (Hands, 1985); (4) reliance on time dilation (as derived from Einstein's theory of relativity and demonstrated empirically) which has the practical effect that at very fast speeds travelers will "age" less than those who are left behind (Herbert, 1988, 47); and (5) the acceptance of multigenerational missions involving, perhaps, self-contained "world ships" which are both societies and vehicles (Martin, 1984) or multiple missions whereby in a series of small steps a population fans out across the Universe (Jones & Finney, 1985).

Given the expected level of technology, most of the reasons advanced for fearing aliens (occupation of our planet, slavery, rape of Earth's resources) are implausible. It is hard to believe that a society sufficiently advanced to support interstellar travel (a requirement for occupying our planet) would be unable to satisfy its basic resource requirements. The same "Drake Equation" (Davoust, 1991, 116118; Drake & Sobel, 1992, 50-61) that suggests a million civilizations in one Galaxy suggests many times that number of planets bearing immense resources but not intelligent life itself. These resources would be free for the taking and their exploitation would not require competition with the local inhabitants.

At the level of the society, institutions and agencies maintain and repair the system. Akin to systems that, at the individual level, provide immunity and promote healing and growth, these include educational institutions, churches, mental hospitals, prisons, and other service and welfare organizations. What form might such organizations take? On Earth, essentially all societies have institutionalized means to ensure obedience to authority, independence, and responsibility for one's peers. In a society where individuals have indefinite life spans, accidental death may be the only real threat. Under these conditions sophonts might be very safety conscious, establishing mechanisms to eliminate all hazards (Drake & Sobel, 1992, 160).

### ETI will provide a galactic religion of peace eliminating war

Squeri, Lawrence. "When ET Calls Is SETI Ready." Journal of Popular Science 37.3 (2004): 478-96. Lawrence Squeri is professor of history and department chairman at East Stroudsburg University of Pennsylvania. He is researching a book on SETI.

Sagan’s skepticism toward organized religion is not uncommon in SETI circles. Jill Tarter, one of the few women in SETI and allegedly the inspiration for the Jodie Foster character in the movie Contact, minces no words: ‘‘ . . . bad people do evil things; good people do good things. But it takes religion to make a good person do something really bad.’’ Tarter believes we must outgrow ‘‘adamist’’ religions if we wish to avoid religious wars and survive. An advanced civilization will have outgrown ‘‘organized religion as we know it.’’ If not, it will not have survived. According to Tarter, extraterrestrials probably have a universal religion that allows coexistence with technologies and does not precipitate violence. Or ET may have completely outgrown religion. Either way, we have something to learn from ET, believes Tarter. SETI activists take for granted that contact will validate their religious views or lack thereof.

### Aliens will be able to help Humanity

Project Cyclops: a Design Study of a System for Detecting Extraterrestrial Life. Moffett Field, CA: NASA/Ames Research Center, 1971

 Since we are only recently able to signal over interstellar distances, or to detect such signals, any race we contact will be at least as advanced as we in the technologies involved, and probably mote so. There are thus some potentially valuable tutorial benefits to science and technology from contact with other cultures. However, the round trip delay times are apt to be on the order of a century or more, so any information exchange will not be in the form of a dialogue with questions asked and answers given, but rather in the nature of two semi-independent transmissions, each a documentary exposition of the salient facts about the society doing the sending-its planetary data, its life form, its age, its history, its most important knowledge and beliefs, any other cultures it may have already contacted, etc. Thus, although over the course of a century or more we might receive a tremendous amount of information, the rate of reception, the gaps in the picture, and the effort needed to construct a model of the other race from the data received would prevent any violent cultural shock. It seems virtually certain that if we are successful in establishing interstellar contact we will not be the first civilization to have done so. In fact it may well be that interstellar communication has been going on in our Galaxy ever since the first intelligent civilizations evolved in large numbers some four or five billion years ago. One of the consequences of such extensive heavenly discourse would be the accumulation by all participants of an enormous body of knowledge handed down from race to race from the beginning of the communicative phase. Included in this galactic heritage we might expect to find the totality of the natural and social histories of countless planets and the species that evolved: a sort of cosmic archeological record of our Galaxy. Also included would be astronomical data dating from several aeons ago, perhaps pictures of our own and neighboring galaxies taken by long dead races that would make plain the origin and fate of the universe. If such a heritage exists it will not only illuminate our future, but the past as well. Access to such a treasury would certainly be worth the cost of Cyclops many times over. Far more important in the long run than the "synchronization" of the scientific development of the cultures in contact would be: 1. The discovery in one another of the social forms and structures most apt to lead to self-preservation and genetic evolution. 2. The discovery of new aesthetic forms and endeavors that lead to a richer life. 3. The development of branches of science not accessible to one race alone but amenable to joint efforts. 4. The end of the cultural isolation of the human race, its entry as a participant in the community of intelligent species everywhere, and the development of a spirit of adult pride in man, rather than childish rivalry among men. Indeed the salvation of the human race may be to find itself cast in a larger role than it can at present visualize, one that offers a cosmic future but one that requires a reorientation of our philosophy and of our mores to fulfill.

### Funding SETI means a chance at entering the super-special awesome intergalactic club

Squeri, Lawrence. "When ET Calls Is SETI Ready." Journal of Popular Science 37.3 (2004): 478-96. Lawrence Squeri is professor of history and department chairman at East Stroudsburg University of Pennsylvania. He is researching a book on SETI.

A better religion is not the only benefit of contact. Sagan and other SETI enthusiasts were so caught up in Cold War angst that they saw salvation from the stars. They posited the existence of a ‘‘Galactic Club,’’ a network of extraterrestrial civilizations in touch with each other, through physical contact, radio, or by some unknown means. It is assumed that these civilizations have shared knowledge. Once we contact a single one, we will know the universe’s secret of survival. As a bonus, humanity will have access to the wisdom of these civilizations, which Carl Sagan termed the ‘‘Encyclopedia Galactica’’ (a term borrowed from Isaac Asimov’s science fiction novel Foundation). Potential benefits are endless: new technologies, new insights in all branches of knowledge, and perhaps even cures for killer diseases.

The concept of the Galactic Club is very comforting, for it suggests a deus ex machina that will set humanity on the right path, and it expresses the very human longing for a better future. Or perhaps the Galactic Club may have a less mystical and a more prosaic origin: SETI scientists have watched too many Star Trek episodes and have internalized its vision of a future United Federation of Planets.

## SETI K2 Contact

### SETI produces consensus for messaging aliens

Vakoch, Douglas A. "Responsibility, Capability, and Active SETI: Policy, Law, Ethics, and Communication with Extraterrestrial Intelligence." *Acta Astronomica* (2011): 514-19 (Department of Clinical Psychology, California Institute of Integral Studies, Center for SETI Research, SETI Institute)

In response to the advances in SETI programs and the prospect in the near future that we may be faced with the detection of evidence that we are not alone in the universe, since the 1980s, under the auspices of the International Academy of Astronautics (IAA) and the International Institute of Space Law (IISL), legal experts, scientists, and technologists have devoted significant attention to legal and policy issues relevant to SETI [6]. This discussion has drawn upon precedents from space law and other legal principles to provide guidance about the transmission of messages from Earth to any extraterrestrial intelligence that might be detected in the course of SETI research, summarized as so-called ‘‘post-detection protocols.’’

Some have argued that essentially the same legal and policy considerations apply whether one is replying to a signal from an already detected civilization, or whether one is transmitting without prior knowledge that an extraterrestrial civilization exists. Others suggest that decisions about whether to transmit from Earth de novo, prior to detecting extraterrestrial intelligence, may require a different deliberative process than traditional, Passive SETI. Guillermo Lemarchand and Donald Tarter, for example, have analyzed the protocol called the ‘‘Declaration of Principles Concerning Activities Following the Detection of Extraterrestrial Intelligence’’ [7]. Some have observed that, based on this document, there should be no transmissions of any sort prior to broad-based international consultation. Specifically, they highlight Article 8, which reads ‘‘No response to a signal or other evidence of extraterrestrial intelligence should be sent until appropriate international consultations have taken place.’’ In contrast, Lemarchand and Tarter argue that ‘‘the existing SETI protocol does not specifically prohibit active predetection search strategies. It is, after all, a ‘post-detection’ protocol.’’ (p. 140).

By time of the 2006 International Astronautical Congress, held in Valencia, Spain, the international SETI community had moved to a point at which there was widespread support for the view that the existing SETI protocols should not be construed to apply to de novo transmissions. An editorial in Nature [8] maintained that ‘‘the Valencia meeting voted against trying to set up any processes for deliberating over the style or content of any spontaneous outgoing messages,’’ (p. 606) though it would be more accurate to say that the group that met in Spain simply proposed that the current SETI protocols remain silent on the issue of Active SETI, given the different circumstances of replying to a signal from another civilization and of transmitting without prior knowledge that the hoped recipient actually exists. At that same congress, though independent of these discussions of the IAA’s SETI Permanent Study Group, Ricky Lee’s [9] review of legal and policy issues related to SETI included the recommendation that the existing protocols should be modified to distinguish ‘‘between a communication sent by the Earth that is directed at a known alien civilization and a general attempt at creating communications with such unknown alien civilizations’’ (p. 5).

### SETI requires truthfulness for a response

Vakoch, Douglas A. "Responsibility, Capability, and Active SETI: Policy, Law, Ethics, and Communication with Extraterrestrial Intelligence." *Acta Astronomica* (2011): 514-19 (Department of Clinical Psychology, California Institute of Integral Studies, Center for SETI Research, SETI Institute)

While we may not be in a formal legal relationship with extraterrestrial intelligence for some time, we may still benefit from ‘‘metalagalactic’’ guidelines for appropriate interstellar communication [15]. For example, Aldo Armando Cocca [16] identifies a dozen principles ‘‘rich in legal content in a brief code’’ to guide the actions of SETI researchers. Among these is the ‘‘principle of truthfulness,’’ which states that ‘‘The addressee of messages or signals must never be intentionally deceived.’’ (p. 129). Cocca extends this emphasis on truthfulness to other terrestrial researchers as well in a separate principle, also identified as the ‘‘principle of truthfulness,’’ which states that ‘‘Researchers must always observe due loyalty vis-a-vis all other researchers.’’ (p. 129).

Ernst Fasan [17] conveys a similar emphasis on truthfulness, at least about our intentions to act in certain ways toward extraterrestrials, when he suggests the following as an important concept to communicate to extraterrestrial intelligence: ‘‘If we promise something, we shall keep our word; if you promise something, please do the same.’’ (p. 134). However much we might agree that we have a responsibility to be truthfulness in interstellar messages, following through on that intent may be difficult. As Goldsmith [18] notes after approvingly recalling Fasan’s call for truthfulness, ‘‘In view of the notorious difficulty of separating truth from falsity, even this simple rule may prove difficult to apply. Does exaggeration count as untruthfulness, as when Thomas suggested that we broadcast nothing but Bach?’’ (p. 150).

## SETI Key

### SETI does stuff- they have an objective look on finding ETI

Squeri, Lawrence. "When ET Calls Is SETI Ready." Journal of Popular Science 37.3 (2004): 478-96. Lawrence Squeri is professor of history and department chairman at East Stroudsburg University of Pennsylvania. He is researching a book on SETI.

SETI scientists have demanded hard evidence of alien visitations. According to Albert Harrison, a psychologist at the University of California at Davis, who has written extensively on SETI, there must be ‘‘(a) skepticism, verification, peer review, and the scientific method, (b) strict safeguards against hoaxes, self-delusion, and erroneous data, and (c) protocols to avoid premature and immodest claims.’’ This scientific rigor may give academic respectability to SETI but is simply ignored by much of the public.

Like all elites with professional credentials, SETI has to suffer the existence of self-styled experts. Ufologists who write and lecture on alleged human contacts with extraterrestrials have captivated much of the public. These ufologists do not write and speak with the precision of the scientific community; they do not use its specialized jargon, nor do they have the facility with mathematical formulae—and they do not care. By insisting that extraterrestrials have visited the Earth, they proclaim a greater insight into the cosmos than SETI, whose admission of not having contacted extraterrestrials can be seen as an admission of failure. In our nonjudgmental, postmodern culture, ufologists even manage to share the spotlight with SETI. Popular documentaries on television pay attention to alleged government cover-ups of flying saucer crashes, autopsies of alien visitors, abductions into spaceships, and other strange tales.

### Radio telescopes will not become outdated for SETI

*Project Cyclops: a Design Study of a System for Detecting Extraterrestrial Life*. Moffett Field, CA: NASA/Ames Research Center, 1971

Cocconi and Morrison pioneered the new era of serious scientific study of the possibility of interstellar communication with their 1959 paper in Nature (ref. 1). In that paper we find many of the arguments still thought to be central in the quest for signals originated by other intelligent life. Within a few years several other papers appeared by Bracewell, Drake, Dyson, Handelsman, Huang, Oliver, Sagan, Shklovskii, and others. These were followed by five major works on interstellar communication: Cameron's 1963 collection of original papers (ref. 2), Sagan and Shklovskii's fundamental and lucidly written review of 1966 (ref. 3), Dole's 1964 (revised 1970) study of habitable planets (ref. 4), and It will be seen that in their totality these premises two Russian contributions-a 1964 conference report argue that (ref. 5) and Kaplan's 1969 compendium (ref. 6). Drake (ref. 7) and Sullivan (ref. 8) have written excellent popular books on the subject. The former is a compact summary for students, the latter a comprehensive review addressed to the educated layman. bibliography is also available (ref. 9).

It is perhaps significant to note Cyclops study examined many advances in technology that have occurred in the interim, the basic approach selected does not differ essentially from that proposed by Cocconi and Morrison twelve years ago, and espoused by Drake. The intervening years have greatly increased the search capability of feasible systems, but have not altered the part of the spectrum to be used. We do not feel this represents a lack of imagination in the present study, but rather a validation of the original thinking on the subject. There is also an implication that this thinking has attained some status of stability if not maturity. Some competing view points are reexamine in Appendix B.

## Contact Good—Morality

### Benefit from Alien technology- high moral and technological standards

Harrison, Albert A. "Thinking intelligently about extraterrestrial intelligence: An application of living systems theory." Behavioral Science 38.3 (1993): 189. Academic Search Premier. EBSCO. Web. 19 July 2011. UC Davis, Social Psychology. Harrison has written on habitability requirements for extended duration missions, and the integration of social and technical subsystems to meet advanced mission requirements. Recently he has begun writing on SETI

Discussing work by anthropologist Shirley Ann Vaurughese, Ridpath (1978,143) proposes that we grade societies both in terms of technology and social development. By this somewhat ethnocentric definition of development, societies that have achieved only a low level of development are likely to be unstable, conflict-laden, and warlike. Those that have achieved a high level of social development would be stable and peaceful. The most dangerous society would have high technological but low social development--that is, great ability to inflict harm but little self-control. As Deardorff (1987) points out, the "principle of mediocrity" which suggests that humans have mediocre intelligence may extend into the realm of values (ethics, social responsibility) as well.

### Aliens won’t be mean- if they were they already would’ve blown themselves up

Harrison, Albert A. "Thinking intelligently about extraterrestrial intelligence: An application of living systems theory." Behavioral Science 38.3 (1993): 189. Academic Search Premier. EBSCO. Web. 19 July 2011. UC Davis, Social Psychology. Harrison has written on habitability requirements for extended duration missions, and the integration of social and technical subsystems to meet advanced mission requirements. Recently he has begun writing on SETI

SETI proponents believe that it is a very old civilization that we are most likely to encounter, for the longer a society endures the more likely that it will overlap ours in time. Careful consideration was given the possibility that very few civilizations would make it past the early nuclear age, with the result that very few would share our civilization's time frame. Current speculation is that although many civilizations may destroy themselves early on, those that work through their early nuclear age can endure for millions of years (Drake & Sobel, 1992, 68). From one point of view, since they will have already moved past their era of conflict, we may expect them to be peaceful (Drake & Sobel, 1992, 195).

# \*\*Solvency—US Key\*\*

## United States Only Country Suitable For SETI

### The United States is the only country that can take the initiative in SETI. US is key to global cooperation.

**NASA 1977**. The Search for Extraterrestrial Intelligence

The United States has frequently demonstrated the will and foresight to take the initiative in programs of worldwide benefit. The US space program has provided not only excitement and scientific knowledge, but numerous practical satellite services not for this country alone, but for the whole world. It is the same spirit of providing a focal point for international cooperation and support that we feel the US can and should take the initiative in SETI. The material, technological and intellectual resources of the US are such that a large-scale SETI program could be carried on indefinitely by this country alone without appreciable drain on the economy. There are good reasons for believing the net effort on the economy could be positive. Even if international cooperation were slow to materialize, we believe SETI remains a feasible and worthwhile US endeavor. The psychological of the mechanisms for international cooperation suggest that an international SETI effort is unlikely until one big nation, such as the US seizes the initiative and invites serious participation by others. It is in this sense of initiative and not in the pursuit of narrow national advantage that we recommend a leading role for the US in SETI.

### The US is key to the search for ET intelligence – and it has to happen soon.

Tough ’00 [Allen, Professor Emeritus at the Ontario Institute for Studies in Education, University of Toronto, Foundation for the Future, 2000, “When SETI Succeeds: The Impact of High-Information Contact”, www.futurefoundation.org/documents/hum\_pro\_wrk1.pdf , p. 15, 21 July 2011]

If contact is delayed for centuries, it will impact people who may be very different from us. Recent years have seen enormous changes in philosophy, science, and popular beliefs. Certainly, we expect that, compared to people who believed that the Sun circles the Earth, who never heard of evolution, and who never read science fiction, the people of today would respond very differently to ETI. Similarly, the people of tomorrow may have values, interests, and technologies that differ substantially from our own and for this reason react to ETI in ways that we cannot imagine.

### The Federal Government must take action for SETI

### Martin **Dominik** and John C. **Zarnecki** [The detection of extra-terrestrial life and the consequences for science and society, Dominik- University of St Andrews, Zarnecki- 2Planetary and Space Sciences Research Institute (PSSRI ), 20**11** http://ejscontent.ebsco.com/ContentServer.aspx?target=http%3A%2F%2Frsta%2Eroyalsocietypublishing%2Eorg%2Fcontent%2F369%2F1936%2F499%2Efull%2Epdf%3F%26UCI\_FMT%3DKEV%26UCI%2EUserIP%3D141%2E161%2E8%2E93%26UCI%2EPID%3D00101990]

While scientists are obliged to assess benefits and risks that relate to their research, the political responsibility for decisions arising following the detection of extra-terrestrial life cannot and should not rest with them. Any such decision will require a broad societal dialogue and a proper political mandate. If extraterrestrial life happens to be detected, a coordinated response that takes into account all the related sensitivities should already be in place. In 1989, the International Academy of Astronautics (IAA) approved a SETI post-detection protocol [51], which was developed by one of its committees. Despite the fact that it has subsequently been endorsed by the International Institute of Space Law (IISL), the Committee on Space Research (COSPAR) of the International Council for Science (ICSU), the International Astronomical Union (IAU) and the International Union of Radio Science (URSI), the procedures laid out in that document are not legally enforcible. If it remains a voluntary code of practice, it will probably be ignored in the event to which it should apply. Will a suitable process based on expert advice from proper and responsible scientists arise at all, or will interests of power and opportunism more probably set the scene (cf. [52])? A lack of coordination can be avoided by creating an overarching framework in a truly global effort governed by an international politically legitimated body. The United Nations for a constitute a ready-made mechanism for coordination. Member States of the Committee on the Peaceful Uses of Outer Space (COPUOS) will need to place ‘supra-Earth affairs’ on the agenda in order to take it further to the General Assembly, with the goal of establishing structures similar to those created for dealing with threats arising from potentially impacting near-Earth objects [53].

## Government needed to avoid craze among people

### Government key to avoiding public panic

Harrison, 11 [Albert, Department of Psychology, University of California, “SETI Past, Present, and Future, After contact, then what?”]

Government would do well to have a strong central planning effort to deal with “detection day.” The principal goal should be to have a workable plan in place. This would establish jurisdictions, assign roles, and above all make provision for a coordinated but flexible response. To minimize public perceptions of dishonesty Government should avoid premature statements (confident pronouncements before the facts are in) and coordinate claims made by different spokespersons so that they are consistent with one another. Government could enlist the help of damage control experts (such as those that tell businesses what to do following recall of an unsafe product) and third party public relations experts whose goals are to inform and persuade.

## Government is key to spur funds

### Government key to spur funding and the beginning of a changed mindset towards aliens.

Kerr, 05 [Richard, Journalist at Science, Science Mag, http://www.sciencemag.org/content/309/5731/88.full, Are We Alone In The Universe?]

The technology may well be available in coming decades, but SETI will also need money. That's no easy task in a field with as high a “giggle factor” as SETI has. The U.S. Congress forced NASA to wash its hands of SETI in 1993 after some congressmen mocked the whole idea of spending federal money to look for “little green men with misshapen heads,” as one of them put it. Searching for another tippy-top branch of the evolutionary tree still isn't part of the NASA vision. For more than a decade, private funding alone has driven SETI. But the SETI Institute's planned $35 million array is only a prototype of the Square Kilometer Array that would put those tens of millions of stars within reach of SETI workers. For that, mainstream radio astronomers will have to be onboard—or we'll be feeling alone in the universe a long time indeed.

## Private and Government Funding combined

### The U.S. should fund SETI along with private entities.

Webb 05 [John, President Instarsat LLC, http://www.instarsat.com/pdf/P1.Webb.pdf , 12/2/05 p.1]

The new vision for space exploration (Reference 1) challenges both the civil and private space enterprise (commercial) space sectors, in the US and internationally, to embrace and pursue innovative policies, methodologies, best practices, and new technologies in the pursuit of a bold and energizing set of space exploration goals. New and innovative approaches to achieving robotic space exploration goals are opportunities to facilitate the advancement of the new space exploration vision. As the reality of political and budgetary constraints begins to way heavily on decision makers and key stakeholders, a shift in space exploration priorities jeopardizes the future of a robust program of science missions. Consequently, this shift in priorities will redirect resources towards the development of relevant science missions that specifically support the new vision for space exploration (Reference 2). Therefore, it is evident that a significant gap in other future robotic solar system exploration programs will exist. To address the need to continue a robust, comprehensive, and systematic program of robotic exploration of our solar system and beyond, a non-traditional approach to advance future space science objectives for robotic solar system exploration must be undertaken. It will require the full participation of civil, private, and scientific stakeholders within the space community embracing the concept of, and working together to build the framework for broader cooperation. A viable and realistic framework of broader cooperation advancing space exploration goals is a valuable operational construct that has the potential of expanding space science programs further, that otherwise may be lost to other programmatic priorities. Private space enterprise initiatives, as complimentary programs to civil space, addresses this fundamental problem with a solution that contributes responsibly to the continuance of the purposeful (scientifically driven) and successful pursuit of robotic solar system exploration while advancing civil and commercial space exploration goals.

### Cooperation among the entities will lead to a greater good.

Webb 05 [John, President Instarsat LLC, http://www.instarsat.com/pdf/P1.Webb.pdf , 12/2/05 p.1]

The proposed framework of cooperation between civil space and private space enterprise encompasses a non-traditional innovative approach towards achieving space exploration goals. The importance of space industry competitiveness, innovation, and investments in technology are key contributions that will further promote the success of future robotic solar system exploration. These contributions coupled with a unique complimentary approach of robotic solar system exploration, will also result in the robust development and growth of viable and sustainable space business initiatives The building blocks for a viable and realistic framework of broader cooperation between civil space, private space enterprise, and the science community, nationally and internationally, are the technological and scientific achievements gained by all who share in the pursuit of, participation in, and contribution to, a shared vision of making cooperative initiatives in robotic solar system exploration a reality.

## SETI is key for USFG

### **SETI is key to international affairs**

Harrison,[ Albert A. "The Future of SETI: Finite Effort or Search without End?" Futures 41.8 (2009): 554-61. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology. He has written on habitability requirements for extended duration missions, and the integration of social and technical subsystems to meet advanced mission requirements.]

Several ‘‘wild cards’’ could forever change the nature SETI. The first is government involvement. SETI has been a peaceful activity. The scientists involved have been quite open about their activities and look to international organizations such as the United Nations to assure order and progress. Governments could become involved if classified state-of-the-art technology detects hints of extraterrestrial intelligence, or if officials conclude that the scientists are about to hit pay dirt. Under these conditions scientists could be replaced by security agents, detailed reports by highly censored news releases, and openness by secrecy [43]. Rather than being a celebratory event for everyone, the discovery could become a bargaining chip in international affairs.

### U.S. Government needs to have space capabilities—Us is key

DOD ’11,[Department of Defense, January, “National Security Space Strategy”, http://www.defense.gov/home/features/2011/0111\_nsss/docs/NationalSecuritySpaceStrategyUnclassifiedSummary\_Jan2011.pdf]

U.S. space capabilities will continue to be fundamental for national security. DoD and the IC will identify, improve, and prioritize investments in those capabilities that garner the greatest advantages. We will develop, acquire, field, operate, and sustain space capabilities to deliver timely and accurate space services to a variety of customers, from soldiers to national decision-makers. We will enhance interoperability and compatibility of existing national security systems, across operational domains and mission areas, to maximize efficiency of our national security architecture; we will ensure these characteristics are built into future systems. We will ensure that data collection and products are released at the lowest possible classification to maximize their usefulness to the user community. Ensuring U.S. capabilities are developed and fielded in a timely, reliable, and responsive manner is critical for national decision-makers to act on time-sensitive and accurate information, for military forces to plan and execute effective operations, and for the IC to enable all of the above with timely indications and warning. Improving our acquisition processes, energizing the U.S. space industrial base, enhancing technological innovation, and deliberately developing space professionals are critical enablers to maintaining U.S. space leadership. In cooperation with our industrial base partners, DoD and the IC will revalidate current measures and implement new measures, where practicable, to stabilize program acquisition more effectively and improve our space acquisition processes. We will reduce programmatic risk through improved management of requirements. We will use proven best practices of systems engineering, mission assurance, contracting, technology maturation, cost estimating, and financial management to improve system acquisition, reduce the risk of mission failure, and increase successful launch and operation of our space systems.

## Why the United States Federal Government Should Fund SETI

### Privatized SETI does not have enough funds

Steel, 95 [Duncan, professor of Physics at the University of Michigan, “Tunguska and the Kagarlyk meteorite”, The Observatory, June, p.135, http://adsabs.harvard.edu/full/1995Obs...115..136S].

Jean Heidmann, Chair of the now defunct Local Organizing Committee, points out that the highlighted programme touches the most profound aspects of humankind. Be as it may, in the privatized world of SETI the participation of a wide circle of specialists, from historians and psychologists to philosophers and space lawyers, is prevented because of the lack of financial support.

### SETI telescopes inactive- lack of government funds.

Mckie, 2010 [Robin, “First Contact”, science editor of The Observer Sydney Morning Herald, Health and Science p.19. February 25]

With the consistent refusal by governments to fund SETI programs, its practitioners have had to borrow time on astronomical radio telescopes, usually for only a few days at a time. At best, they have been able to look at a few promising stars over a range of a few radio frequencies. Shostak compares it to "like trying to do medical research when you have to go next door to borrow a microscope for a couple of hours at most". However, SETI scientists are now building their own telescopes, a classic example being the Allen Array, funded through a $11.5 million donation from Paul Allen, the co-founder - with Bill Gates - of Microsoft. To date, 42 radio telescopes, each with a six-metre diameter, have been erected north-east of San Francisco. When the project is complete, 350 dishes will transform earthlings' hunt for aliens.

## **Long Term Benefit**

### The government- think of long term benefit

### Allen **Tough** [PHD, professor at the University of Toronto “Crucial Questions about the future” 19**91**]

In addition to developing future-relevant knowledge and fostering widespread understanding among citizens, a third priority is necessary for achieving a satisfactory future. This third strategy consists of far-reaching improvement in policy-making, governance and public administration. In order to be successful, these processes need to be well intentioned, well-informed, responsive to the most important needs of the citizens, and focused on the overall well-being of the total population. They should build on the future-relevant knowledge and widespread learning that we have just finished discussing. They also need to emphasize fundamental priorities, a global perspective, the long-continuing future of human civilization, and equality of opportunity for future generations. A large body of literature discusses possibilities for improving policy-making and governance, including deep-seated structural changes, in order to deal with the complex overwhelming, rapidly changing global and regional problems of today, Instead of devoting an entire chapter to this topic let me simply select five aspects that I consider especially important. First, it is important that a *long term perspective* be built into the planning policy making and governance processes. As Richardson (1987, p.12) has pointed out, “owing to the momentum inherent in the world’s physical and social processes, policy changes made soon are likely to have more impact with less effort than the same set of changed made later. By the time a problem is obvious to everyone, it is often too far advanced to be solved,” Although 30-year or 100-year perspective would be adequate for most problems, some potential long term environmental problems may require looking 500 years into the future (Tonn, 1986). Forrester (1973, p.208) noted that there is usually a fundamental conflict between the short-term and long-term consequences of a policy: “A policy which produces improvements in the short run within five to then years is usually one which degrades the system in the long run, beyond ten years. Likewise, those policies and programs which produce long-run improvement may initially depress the behavior of the system. This is especially treacherous. The short run is more visible and more compelling. It speaks loudly for immediate attention. But a series of actions all aimed at short-run improvement can eventually burden a system with long-run depressants so severe that even heroic short-run measures no longer suffice."

# \*\*Solvency—SETI Key\*\*

## SETI Key

### SETI is key- discoveries would solve worldwide issues and advance our human civilization

### **Tough 2k** [Allen, PhD Professor at the University of Toronto 2000: “An Extraordinary Event” 7, <http://ieti.org/tough/articles/intro.htmMLF> 6-21-11]

We might well receive practical information and advice that helps our human civilization to survive and flourish. Possible examples include technology, transportation, a new form of energy, a new way of producing food or nourishing ourselves, a feasible solution to population growth, more effective governance and social organization, fresh views on values and ethics, and inspiration to shift direction dramatically in order to achieve a reasonably positive future. The message might also bring home to people the importance of eliminating warfare or at least eliminating weapons of extraordinary destruction. Viewing ourselves from an extraterrestrial perspective might be very useful in reducing our emphasis on differences and divisions among humans, and instead seeing ourselves as one human family.

### SETI is key- E.T. would provide insight and knowledge about unanswered questions

### Tough 2k [Allen, PhD Professor at the University of Toronto 2000: “An Extraordinary Event” 7, http://ieti.org/tough/articles/intro.htmMLF 6-21-11]

We might gain new insights and knowledge about deep major questions that go far beyond ordinary practical day-to day matters. Topics in an encyclopedia-like message or closeup dialogue could include astrophysics, the origin and evolution of the universe, religious questions, the meaning and purpose of life, and answers to philosophical questions. We might receive detailed information about the other civilization (which might be deeply alien to us) and about its philosophies and beliefs. Similar information could be provided about several other civilizations throughout our galaxy, too. We might even receive a body of knowledge accumulated over the past billion years through contributions by dozens of alien civilizations throughout the galaxy.

**SETI is essential for education- it helps us learn and understand the universe better**

**Tough 2k** [Allen, PhD Professor at the University of Toronto, “When SETI Succeeds: The Impact of High-Information Contact”, July, http://www.futurefoundation.org/documents/hum\_pro\_wrk1.pdf]

Post-contact society is likely to affect our views of ourselves in at least three ways. First, it will speed awareness that we are part of the biological universe (Dick, 1996). Contact, even under minimum detection scenarios, is likely to accelerate our views of ourselves as part of cosmic man or “interstellar humanity,” to extend the terminology of Olaf Stapleton’s “ interplanetary man” (Dick, this volume ). Many other factors—such as our progress in spacefaring—will contribute to our consciousness of the cosmos.

**SETI is essential for equality- discoveries will lead us to treaty everyone equally**

**Tough 2k** [Allen, PhD Professor at the University of Toronto, “When SETI Succeeds: The Impact of High-Information Contact”, July, http://www.futurefoundation.org/documents/hum\_pro\_wrk1.pdf]

Second, knowledge of relationships among extraterrestrial subpopulations could help us gain insight into intergroup relations on Earth. We may learn, for example, from how ETI societies treat different societies as well as their own subpopulations. This discovery could cause us to reﬂect on how we ourselves treat people from different cultures and subcultures. By seeing how ETI manages diversity, we may learn new models for group relations on Earth.

### SETI is uniquely key because it was developed for exploration and to understand human actions after “contact”

### **Harrison and Dick 2000**, Albert A Harrison and Steven J. Dick, (professor at the University of California at Davis) (United States Naval Observatory) “When SETI Succeeds: The Impact of High-Information conflict” Future Foundation, http://www.futurefoundation.org/documents/hum\_pro\_wrk1.pdf

As we attempt to forecast humanity’s long-term future, the possibility of contact between human and extraterrestrial intelligence requires careful thought. Australian astronomer Ray Norris (1998) points out that our ability to conduct radio telescope searches continues to increase dramatically, and estimates a 50–50 chance of a confirmed detection within the next ten years. This estimate is based on only one of many possible search strategies. If extraterrestrial intelligence exists, given a thousand-year time perspective and burgeoning technology, its discovery may not be so much of a “wild card” as a high probability— perhaps inevitable—event. The **scientists who formulated SETI, the scientific search for extraterrestrial intelligence, were keenly interested in how people would react to “contact,” or incontrovertible evidence that we are not alone in the universe** (Finney, 1999; Morrison, Billingham, and Wolfe, 1977; Swift, 1990). Most past discussions of the impact of contact (Berenzden, 1973; Billingham et al., 1999; Harrison, 1997; Morrison et al., 1977; US Congress, 1961) were predicated on the microwave search strategy, and emphasized people’s initial reactions to the discovery of extraterrestrial life.

## Seti Key to econ

### Seti cost affective- Cuts in seti Future communication Possibility of ETI

### Christopher *Cokinos*, June 18, 2011, Los Angeles Times, “Funding cut to the Search for Extraterrestrial Intelligence and the death of curiosity”, http://www.latimesSETI Have KILLED the Allen Array—Small Disputes Over Funding Have

.com/news/opinion/commentary/la-oe-cokinos-seti-20110618,0,1241870.story

In a country where some corporations do not pay taxes, millionaires get farm subsidies and a presidential candidate can run up a half-million-dollar tab at Tiffany's, we're deferring an attempt to answer one of our most enduring (and least inexpensive to answer) questions: Are we alone in the universe? SETI: A June 18 Op-Ed article on funding for radio telescope research characterized the question "Are we alone in the universe" as one of the least inexpensive to answer. It is, rather, one of the least expensive to answer. Certainly we don't cotton to the idea of being alone. We yearn for the big signal from the stars, the cosmic hail. When Stephen Hawking warns us against contacting E.T. because we might end up invaded by Klingons, we argue about it around the water cooler. We thrill to "Contact" and "District 9" and play video games featuring tentacled aliens. We tune in when Carl Sagan and Timothy Ferris explain outer space on TV. Yet we're surprisingly unwilling to put our money where our imaginations want to roam. News that the Allen Telescope Array is "hibernating" — a curiously biological term for shutting down 42 radio telescopes designed to listen for signs of life from other worlds — raises questions about our true commitment to the search for extraterrestrial intelligence. The National Science Foundation recently slashed the University of California's budgets for the Allen array by 90%. This, along with state cuts, has left UC Berkeley, which operates the Hat Creek, Calif., array in the Cascade Mountains, and the private SETI Institute, which conducts searches, in the lurch. For now, the phone is off the hook — as it was in 1994 when Sen. Richard Bryan (D-Nev.) derided NASA's "Martian chase" and successfully shut down its SETI — "Search for Extraterrestrial Intelligence" — program. It would cost each U.S. taxpayer just 3 cents a year to fund the Allen array, according to SETI Institute Senior Astronomer Seth Shostak. But in this political environment, direct taxpayer support is unlikely, so the SETI Institute is trying to raise $5 million to reboot the array. Donors such as Microsoft's Paul Allen stepped up after NASA's project died; it's for him that the array is named. In fact, SETI's best hope may be the private sector. Privately financed astronomy is nothing new. In the 18th and 19th centuries — the heyday of private observatory building — such work was in part spurred by interest in alien life. It's an interest that, despite present budget tribulations, runs deep. As scholars Steven Dick and Michael Crowe have shown, we can trace the idea of an infinite universe full of other worlds to pre-Socratics like Democritus. This view was marginalized by more famous philosophers, such as Aristotle, and later, by a church fearful of anything that threatened the notion of a unique God-Earth relationship. But by the Victorian era, there were serious discussions not only about a lively universe — which was widely assumed — but about whether Christ might have to be endlessly reincarnated on a "plurality of worlds." That thorny issue eventually faded from view and new takes on the question of cosmic life emerged, such as whether there were canals on Mars. Arguably, the first organized SETI took place in the 1920s when astronomer David Todd persuaded the U.S. military to observe radio silence across North America while he and others listened to the Red Planet. More famously, pioneering radio astronomer Frank Drake turned a big dish in West Virginia toward the stars in 1960. SETI has continued, in fits and starts, ever since. Still, while the public imagines a universe of star cruisers and galactic cyberwebs, budget-cutting bureaucrats find even partial grants for SETI an easy target. Did you write your representative or senator when the SETI funding was slashed? I guess we prefer our aliens to announce themselves without effort on Netflix. So it's time for more Paul Allens — Carnegies of the cosmos — to step into the void left by the cuts. And there's not a moment to waste. NASA's Kepler space telescope has identified some 1,200 potential planets outside our solar system — dozens of which will be the size of Earth. Some of those could sustain liquid water. It's a big leap from puddles to technological civilizations, but if we don't look, we'll never know if the leap's been made. And only penny-pinching solipsists with streaming video could be happy in such cosmic ignorance.

### SETI costs minimal compared to defense spending, same price as just 5 Tomahawk missiles

### Alan Buckingham, May 2, 2011, “The Real Cost of SETI”, Geek News Central, http://www.geeknewscentral.com/2011/05/02/the-real-cost-of-seti/

The cost of SETI operations is $2.5 million per year, or the cost of 5 Tomahawk missile. And, from that starting point, costs just spiral out of control. I ask you all, if you believe in this program, then read what both links I provided have to say. Check out the info-graphic that displays what we spend elsewhere. Sure, things like national-defense are necessary. But, when $1 from every Starbucks customer could fund such great science for years, is that really too much to ask? When a single bank executive could fund SETI with walking-around money, is that too much to ask? Google could fund this project without even missing the money. Hint to any Google execs who read this blog…

### Plan solves for ETI—radio and optical SETI are the most economical methods

**Tough 2k** [Allen, PhD Professor at the University of Toronto, “When SETI Succeeds: The Impact of High-Information Contact”, July, http://www.futurefoundation.org/documents/hum\_pro\_wrk1.pdf]

Conﬁrmation of extraterrestrial intelligence could come about in any of a number of ways, but given our known laws of nature and current technology, some search procedures seem more promising than others. At present, the favored approaches of most scientiﬁc searchers are radio SETI, which involves using radio telescopes to detect electromagnetic patterns that are of extraterrestrial but intelligent origin, and optical SETI, based on searching other segments of the electromagnetic spectrum for laser communications or signature patterns of energy use. Proponents of these dominant strategies note that moving information around the universe is incredibly more economical than moving matter, and that whereas radio and optical signals move at the speed of light, spaceships or probes can move at but a tiny fraction of that speed . From this perspective , expanding the search means involving more radio telescopes, engaging them in the search a greater percentage of their time, including more areas of the sky in the survey, and scanning a greater number of channels . Radio astronomers could increase the chances of success further by building an observatory on the Moon, and analyzing anomalous data that are normally locked in bottom desk drawers.

### SETI is effective and cheap- found over 1,000 planets and costs $1.5 million per year

### Huffington Post 5/1 [Huffington Post, “Alien Search: Help Slumping Nonprofit SETI Institute In Space Research” ,2011, http://www.huffingtonpost.com/2011/05/01/nonprofit-seti-institute-alien\_n\_855758.html]

Just when scientists are making advancements in searching for extraterrestrial life beyond Earth, a lack of funds is putting a cap on their telescopes. The nonprofit SETI Institute sent an email to its supporters saying a drop in both government and private funds means the northern California facility no longer has the $1.5 million a year needed to operate. Last week, the science research institute's Allen Telescope Array was put into a hibernation state. Since 2007, the radio dishes had scanned space for signals from alien civilizations, according to the Associated Press. In a blog for HuffPost, Seth Shostak, senior astronomer at the institute, says during tough economic times, some may scoff at the importance of exploring the universe. But he's asking for help in resuscitating the program, making the case for discovery. "The answer is that discovering new things is what distinguishes our species...Are we destined to merely endure, or to flourish?" The San Jose Mercury News reports that the turn of events comes just after the announcement from astronomers this spring, who said 1,235 new possible planets had been observed. Fifty or 60 of those planets appear be habitable, Shostak told the Associated Press. "There's plenty of cosmic real estate that looks promising," he added. "We've lost the instrument that's best for zeroing in on these better targets."

Shostak told the Mercury News the project's suspension is like "the Niña, Pinta and Santa Maria being put into dry dock." The telescopes are named for Microsoft co-founded Paul Allen, who donated millions of dollars for the project. A spokesman for the Paul G. Allen Family Foundation said it had no immediate plans to provide more funding to the facility, according to the Associated Press. The SETI Institute is seeking public help.

### **Plan is cheap- only costs $200,000 activate SETI**

### **SETI Institute 6/21** [SETI, “SETIstars”, 2011, http://www.seti.org/page.aspx?pid=1612]

Mountain View, California – Tuesday, June 21, 2011 – Today The SETI Institute announces the launch of SETIstars.org, a new initiative to bring the Allen Telescope Array (ATA) back online. The array comprises 42 telescopes in Northern California that scan for radio signals from outer space, contributing greatly to one of the most profound enterprises in human history: the search for life elsewhere in the universe. Earlier this year, a lack of funds curtailed this search, forcing the ATA into hibernation. But public outcry over the shutdown has been enormous, surprising even longtime SETI Institute staff members, who remain optimistic about future prospects. “We are very excited to be launching SETIstars.org today,” said Jill Tarter, Director of The SETI Institute’s Center for SETI Research, and winner of the 2009 TED Prize. “By putting this site online, we are taking the first step toward allowing the general public to take a more personal stake in the future of one of the most important scientific endeavors in the history of humankind.” Visitors to the website may donate directly, to support a $200,000 challenge that will bring the ATA out of hibernation. In addition to donating, visitors can learn more about the ATA and the SETIstars project. “The launch of SETIstars could not come at a more crucial time,” said Tarter. "Thanks to NASA's Kepler Mission, for the first time in human history we can now direct the telescope's scans towards planet candidates in the habitable zone around their parent star. It is exactly the wrong time for the telescope to go dark. But given the outpouring of support already, I'm invigorated by the idea that we will be able to continue the work.”

### SETI is effective- it has led to economic and educational benefits

### Cirkovic ’03 [Milan, Senior Research Associate at the Astronomical Observatory of Belgrade and Assistant Professor of the Department of Physics at the University of Novi Sad in Serbia and Montenegro, “ On the Importance of SETI for Transhumanism”, October, http://jetpress.org/volume13/cirkovic.html]

To these rather well-known and publicized benefits of SETI, we should now add another, which has not actually been investigated, at least not outside the SF circles. The main lesson of the phase-transition models is that, starting with some epoch relatively close in our past, the entire Galaxy is open to colonization and technologization by whoever happens to be there, or whoever has a very slight—in astronomical terms—advantage. Obviously, the main purpose of colonization of the Galaxy is to use the Galactic physical resources to create new lives, new observer-moments, and ultimately new values. Of course, any detailed analysis of this process hinges on what could be called “interstellar political economy”, and in particular the risk/benefit analysis of the interstellar travel and colonization. For the purposes of this cursory study we employ only those assumptions which are advanced by “contact pessimists” in their formulation of Fermi's paradox: that interstellar travel is physically feasible, and at least a finite fraction of all civilizations will engage in it. The period of phase transition is like a race, when after the starting pistol goes off, many runners strive to reach the same goal. Add to this an amount of variability of initial conditions (runners which would not start exactly from the same starting line), as well as inherent variability (intrinsic differences between the ETI societies), as well as possibility of negotiations, conflicts, and cooperation. In any of these cases, we can hardly escape to conclude that any knowledge on our rival civilizations[13] gathered through SETI is an invaluable resource. This aspect of SETI can be, very loosely, understood as a new form of (literally) intelligence gathering.

### Seti was efficient with budget and was just used as a “sacrificial lamb”🡪 SETI is best/key (Retag needed)

### Steven J. **Dick** and James E. **Strick** [“The Living Universe” 20**04**, Associate Professor in the Dept. of Earth and Environment and Chair of the Program in Science, Technology and Society, at Franklin and Marshall College in Lancaster, PA, American astronomer, author and historian member of the International Academy of Astronautics and its SETI Permanent Study Group]

The termination of the taxpayer-funded SETI program must be seen in the context of other congressional action at the time. There is no doubt that in a climate of rapidly rising federal deficits Congress was looking for budget cuts. In the same session Congress had failed to kill two other NASA programs, the much maligned Space Station, which received the full $2.1 billion funding the president requested program, and the $3 billion Advanced Solid Rocket Motor program. In light of the failure to make these cuts, some SETI proponents saw the termination of the much smaller (and therefore politically less supportable) SETI as the sacrificial lamb. Drake noted that one space shuttle launch costs $1 billion-“a century worth of SETI research”- while others noted that Stanford had just received a federal grant of $240 million for research on antimatter. Some saw the difference as the “giggle factor”, a subject open to ridicule o matter how important. John Pike, of the Federation of American scientists, noted that aliens were a frequent subject of the notorious *National Enquirer* tabloid and offered another theory: “The political problems SETI has demonstrate the way in which a member of Congress in an irresponsible garb for headlines can do serious damage to a program.” One think is clear unlike the Superconducting Super Collider canceled in the same session of Congress. SETI was not terminated for bad management or cost overruns. One cannot however discount spillover bad feeling from the Hubble Space telescope, then returning unfocused photographs due to a problem with its mirror, an embarrassment that better management might have caught.

### The Government funding had significant effects on how SETI was run

### Steven J. **Dick** and James E. **Strick** [“The Living Universe” 20**04**, Associate Professor in the Dept. of Earth and Environment and Chair of the Program in Science, Technology and Society, at Franklin and Marshall College in Lancaster, PA, American astronomer, author and historian member of the International Academy of Astronautics and its SETI Permanent Study Group]

Notwithstanding Morrison’s open-ended definition of *astrobiology,* limits were evident in this first meeting. No papers were presented on the Big Bang and the origin of the universe, none on galaxy formation and dynamics, not even any on the large-scale structure of our own galaxy. Rather, the discussion began (logically though purposely not in order of presentation) with solar system dynamics and planetary detection, proceeded to cosmic chemistry and the origin of life, continued through the evolution of the genome, metabolism, and microbial communities, and ended with the evolution of advanced “metazoan” life. In this discussion Mars played a large role, including its geology, climatology, and oxidants; the latest research on the Mars meteorite; and planned Mars missions. The single greatest interest was shown in laboratory and theoretical studies of prebiological chemistry, perhaps still an artifact of funding in the old exobiology program. But interest in new research on biomarkers and on life in extreme environments was also very strong. Aside from a paper given by Bruce Jakosky the chair of the Scientific Organizing Committee), the roadmap’s renegade question the cultural impact of astrobiology was entirely absent, perhaps equal parts a reflection of the difficulty of getting social scientists involved and the lack of encouragement form natural scientists. And SETI was notably lacking, expect for a handful of poster papers, one of which was dedicated to education. With respect to SETI, the meeting starkly demonstrated how government funding, or lack thereof, could shape an entire field. Altogether however some thirty categories of the emerging science were represented aside from SETI. And this was just the first astrobiology science meeting.\

## Seti key-tech

### If SETI succeeds, contact will be made- radio messages or probes will reach extraterrestrial life

### **Tough 2k** [Allen, PhD Professor at the University of Toronto 2000: “An Extraordinary Event” 7, <http://ieti.org/tough/articles/intro.htmMLF> 6-21-11]

If SETI succeeds, two types of contact are possible. One possibility is simply evidence that another advanced intelligence exists somewhere in the universe, with little information about its characteristics and no dialogue. One example is evidence of a Dyson sphere or some other major astroengineering project many light-years away, with no additional information about its creators. Another example is a radio message that arrives from many light-years away but is not successfully decoded even after many years of effort. The second possibility is contact that yields a rich storehouse of knowledge about the alien intelligence and its history, technology, science, values, social organization, and so on. This could occur through an encyclopdic radio or optical message that we manage to decode. Because of recent progress in nanotechnology, artificial intelligence, and space exploration, we now realize that closeup contact with a small but super-smart probe is at least as likely a scenario. In fact, by monitoring our telecommunications, the probe will likely have learned our languages and be able to communicate with us quite effectively: no decoding necessary! Since this seminar focused on contact as a high-impact event, my instructions to participants emphasized the high information scenarios. Here are the exact words: "Because of the Foundation's interest in the factors that are especially likely to have a high impact on humanity, our discussion will assume that some sort of major information exchange or lively back and-forth dialogue occurs between humans and some form of extraterrestrial intelligence. The particular scenario is not important in this seminar; it could be a rapidly translated encyclopedic message sent from 40 light-years away by radio or laser, for instance, or a small but extraordinarily intelligent probe sent by a civilization with technology 100,000 years ahead of ours. As Steve Dick noted in his Santa Cruz paper, "A 'dial tone' signal, only giving evidence of intelligence, will be quite different in impact from the decipherment of significant amounts of information" (Dick, 1995). We will, therefore, focus exclusively on the potential effects of high information scenarios."

**SETI is effective- microwave and optical SETI methods can be project up to 3000 ly away**

**Tarter ’01** [Jill, Director of the Center for SETI Research at the SETI Institute, “The Search For Extraterrestrial Intelligence” ,2001, http://astro.wsu.edu/allen/courses/astr450/annurev.astro.39.1.511.pdf]

Well-designed experimental protocols should permit something to be learned from a null result. At current levels of sensitivity, targeted microwave searches could detect the equivalent power of strong TV transmitters at a distance of 1 light year (within which there are no other stars), or the equivalent power of strong military radars to 300 light years, and the strongest signal generated on Earth (Arecibo planetary radar) to 3000 light years, whereas sky surveys are typically two orders of magnitude less sensitive. The sensitivity of current optical searches could detect megajoule pulses focused with a 10-m telescope out to a distance of 200 ly. Only a small fraction of the stars within these detection-limited volumes have been surveyed. Improvements in the sensitivity of surveys by four or ﬁve orders of magnitude will be needed before a meaningful statement can be made about the prevalence or absence of emerging technologies such as our own within the Milky Way Galaxy. Although it will never be possible to prove the negative case, null results from surveys with such improved capabilities would be very sobering. The conclusion that we are, for all practical purposes, alone could then be justiﬁed. Given the sensitivity improvements required, this state of affairs is not likely any time soon. Whether continuing negative results lead to the decision to transmit for the beneﬁt of those emerging after us, or to the conclusion that L is inevitably small, will surely depend on what we have learned by then about the distribution of life of the nonintelligent kind.

### **SETI is essential for the discovery of SETA- electromagnetic energy and radio waves could find ET tech**

Michaud ’07 [Michael, Deputy Assistant Secretary of State for Science and Technology, and as Science and Technology Counselor at the American embassies in Paris and Tokyo, “Contact With Alien Civilization”, 2007, page 135-136]

Electromagnetic signals might not be the only evidence of alien technological activities that we can detect. Recent years have seen growing interest in broadening our quest to include a Search for Extraterrestrial Artifacts (SETA). Scot Stride of the Jet Propulsion Laboratory described two predominant hypotheses as to how we can detect extraterrestrial intelligence: a SETI Energy Hypothesis that states that technologically advance civilization uses electromagnetic energy as a means to remotely explore the universe and to detect or communicate with other advanced civilizations, and a SETI Artifact Hypothesis that states that a technologically advanced civilization has undertaken a long-term program of interstellar exploration via transmission of material artifacts. The authors of the SETI 2020 report recognized that we could search for alien artifacts or interstellar spacecraft. SETI has sought signals instead, not because these other approaches are without merit, but simply because in electromagnetic signaling the speed is very high and the cost is very low. We should keep our robotic eyes open for both, Tarter and Chyba proposed. Television journalist and novelist Richard Burke-Ward proposed an ambitious broadening of SETI to look for or contact alien artifacts. The search for alien machines might even be incorporated into the Drake equation. The probability of finding a functioning probe would depend on the prevalence of intelligent species in our galaxy, the likelihood of probes being sent to other stars, and the life spans of the probes (we might qualify this; a dead prove still could be detectable).

## Seti exploration key

### Change over time with search (RETAG, the solvency card) 1ac solvency

Michaud 07, Michael A. G Michaud, 2007 (Author of over one hundred published works, Michael Michaud was a U.S. Foreign Service officer for 32 years before turning full time to writing.  During his diplomatic career, he served as Acting Deputy Assistant Secretary of State for Science and Technology, Director of the State Department’s Office of Advanced Technology, Minister-Counselor for Environment, Science, and Technology at the American Embassy in Tokyo) “Paradigm Shift” in “Contact with Alien Civilization” <http://www.springerlink.com/content/r01697143065120g/fulltext.pdf> pg. 343

Searching for other civilizations helps us to visualize ourselves in the fourth dimension—time. Contact could bring a Copernican revolution not just in the spatial sense but in the historical sense as well. The moment of contact is unpredictable; it could range from tomorrow to the end of intelligent life on Earth. Our nearest neighbors may be many light-years away—a measure of time as well as distance. In a radio dialogue across interstellar space, the gap between question and answer could be centuries. Thinking about our place in time must include a long future. By focusing attention only on the past and the present, argued Tipler, science has ignored almost all of reality.7 **We ourselves will change over time**. **If the search goes on long enough**, Baird foresaw, the definition of humanness may slowly shift to the extent that the organism that initiated the search in the twentieth century may bear little resemblance to the organism that finally tastes success.8

## Laundry list

### SETI unites us

### Tough 95, Allen Tough, 1995, (Professor at University of Toronto. He has contributed to the fields of [Adult Education](http://en.wikipedia.org/wiki/Adult_Education), [Futures Studies](http://en.wikipedia.org/wiki/Futures_Studies), and [SETI](http://en.wikipedia.org/wiki/SETI)) “Positive Consequences of SETI Before Detection”, http://www.astrosociology.com/Library/PDF/Positive%20Consequences%20of%20SETI%20Before%20Detection.pdf

The SETI enterprise makes the likelihood of intelligent life throughout our galaxy feel more tangible and real. Instead of just talking or writing about the possibility, someone is actually doing something about it. As a result, humanity is gradually shifting toward a fresh image of who we are as a species. Increasingly we see ourselves as one of the abundantly diverse intelligent species that have arisen in the universe. That is how we fit into the universe. We feel part of the cosmic family; **we feel a bond or kinship with others**. We are one of the species that has developed a civilization marked by curiosity, inquiry, knowledge, meaning, and purpose. We are not alone in the universe. Although we are unique, we may be one of billions of civilizations in the universe (just as each person and each snowflake is unique, but is also one of billions). As they learn about cosmic evolution and SETI activities, more and more people are developing a deeper sense of themselves as citizens of the universe--as part of intelligent life and evolving culture throughout the cosmos. We begin to move from forlorn isolation to a "feeling of genuine biological and spiritual unity with the universe" and that universe feels "**friendlier**." We begin to see ourselves within a galactic frame of reference. To use Michael Michaud's words, we are about to "leave the era of Earth history, and enter an era of cosmic history." More recently he noted that "many of us are involved in SETI because we hope that detection, and even the search itself, will introduce a new and positive factor in human affairs. We are involved because SETI defines us as a species with shared interests. We are involved because SETI forces humanity to think big." According to Frank White, SETI may be, at its deepest levels, an effort to achieve a new kind of connection with the universe--to regain an integration or connectedness that has been shattered by standing apart from the cosmos and examining it as something that is not alive, not intelligent, and separate from ourselves. Both as a society and as individuals, our sense of meaning and purpose can be enhanced by tangible SETI efforts to detect communications from other civilizations, or other information about them. Today's efforts may be the beginning of centuries of interaction with other intelligent beings in our galaxy. As the significance of SETI's potential sinks in, some people come to feel a deeper sense of meaning and purpose in the universe. Humanity may be on the threshold of finding its place among the variety of intelligent life in our galaxy. Being alive just when humanity is beginning its serious efforts to detect other advanced civilizations provides a special perspective for some people. It is an especially meaningful and hopeful moment in human history. Perhaps humanity's ultimate purpose is to be a happy and successful part of the cosmic evolutionary process--the continuing evolution of life, culture, communication, and cooperation throughout the galaxy. As Carl Sagan said during the Encyclopaedia Galactica episode of his Cosmos television series, "In a cosmic setting vast and old beyond ordinary human understanding, we are a little lonely. In the deepest sense, the search for extraterrestrial intelligence is a search for who we are."

### SETI is key- spreads scientific knowledge to the lay public- blends multidisciplinarity and public interest

### Cirkovic ’03 [Milan, Senior Research Associate at the Astronomical Observatory of Belgrade and Assistant Professor of the Department of Physics at the University of Novi Sad in Serbia and Montenegro, “ On the Importance of SETI for Transhumanism”, October, http://jetpress.org/volume13/cirkovic.html]

In the period of “contact optimism” in 1960s and 1970s several beneficial aspects of SETI projects have been listed by pioneers such as Frank Drake, Carl Sagan, Ronald Bracewell, and others (e.g., Bracewell 1975). It was pointed out that SETI projects are cheap and efficient, offering a wealth of ETI-unrelated scientific data, enabling testing of astronomical (especially radioastronomical) equipment, and serving an important educational role. In addition, through a unique blend of multidisciplinarity and public interest, SETI offers an excellent avenue of communicating general scientific knowledge to the lay public; Carl Sagan’s work on astronomy public outreach is perhaps the most splendid example of what can be done in this respect. Stock examples also include such difficult to quantify or intangible benefits as the sense of unity of humankind when faced with the vastness of space and the potential alien diversity.

  There is no need to dwell here longer on these issues, since they stand the same today as when they were suggested. Subsequent development has only strengthened some aspects of them: notably optical, IR, and other SETI projects have widened the horizons for collateral scientific benefits, and the unity of humankind certainly seems more desirable than ever.

**SETI is key- 6 benefits**

**Tough ’95** [Allen,PhD Professor at the University of Toronto, “Positive Consequences of SETI Before Detection”, 1995, http://www.astrosociology.com/Library/PDF/Positive%20Consequences%20of%20SETI%20Before%20Detection.pdf]

Even before a signal is detected, six positive consequences will result from the scientific search for extraterrestrial intelligence, usually called SETI. (1) Humanity's self-image. SETI has enlarged our view of ourselves and enhanced our sense of meaning. Increasingly, we feel a kinship with the civilizations whose signals we are trying to detect. (2) A fresh perspective. SETI

forces us to think about how extraterrestrials might perceive us. This gives us a fresh perspective on our society's values, priorities, laws, and foibles. (3) Questions. SETI is stimulating thought and discussion about several fundamental questions. (4) Education. Some broad-gauge educational programs have already been centered around SETI. (5) Tangible spin-offs. In addition to providing jobs for some people, SETI provides various spin-offs, such as search methods, computer software, data, and international scientific cooperation. (6) Future scenarios. SETI will increasingly stimulate us to think carefully about possible detection scenarios and their consequences, about our reply, and generally about the role of extraterrestrial communication in our long-term future. Such thinking leads, in turn, to fresh perspectives on the SETI enterprise itself.

### SETI is key for exploration-helps us achieve a connection with the universe

### Tough 2k [Allen, PhD Professor at the University of Toronto, “When SETI Succeeds: The Impact of High-Information Contact”, July, http://www.futurefoundation.org/documents/hum\_pro\_wrk1.pdf]

In The SETI Factor, Frank White raised the possibility that SETI “may be an effort to achieve a new kind of connection with the universe ,working within the framework that is acceptable to the Western scientiﬁc model. Perhaps SETI is an acceptable way for us to seek that reintegration, a feeling of connectedness which has been shattered by standing apart from the cosmos and examining it as something that is not alive, not intelligent, and separate

from ourselves” (White, 1990)

### SETI is key- multiple warrants

### Tough and Wang ‘4 [Allen, PhD Professor at the University of Toronto, Wang, adult educator in SETI, “Communicating with SETI”, 2004, http://ieti.org/tough/articles/comm\_eti.pdf]

Before moving on to explore some significant implications, let’s pause a moment to summarize. ­ The desire to communicate with an alien civilization (extraterrestrial intelligence) is normal and natural. A variety of efforts have been proposed and implemented over the years. When humankind does finally achieve communication with another culture, the new perspective and new knowledge that we gain will be valuable, deep, exciting, pervasive, and high-impact. These simple statements can produce major implications. In this paper we suggest three of these: the need for a better attitude, the need for a more effective strategy, and the possible benefits of a new international forum. We discuss each of these in turn.

### SETI causes the overview effect

Allen Tough, 1998. [Prof. Allen Tough is a noted social scientist, author, educator, and futurist residing near Toronto, Ontario Canada.] Acta Astronautica, 42 (10-12), pages 745-748. Positive Consequences of SETI Before Detection.

Photographs of the whole earth from the early space missions gave us a fresh perspective. A more recent photograph from even further away in our solar system gives us the sense of being a small fragile planet--a pale blue dot surrounded by space. SETI provides a third fresh perspective by encouraging us to think about how extraterrestrials might perceive us. As we view ourselves through the "eyes" of distant extraterrestrials, this fresh perspective leads in turn to a fresh way of looking at our society's values, goals, priorities, and foibles. Three aspects of SETI stimulate this fresh perspective by encouraging us to put ourselves "in the shoes" of remote extraterrestrials. (a) In order to choose search strategies, scientists must first think through the likely characteristics of whoever is out there, and their likely behaviour toward all other civilizations--in particular toward us since they may somehow be aware of our existence or even have some information about us. (b) During the past few years, at astronautics and SETI meetings, some attention has focused on what we should do about sending a reply after we detect a signal. Such thinking inevitably requires attention to how "they" might react to various sorts of replies that we might send. (c) In general, the whole SETI enterprise stimulates a wide variety of people to begin thinking more seriously about who might be out there and how they might view our society.

### Overview effect good—solves warfare, population growth, and environmental degradation

Allen Tough, 1998. [Prof. Allen Tough is a noted social scientist, author, educator, and futurist residing near Toronto, Ontario Canada.] Acta Astronautica, 42 (10-12), pages 745-748. Positive Consequences of SETI Before Detection.

By thinking about how a remote civilization might view us, we gain a fresh perspective on our own civilization. Various specific implications may occur to us. We may wonder why our society places such emphasis on differences among people when, compared to any extraterrestrial species, we are all quite similar and should feel deeply connected. We may see more sharply the importance of such priorities as ensuring our long-term survival and flourishing, caring about future generations, accumulating significant knowledge, protecting that knowledge from potential catastrophes, developing a set of universal goals and laws that might apply throughout the galaxy, and reducing our worst foibles and errors (warfare, population growth, environmental degradation). Surely extraterrestrial would wonder why we have not shifted our attention, resources, and efforts toward these key priorities.

### Evidence of overview effect empirically proven

Erin Moore Daly & Robert Frodeman 08 [Erin Moore Daly is a graduate student in the School of Life Sciences and the Center for Science, Policy, and Outcomes at Arizona State University. Her research interests are in science and technology policy and environmental philosophy. Robert Frodeman is chair of the Department of Philosophy at the University of North Texas. He specializes in environmental philosophy and philosophy and science policy. He has held positions at the University of Texas, the University of Tennessee, and the University of Colorado, and consulted for the US Geological Survey for ten years.] Separated at Birth, Signs of Rapprochement Environmental Ethics and Space Exploration .Ethics & the Environment, Volume 13, Number 1, Spring 2008, pp. 135-151

During the period in which humans first entered space, walked on the Moon, and extended the range of human existence beyond the Earth, we began to pay attention to the habitability of our terrestrial home. The first images taken from space by the U.S. Weather Bureau’s TRIOS satellite launched in 1960 showed a “pale blue dot” floating in a vast darkness (Sagan 1994). Worldwide, these images unleashed a wide range of remarks—on the Earth’s fragility, insignificance, or magnificence, its stunning geographical features, and the non-existence of visible national boundaries.

### Cutting funds for SETI is death to curiousity🡪 SETI is key

### Christopher Cokinos, [University of Arizona English professor 6/24/11 http://www.cleveland.com/opinion/index.ssf/2011/06/funding\_cut\_to\_the\_search\_for.html, “Funding cut to the Search for Extraterrestrial Intelligence and the death of curiosity: Christopher Cokinos”]

Yet we're surprisingly unwilling to put our money where our imaginations want to roam. News that the Allen Telescope Array is "hibernating" -- a curiously biological term for shutting down 42 radio telescopes designed to listen for signs of life from other worlds -- raises questions about our true commitment to the search for extraterrestrial intelligence. The National Science Foundation recently slashed the University of California's budgets for the Allen array by 90 percent. This, along with state cuts, has left UC Berkeley, which operates the Hat Creek, Calif., array in the Cascade Mountains, and the private SETI Institute, which conducts searches, in the lurch. For now, the phone is off the hook -- as it was in 1994 when Sen. Richard Bryan, Democrat of Nevada, derided NASA's "Martian chase" and successfully shut down its SETI -- "Search for Extraterrestrial Intelligence" -- program. It would cost each U.S. taxpayer just 3 cents a year to fund the Allen array, according to SETI Institute Senior Astronomer Seth Shostak. But in this political environment, direct taxpayer support is unlikely, so the SETI Institute is trying to raise $5 million to reboot the array. Donors such as Microsoft's Paul Allen stepped up after NASA's project died; it's for him that the array is named. In fact, SETI's best hope may be the private sector. Privately financed astronomy is nothing new. In the 18th and 19th centuries -- the heyday of private observatory building -- such work was in part spurred by interest in alien life. It's an interest that, despite present budget tribulations, runs deep. As scholars Steven Dick and Michael Crowe have shown, we can trace the idea of an infinite universe full of other worlds to pre-Socratics such as Democritus. This view was marginalized by more famous philosophers, such as Aristotle, and, later, by a church fearful of anything that threatened the notion of a unique God-Earth relationship. But by the Victorian era, there were serious discussions not only about a lively universe -- which was widely assumed -- but about whether Christ might have to be endlessly reincarnated on a "plurality of worlds." That thorny issue eventually faded from view and new takes on the question of cosmic life emerged, such as whether there were canals on Mars. Arguably, the first organized SETI took place in the 1920s when astronomer David Todd persuaded the U.S. military to observe radio silence across North America while he and others listened to the Red Planet. More famously, pioneering radio astronomer Frank Drake turned a big dish in West Virginia toward the stars in 1960. SETI has continued, in fits and starts, ever since. Still, while the public imagines a universe of star cruisers and galactic cyberwebs, budget-cutting bureaucrats find even partial grants for SETI an easy target. Did you write your representative or senator when the SETI funding was slashed? I guess we prefer our aliens to announce themselves without effort on Netflix. So it's time for more Paul Allens -- Carnegies of the cosmos -- to step into the void left by the cuts. And there's not a moment to waste. NASA's Kepler space telescope has identified some 1,200 potential planets outside our solar system -- dozens of which will be the size of Earth. Some of those could sustain liquid water. It's a big leap from puddles to technological civilizations, but if we don't look, we'll never know if the leap's been made. And only penny-pinching solipsists with streaming video could be happy in such cosmic ignorance.

## Seti key-anthro/sociology

### SETI is uniquely key because it was developed for exploration and to understand human actions after “contact”

### **Harrison and Dick 2000**, Albert A Harrison and Steven J. Dick, (professor at the University of California at Davis) (United States Naval Observatory) “When SETI Succeeds: The Impact of High-Information conflict” Future Foundation, http://www.futurefoundation.org/documents/hum\_pro\_wrk1.pdf

As we attempt to forecast humanity’s long-term future, the possibility of contact between human and extraterrestrial intelligence requires careful thought. Australian astronomer Ray Norris (1998) points out that our ability to conduct radio telescope searches continues to increase dramatically, and estimates a 50–50 chance of a confirmed detection within the next ten years. This estimate is based on only one of many possible search strategies. If extraterrestrial intelligence exists, given a thousand-year time perspective and burgeoning technology, its discovery may not be so much of a “wild card” as a high probability— perhaps inevitable—event. The **scientists who formulated SETI, the scientific search for extraterrestrial intelligence, were keenly interested in how people would react to “contact,” or incontrovertible evidence that we are not alone in the universe** (Finney, 1999; Morrison, Billingham, and Wolfe, 1977; Swift, 1990). Most past discussions of the impact of contact (Berenzden, 1973; Billingham et al., 1999; Harrison, 1997; Morrison et al., 1977; US Congress, 1961) were predicated on the microwave search strategy, and emphasized people’s initial reactions to the discovery of extraterrestrial life.

### SETI is uniquely key- conference on ET impact on humanity

Harrison 2005, Albert Harrison, 2005, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis) Overcoming the Image of Little Green Men: Astrosociology and SETI, <http://www.astrosociology.com/Library/PDF/submissions/Overcoming%20LGM_Harrison.pdf> pg. 8)

**For forty years SETI scientists have invited the participation of “anthropologists, psychologists, sociologists, historians, philosophers, and others from across the great cultural divide (Finney, 2000, page 151). They have always understood that their efforts would have profound implications for humankind** (Baird, 1987; Billingham et al., 1999; Harrison, 1993, 1997; Harrison, Billingham et al., 2000; Harrison, McConnell and Schmidt, 2003). This was first evidenced in a 1961 report prepared by NASA for the US Congress in 1961 (Michael, 1961). A workshop conducted at NASA’s Ames Research Center in the 1970s stressed the urgency of making SETI an interdisciplinary effort (Morrison, Billingham and Wolfe, 1977). A similar recommendation was forthcoming from a 1999 NASA-Ames conference on the Societal Implications of Astrobiology (Harrison, Connell and Schmidt, 2003). Every year, the Congress of the International Academy of Astronautics holds separate workshops on the technical and social aspects of the search. In a position paper initially developed for the SETI Committee of the Academy, Harrison and Billingham et al. (2000) summarized key research areas as follows. Public Attitudes and Support – Survey research can help searchers understand attitudes toward astrobiology, SETI, and extraterrestrial life. These attitudes have implications for both science and policy. Conduct and Expansion of the Search – Social scientists may shed light on the cultural, intellectual, and emotional factors that shape the search and move searchers beyond unnecessarily limiting mind-sets. This can result in improved search strategies. Signal Decryption and Interpretation – Anthropology, including archaeology and linguistics, along with cognitive psychology could be useful for decrypting and interpreting any message that we may intercept. These fields could also be helpful for framing interstellar communications that can be understood in cultures that are radically different from our own. News Dissemination and Rumor Control – Social scientists can facilitate the orderly dissemination of news to the public. Here, we can benefit from historical precedent and our understanding of the media and mass communications, organizational functioning, social and psychological influences on attitude formation and change, rumor control, and many related topics. Immediate and Long-Term Consequences of Detection – Social scientists can help forecast, understand and guide human reaction to confirmation of the existence of extraterrestrial life. Near-term research issues include initial reactions to the news, first impressions of the aliens, attitude perseverance and change, rumor, and collective behavior, including possible panic. **Here, expertise on demographic and cultural differences, human information processing, social influence processes, and collective behavior will be welcome. Over the long range, confirmation of the existence of extraterrestrial life could affect every sphere of human endeavor. Obvious areas of concern include social change, cultural diffusion, technology and culture, international relations, meta-law, sociology of knowledge, sociology of law, sociology of occupations, social welfare, the history of science and technology, and intergroup relations**. Analyses of Extraterrestrial Organisms and Civilizations. The most challenging topic, and one that is avoided by most wise scientists, is forecasting the likely nature of extraterrestrial organisms and societies. Here, of course**, anthropomorphism can run rampant**, and science fiction themes of angels, devils, and emotionally sterile robots dominate purely imaginative scenarios. Another tact, reverse engineering, is to identify the requirements for interstellar communication and then work backwards to identify the behavioral and societal prerequisites. A certain level of interest in the universe around them and the ability to launch interstellar probes or, more likely, initiate interstellar broadcasts are prerequisites for them to make their presence known to us. Thomas Aquinas, no less, pioneered this strategy to identify the pre-requisites for other human-like races (George, 2005). Another strategy is to seek principles of behavior that are “universal” or “deep” in the sense that they hold true across species, cultures, and historical epochs (Harrison, 1993, 1997; Harrison and Dick, 2000). Our knowledge of biosocial entities on Earth gives us a good starting place for organizing our thinking about life everywhere.

### Sociology is important for space exploration- solve misconceptions

Harrison 2005, Albert Harrison, 2005, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis) Overcoming the Image of Little Green Men: Astrosociology and SETI, <http://www.astrosociology.com/Library/PDF/submissions/Overcoming%20LGM_Harrison.pdf> pg. 8)

Astrobiology and SETI have many opportunities for increased involvement by sociologists, and sociological expertise is sorely needed. Sociological issues will be discussed with or without sociologists' involvement, and in the latter case the results will not meet with sociologists' professional approval. The very bright astronomers engaged in the search have some grounding in biology and are quite comfortable with Darwinian notions, but are not conversant with higher-level analyses. Some discussions are tainted by popular misconceptions regarding collective behavior and disaster management (Orson Wells' "War of the Worlds" broadcast).

### SETI’s search for ETI makes it uniquely key to disprove our human uniqueness

Harrison et. al 2000, Albert Harrison, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis), “When SETI Succeeds: The Impact of High-Information Contact”, Foundation for the Future, edited by Allen Tough, Section V, pdf pg. 71

Successive discoveries that the Earth circles the Sun, that the Sun is but one of many billions of stars in our galaxy, and that there are billions of galaxies, coupled with a growing understanding of the origin and evolution of life, **have led to widespread abandonment of the once-prevalent view of humankind as central and unique in the universe** (Dick, 1996; Shklovskii and Sagan, 1966; Shostak, 1998). Over the past four centuries, physical scientists have established that the laws of physics and chemistry are universal in the sense that they apply at all times in all places. Over the past century, biological scientists have followed a similar path and it now appears that the laws of biology also hold for all places and all times (Dick, 1996). If the laws of physics and biology are universal, and if there are many solar systems with habitable planets, then we would expect life, including intelligent life, to evolve again and again. **Recent discoveries of planets in other solar systems and of reliable self-organizing physical processes that may initiate life add to the plausibility of the “many inhabited worlds” hypothesis**. Whereas we have long since refuted the view that humankind occupies a central place in the physical universe, **we have yet to disprove the hypothesis that humankind is the only intelligent** (or technologically advanced**) form of life.** SETI, the scientific search for extraterrestrial intelligence, **involves observational procedures that can disprove human uniqueness by uncovering evidence of equal or superior intelligence.**

### SETI social scientist can increase chances of finding ETI and manage potential impacts

Harrison et. al 2000, Albert Harrison, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis), “When SETI Succeeds: The Impact of High-Information Contact”, Foundation for the Future, edited by Allen Tough, Section V, pdf pg. 71

In his discussion of SETI, Harrison (1997) points out that our experiences as humans have conditioned our expectations about intelligent life in the universe and have channeled the search process. If “contact” occurs—we will use this term loosely to refer to the acquisition of incontrovertible evidence of one or more technologically advanced civilizations elsewhere— social scientists may help us decode and interpret information and even help us understand extraterrestrial civilizations. If interactive communication is possible, social scientists may help inform the decision whether or not to send a communication, and, if the decision is affirmative, help frame a reply. Contact, we expect, could have a broad and profound impact on individuals, societies, and humanity as a whole. Social scientists could be useful for forecasting and advising how to manage this impact.

### Social scientist can redirect aspects of search and increase………retag (SETI key)

Harrison et. al 2000, Albert Harrison, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis), “When SETI Succeeds: The Impact of High-Information Contact”, Foundation for the Future, edited by Allen Tough, Section V, pdf pg. 71

Detection (along with rigorous confirmation) is the core task of the SETI enterprise. It is therefore extremely important for social scientists to contribute to search strategies to the best of their ability. Each SETI search strategy rests upon certain assumptions about the deeply unknown phenomenon that it is trying to detect. We know so little about the technology goals, values, and distribution of extraterrestrial intelligence. In order to search intelligently, the SETI community must devote plenty of thought to whom and what it is trying to detect. Social scientists can contribute to a fresh examination of the current assumptions underlying the choice of search strategies (Tough, 1999b). The search procedures rest upon our understanding of the physical universe, and our assumptions about **“the other”** and their likely level of technological development. Radio SETI, for instance, is based on the assumption that they, like us, will use radio for communicating. Disciplined thinking by futurists about the long term future of human technology and goals can help us anticipate the technology and goals of extraterrestrials, since their civilization is likely thousands of years more advanced than ours. Thoughtful exploration of possible alien psychology and sociology (discussed below) can also help us get a better sense of the phenomenon we are trying to detect. In addition, social scientists may help the SETI field understand the cultural, intellectual, and emotional factors that shape the search, and may help move us beyond unnecessarily limiting mind-sets about search strategies. Thus, an important potential role for social scientists is to help the scientists who conduct the search to expand their efforts into new and potentially fruitful areas. Indeed, one major search strategy is itself primarily a social science strategy even though it relies on the elaborate technical infrastructure provided by the World Wide Web (Tough, 1999a).

### SETI social scientist can help rethink our place in the universe after contact

Harrison et. al 2000, Albert Harrison, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis), “When SETI Succeeds: The Impact of High-Information Contact”, Foundation for the Future, edited by Allen Tough, Section V, pdf pg. 71

Long-term impact can range from a rethinking of our own place in the universe based upon the sheer confirmation of the “other inhabited worlds” hypothesis to profound changes in human culture and institutions. It is possible to rate the potential impact in terms of the amount of information that is available and in terms of the potential for interactive communication. At *Force 1*, impact will involve the assimilation of knowledge that we are not alone in the universe. This, by itself, will affect our philosophy, our science worldview, our religion, and our culture. At *Force 2*, we may gain scientific, technical, or other information from the extraterrestrial culture that will affect our own science and technology, with far-reaching implications for our economy, our political institutions, and our international affairs. At *Force 3*, we will communicate and interact with the extraterrestrial culture, trading information, and perhaps even developing a long-term dialogue (Michaud, 1979, 1990, 1998). Assessing and guiding the long-term impact will require expertise from essentially all fields. Obvious areas of concern include social change, cultural diffusion, technology diffusion, international relations, metalaw, sociology of knowledge, sociology of law, sociology of occupations, social welfare, the history of science and technology, the psychology of intergroup relations, and so on. There will be no shortage of expert involvement *after* contact, and the main difficulty will be separating meritorious ideas from the noise. What we can do now is establish a group of social scientists who will have given advance thought to these matters and who are in a position to help other scientists—and the public—think productively about contact and its aftermath. In particular, this group might develop a conceptual framework and a research agenda that form a solid base for recommended actions.

### SETI is important for understanding the universe- it will open us up to new ways of viewing the universe

### Tarter ’01 [Jill, Director of the Center for SETI Research at the SETI Institute, “The Search For Extraterrestrial Intelligence” ,2001, http://hoffman.cm.utexas.edu/courses/seti\_reference\_2.pdf]

This article is appearing in the Annual Review of Astronomy and Astrophysics rather than in e.g., the Annual Review of Sociology because searching for evidence of intelligent life on or near other bodies within our own solar system or in the vicinity of distant stars requires the observational tools of the astronomer. Claims by astronomers that intelligent creatures, or their surrogate machines, have visited the Earth in the past, or are resident today, have not withstood the evidentiary demands inherent in scientiﬁc methodology (Sagan 1996, Klass 1983). There have been no extraordinary pieces of evidence to substantiate previous extraordinary claims of this sort. Until this changes, SETI will be practiced by professional and amateur astronomers using astronomical instruments. It will involve remote sensing of distant environs and robotic (and then perhaps human) exploration of solar system worlds, and it will make use of what we think we know about the nature of the universe to distinguish between astrophysical and intelligent phenomena. Every new astronomical instrument that opens up pristine cells of observational phase space, and thus new ways of observing the universe, may potentially surprise us with unexpected manifestations of extraterrestrial technologies, and by inference, extraterrestrial technologists (Tarter 1983). Observers need to remind themselves to remain open to this possibility. They need to have the persistence of Jocelyn Bell and follow up on any “bit of scruff” that shows up in the data (Bell-Burnell 1977). Existing tools should also be used to search in a systematic way for signs of intelligent life elsewhere. If possible, such searches should be planned and conducted so that a null result might be signiﬁcant.

## Seti key-ligit

### SETI is unique for the research but must gain legitimacy before attaining funding (doubt this card has use)

Harrison 2005, Albert Harrison, 2005, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis) Overcoming the Image of Little Green Men: Astrosociology and SETI, <http://www.astrosociology.com/Library/PDF/submissions/Overcoming%20LGM_Harrison.pdf> pg. 5)

Because UFOs engage public interest in intelligent life beyond Earth, it may seem that UFOlogy would be of great value to astrobiology and SETI, but nothing could be further from the case. At the time of the search's initiation most scientists considered extraterrestrial life the province of science fiction, not science. Whereas scientists had certainly heard of UFOs, most had developed a highly skeptical stance and many were actively involved in debunking the idea of extraterrestrial visitation. Flying saucers were not available for study, but the people who reported them were, and researchers engaged in their penchant for attributing low-frequency occurrences to psychopathology. One of the biggest challenges for the SETI scientists then and now is to distance themselves from the uncritical, naive and wishful thinking that many of their peers associate with UFOs. **This was required for the SETI pioneers to earn legitimacy for their efforts and gain acceptance by their scientific colleagues, to build support from the educated public, and secure funding from government agencies and private foundations**. At the heart of their campaign is a relentless emphasis on the scientific stature of SETI: What all SETI searches share, and what distinguishes SETI from other attempts to find extraterrestrial intelligence, is a steadfast insistence on remaining within the assumptions and methods of science. The bedrock is SETI's insistence on (a) skepticism, verification, peer review, and the scientific method, (b) strict safeguards against hoaxes, self-delusion, and erroneous data, and (c) protocols to avoid premature and

immodest claims (Harrison, Billingham et al., 2000, p. 72).

### SETI is uniquely key- UFOlogy and astrobiologists lack credibility and standard control

Harrison 2005, Albert Harrison, 2005, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis) Overcoming the Image of Little Green Men: Astrosociology and SETI, <http://www.astrosociology.com/Library/PDF/submissions/Overcoming%20LGM_Harrison.pdf> pg. 8)

Some UFOlogists are competent scientists but most SETI scientists characterize UFOlogy as amateurish and ineffective. In his comparison of SETI and UFOlogy, historian and skeptic Michael Shermer (2000:229) notes "SETI is elitist; UFOs populist; SETI is highbrow, UFOs are lowbrow... **SETI is dominated by Ph.D. astronomers, physicists, and mathematicians [while UFOlogy is] predominantly within the domain of amateurs who lack scientific credentials**." UFOlogy's marginal status severely limits its opportunities to develop quality research. Public funding is not available. Mainstream science has quality control mechanisms to police membership within the field and imposes peer review on published articles. UFOlogy lacks ways to exclude incompetent researchers and, as already pointed out, is highly vulnerable to hoaxes and tricks. **Universities stand ready to prepare the next generation of astrobiologists, but there is no recognized path to professional UFOlogy**. Mainstream science journals are archived in libraries around the world and made available at special rates to members of professional associations. Few university libraries choose to subscribe to UFO journals, and UFO archives tend to be shuffled from place to place. Scientific UFOlogy can model itself after mainstream science, but since society defines it as a marginal, low status activity, it is hard pressed to match science's practices. Key differences between SETI and UFOlogy are summarized in Table 1. Table 1 SETI and UFOlogy 1. **SETI is Science ! based on a scientific rationale, inference ! conducted by credentialed scientists ! insistence on verifiability/replicability ! peers provide a system of checks and balances 2. UFOlogy is Not Science ! based on popular culture and personal beliefs ! undertaken by untrained observers! widespread acceptance of unverifiable assertions ! weak system of checks and balances ! many erroneous reports and hoaxes**

### SETI’s key to searches legitimacy—qualifications

Harrison et. al 2000, Albert Harrison, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis), “When SETI Succeeds: The Impact of High-Information Contact”, Foundation for the Future, edited by Allen Tough, Section V, pdf pg. 71

What all SETI searches share, and what distinguishes SETI from other attempts to find extraterrestrial intelligence, is a steadfast insistence on remaining within the assumptions and methods of science. The bedrock is SETI’s insistence on (a) skepticism, verification, peer review, and the scientific method, (b) strict safeguards against hoaxes, self delusion, and erroneous data, and (c) protocols to avoid premature and immodest claims. Beliefs in extraterrestrial intelligence have waxed and waned over the centuries, but seem to have attained new heights in recent decades (Dick, 1996). Many factors have strengthened this belief within popular culture (Dick, 1996; McCurdy, 1997). People attend to the source, as well as the content, of ideas, and one of the distinguishing features of SETI is the strong scientific qualifications and prestigious institutions of many of its adherents. Over the years these have included scholars affiliated with major academic institutions such as the University of Alabama, the University of California (Berkeley, Davis, and Santa Cruz), Cornell University, Harvard University, and the Universities of Hawaii, Paris, and Toronto. SETI researchers have also included affiliates of the United States Naval Observatory, Jet Propulsion Laboratories, the National Aeronautics and Space Administration, and the RAND Corporation.

### SETI is legitament and is not pseudoscience

### Moldwin 04, Mark Moldwin, 2004, (Mark Moldwin is Associate Professor of Space Physics in the Earth and Space Sciences Department and the Institute of Geophysics and Planetary Physics, the University of California, Los Angeles.) “A Space Science Perspective on Boundaries”, http://www.redorbit.com/news/science/102455/a\_space\_science\_perspective\_on\_boundaries/

As an illustrative example, let us examine the difference in attitudes toward SETI and UFOIogy in the scientific community. Slowly, **over the last few decades, the search for extraterrestrial intelligence (SETI) has been given the imprimatur to join the ranks of legitimate science.** In 2003, the SETI Institute was named a member of NASA's Astrobiology Institute (www.seti inst.edu) after a rigorous peer-review process. In addition, a search of Harvard's Astrophysical Data System for the keyword SETI listed over 600 refereed-journal articles, indicating the vigor of this research area. One of the premises of SETI is that life may have evolved elsewhere in the universe and some of that life may be intelligent enough to utilize electromagnetic radiation as a form of communication. Therefore, a systematic search of the sky in radio (or even other wavelengths) for evidence of intelligent life is justified. The search for UFOs, on the other hand, is derided as pseudoscience, even though UFOlogists may consistently practice according to the scientific method (i.e., seek confirmable observational evidence, systematically discuss sources of error, etc.) and share a similar premise with SETI researchers-namely that intelligent life may have evolved elsewhere in the universe. Why the difference in the legitimacy of the two endeavors? SETI Ls part of the community of astronomy or astrobiology and is practiced by astronomers, physicists, and geophysicists. The methodology of SETI leads to useful scientific results even in the absence of discovery of intelligent life. In fact, the stated mission of the SETI Institute is "to explore, understand, and explain the origin, nature, and prevalence of life in the universe" a broad goal not predicated on the existence of other intelligent life in the universe. UFOlogy is not part of the community of astronomy, astrobiology, or any other discipline, and its methodology, no matter how scientifically rigorous, will lead to no useful scientific results except in the singular case of the discovery of an alien spacecraft. One could argue perhaps that if UFOlogists became part of NASA's Near-Earth Object (NEO) community (the community of astronomers and geophysicists attempting to identify comets and asteroids) they would gain some legitimacy. However, most UFOlogists already claim evidence of ET visitations and expound on the conspiracy of mainstream science to hide their revelations as opposed to actually searching for evidence.

## Seti key-contact

### We are Not Alone —SETI is key to visiting et—Sponsorship of the Allen Array Will Locate in Just Years

**Science Magazine**, “Are We Alone in the Universe?” July 1st, 20**05** (<http://www.sciencemag.org/content/309/5731/88.full>)

Alone, in all that space? Not likely. Just do the numbers: Several hundred billion stars in our galaxy, hundreds of billions of galaxies in the observable universe, and 150 planets spied already in the immediate neighborhood of the sun. That should make for plenty of warm, scummy little ponds where life could come together to begin billions of years of evolution toward technology-wielding creatures like ourselves. No, the really big question is when, if ever, we'll have the technological wherewithal to reach out and touch such intelligence. With a bit of luck, it could be in the next 25 years.

Workers in the search for extraterrestrial intelligence (SETI) would have needed more than a little luck in the first 45 years of the modern hunt for like-minded colleagues out there. Radio astronomer Frank Drake's landmark Project Ozma was certainly a triumph of hope over daunting odds. In 1960, Drake pointed a 26-meter radio telescope dish in Green Bank, West Virginia, at two stars for a few days each. Given the vacuum-tube technology of the time, he could scan across 0.4 megahertz of the microwave spectrum one channel at a time.

Almost 45 years later, the SETI Institute in Mountain View, California, completed its 10-year-long Project Phoenix. Often using the 350-meter antenna at Arecibo, Puerto Rico, Phoenix researchers searched 710 star systems at 28 million channels simultaneously across an 1800-megahertz range. All in all, the Phoenix search was 100 trillion times more effective than Ozma was.

Besides stunning advances in search power, the first 45 years of modern SETI have also seen a diversification of search strategies. The Search for Extraterrestrial Radio Emissions from Nearby Developed Intelligent Populations (SERENDIP) has scanned billions of radio sources in the Milky Way by piggybacking receivers on antennas in use by observational astronomers, including Arecibo. And other groups are turning modest-sized optical telescopes to searching for nanosecond flashes from alien lasers.

Still, nothing has been heard. But then, Phoenix, for example, scanned just one or two nearby sunlike stars out of each 100 million stars out there. For such sparse sampling to work, advanced, broadcasting civilizations would have to be abundant, or searchers would have to get very lucky.

To find the needle in a galaxy-size haystack, SETI workers are counting on the consistently exponential growth of computing power to continue for another couple of decades. In northern California, the SETI Institute has already begun constructing an array composed of individual 6-meter antennas. Ever-cheaper computer power will eventually tie 350 such antennas into “virtual telescopes,” allowing scientists to search many targets at once. If Moore's law—that the cost of computation halves every 18 months—holds for another 15 years or so, SETI workers plan to use this antenna array approach to check out not a few thousand but perhaps a few million or even tens of millions of stars for alien signals. If there were just 10,000 advanced civilizations in the galaxy, they could well strike pay dirt before Science turns 150.

The technology may well be available in coming decades, but SETI will also need money. That's no easy task in a field with as high a “giggle factor” as SETI has. The U.S. Congress forced NASA to wash its hands of SETI in 1993 after some congressmen mocked the whole idea of spending federal money to look for “little green men with misshapen heads,” as one of them put it. Searching for another tippy-top branch of the evolutionary tree still isn't part of the NASA vision. For more than a decade, private funding alone has driven SETI. But the SETI Institute's planned $35 million array is only a prototype of the Square Kilometer Array that would put those tens of millions of stars within reach of SETI workers. For that, mainstream radio astronomers will have to be onboard—or we'll be feeling alone in the universe a long time indeed

### Seti is key for discovering extra terrestrials--- more pointed goal than other orginizations

Albert Harrison [http://www.astrosociology.com/Library/PDF/submissions/Overcoming%20LGM\_Harrison.pdf 2005 “Overcoming the Image of Little Green Men: Astrosociology and SETI”]

Because UFOs engage public interest in intelligent life beyond Earth, it may seem that UFOlogy would be of great value to astrobiology and SETI, but nothing could be further from the case. At the time of the search's initiation most scientists considered extraterrestrial life the province of science fiction, not science. Whereas scientists had certainly heard of UFOs, most had developed a highly skeptical stance and many were actively involved in debunking the idea of extraterrestrial visitation. Flying saucers were not available for study, but the people who reported them were, and researchers engaged in their penchant for attributing low-frequency occurrences to psychopathology. One of the biggest challenges for the SETI scientists then and now is to distance themselves from the uncritical, naive and wishful thinking that many of their peers associate with UFOs. This was required for the SETI pioneers to earn legitimacy for their efforts and gain acceptance by their scientific colleagues, to build support from the educated public, and secure funding from government agencies and private foundations. At the heart of their campaign is a relentless emphasis on the scientific stature of SETI: What all SETI searches share, and what distinguishes SETI from other attempts to find extraterrestrial intelligence, is a steadfast insistence on remaining within the assumptions and methods of science. The bedrock is SETI's insistence on (a) skepticism, verification, peer review, and the scientific method, (b) strict safeguards against hoaxes, self-delusion, and erroneous data, and (c) protocols to avoid premature and immodest claims (Harrison, Billingham et al., 2000, p. 72).

# \*\*Solvency—Ethics\*\*

## Solvency—Ethics

### When SETI receives funding part of it will go towards studying human reactions to the discovery of ETs – a move towards changing peoples’ perception of “aliens”.

Harrison, 09 [Albert, Department of Psychology, University of California. Space: The Final Frontier http://www.sciencedirect.com/science/article/pii/S001632870900072X#secx5. The future of SETI: Finite effort or search without end?]

As detailed elsewhere, there are many areas where social scientists can make key contributions to SETI [1], [39] and [40] A.A. Harrison, J. Billingham, S.J. Dick, B. Finney, M.A.G. Michaud, D.E. Tarter, A. Tough and D.A. Vakoch, The role of the social sciences in SETI. In: A. Tough, Editor, When SETI Succeeds: The Impact of High Information Contact, Foundation for the Future, Bellevue, Washington (2000), pp. 105–119.[40]. Survey research can help searchers understand attitudes toward astrobiology, SETI, and extraterrestrial life. These attitudes have implications for both science and policy. Anthropologists, psychologists, sociologists and historians can shed light on the cultural, intellectual, and emotional factors that shape the search and move searchers beyond unnecessarily limiting mind-sets. Anthropology, including archaeology and linguistics, along with psychology and cognitive science could be useful for decrypting and interpreting any message that we may intercept. These fields could help frame interstellar communications that can be understood in cultures that are radically different from our own. Social psychologists and communications specialists can facilitate the orderly dissemination of news to the public. Here, we can benefit from historical precedent and our understanding of the media and mass communications, organizational functioning, social and psychological influences on attitude formation and change, rumor control, and many related topics. And, of course, social scientists and humanists can help forecast, understand and guide human reaction to confirmation of the existence of extraterrestrial life. Near-term research issues include initial reactions to the news, first impressions, rumor, and collective behavior, including possible panic. Here, expertise on demographic and cultural differences, human information processing, social influence processes, and collective behavior will be welcome. Over the long range, confirmation of the existence of extraterrestrial life could affect every sphere of human endeavor. Obvious areas of concern include social change, cultural diffusion, technology and culture, international relations, law, the history of science and technology, and intergroup relations. And, political scientists can help shape the course of interstellar affairs. Here, historical precedents and trends, mathematical modeling, and game theory may be of help. Such planning must acknowledge multiple contact scenarios and differences in reactions of different groups.

### The discovery of ETs will lead us to gain a new perspective and question the way we perceive those who are different

Tough, 98 [Allen, University of Toronto. Positive consequences of SETI before detection, Acta Astronautica Volume 42, Issues 10-12, May-June 1998, Pages 745-748]

By thinking about how a remote civilization might view us, we gain a fresh perspective on our own civilization. Various specific implications may occur to us. We may wonder why our society places such emphasis on differences among people when, compared to any extraterrestrial species, we are all quite similar and should feel deeply connected. We may see more sharply the importance of such priorities as ensuring our long-term survival and flourishing, caring about future generations, accumulating significant knowledge, protecting that knowledge from potential catastrophes, developing a set of universal goals and laws that might apply throughout the galaxy, and reducing our worst foibles and errors (warfare, population growth, environmental degradation). Surely extraterrestrial would wonder why we have not shifted our attention, resources, and efforts toward these key priorities.

## SETI Good—Mindset Shift

### Furthermore the knowledge of the way the ETs treat their subcultures will cause us to reflect on our own

Tough, ’00 [Allen, Professor Emeritus at the Ontario Institute for Studies in Education, University of Toronto, Foundation for the Future, 2000, “When SETI Succeeds: The Impact of High-Information Contact”, www.futurefoundation.org/documents/hum\_pro\_wrk1.pdf , p. 15, 21 July 2011]

Second, knowledge of relationships among extraterrestrial subpopulations could help us gain insight into intergroup relations on Earth. We may learn, for example, from how ETI societies treat different societies as well as their own subpopulations. This discovery could cause us to reflect on how we ourselves treat people from different cultures and subcultures. By seeing how ETI manages diversity, we may learn new models for group relations on Earth.

### Popular Culture strongly influenced and influences Scientists views on Extraterrestrials🡪 Bad thing

 Steven J. **Dick** [United States Naval Observatory “Other Worlds: The Cultural Significance of the Extraterrestrial Life Debate” http://www.jstor.org/stable/1576349 , 1996, pp. 133-137]

But it was in science fiction that the alien came alive. In 1897, H.G. Wells brought the invading Martian into literature with his War of the Worlds. In the same year, the German Kantian philosopher Kurd Lasswitz ushered in a more benign Martian in AufZwei Planeten (On Two Planets) [19]. In an enormous number of works since then, the alien has become a standard theme of science fiction, used for a variety of purposes. The alien has evolved from the beings found in the predictable but immensely popular space opera adventures of Edgar Rice Burroughs to the philosophical beings of Olaf Stapledon to the subtle and almost ethereal creatures of Bradbury's Martian Chronicle(s1 950). C.S. Lewis, in his space trilogy beginning with Out of the Silent Planet, used the alien theme in defense of Christianity [20]. In short, during the first half of this century, aliens helped man explore traditional themes from a new and less parochial perspective. One sees in cosmic and theological alien literature a pattern of search for a higher truth and wisdom, whether embodied in Stapledon's Star Maker or in a variety of other superior beings. Throughout it all, one also sees the terrestrial theme of good versus evil played out across the universe. During the second half of this century, the career of the alien dramatically accelerated. Along with the elaboration of old themes and the invention of new ones, there was an increasingly intimate relationship between science and science fiction. Not only did scientists more frequently use fiction to speculate about alien contact, but science fiction also influenced many who actually became involved in scientific programs to search for extraterrestrials [21]. The scientifically informed alien fiction of Arthur C. Clarke, Fred Hoyle, Stanislaw Lem, Hal Clement and Carl Sagan, among others, lent a credibility to the subject that it had not had in the first half of this century [22].

### Help needed to understand the cultural significance

### Steven J. Dick [United States Naval Observatory “Other Worlds: The Cultural Significance of the Extraterrestrial Life Debate” http://www.jstor.org/stable/1576349 , 1996, pp. 133-137**]**

It is clear that we have only touched the tip of the iceberg in discussing the cultural significance of the extraterrestrial life debate. Given the passionate debate inspired by the mere possibility of extraterrestrials, one can only imagine the reaction to an actual discovery. Only within the last several years has a more serious interest arisen in the "cultural aspects of SETI" (CASETI). The most important effort has been a series of workshops sponsored by NASA in 19911992, in which a group of about 20 historians, scientists, behaviorial scientists and government policy experts discussed the implications of an actual contact [33]. One of the many insights to emerge from these discussions was that, while historical analogues must be used with caution, they might still be very useful. In particular, the reception of worldviews such as the Copernican and Darwinian and the effects of cross-cultural terrestrial intellectual contacts (as opposed to physical cultural contacts) such as the transmission of Greek knowledge via the Arabs to Western Europe in the thirteenth century might well serve as guides to thinking about the effects of contact with extraterrestrial civilizations.

###

## SETI Good—Mindset Shift

### SETI spurs humanity to question themselves

Allen Tough, 1998. [Prof. Allen Tough is a noted social scientist, author, educator, and futurist residing near Toronto, Ontario Canada.] Acta Astronautica, 42 (10-12), pages 745-748. Positive Consequences of SETI Before Detection.

 Because its applied portion--the actual search--is at least as strong as its theoretical portion, SETI seems more "real" to people and as a result has a stronger impact on their curiosity, questioning, and feelings. For some people both inside and outside the SETI community, the concrete search activities trigger thought and discussion of the following questions. Who is out there? What are they like, what are their fundamental values and priorities, where are they heading, what do they know about us, and what sorts of detectable communications might they be using? What role will they play in our long-term future? Might some extraterrestrials be so alien, so deeply weird, that we cannot even imagine their thought patterns, communications, and behaviour? Where is cosmic evolution heading, and where is human civilization heading?

### SETI will be beneficial for humanity’s identity-expanding process regardless of its outcome.

Frank White 1990 [Frank White is the author of The Overview Effect: Space Exploration and Human Evolution. A member of the Harvard College Class of 1966, Frank graduated magna cum laude, and was elected to Phi Beta Kappa. He attended Oxford University on a Rhodes Scholarship, earning an MPhil in 1969. He is the author or co-author of five additional books on space exploration and the future.] The SETI Factor: How the Search for Extraterrestrial Intelligence Is Changing Our View of the Universe and Ourselves]

The search for extraterrestrial intelligence, regardless of its outcome, is an identity-expanding process for humanity. Thinking about SETI means thinking about our planet, the universe and ourselves. SETI touches on most fields of human knowledge, raising so many fascinating questions that no single book can cover them all. In this book, we will focus on a few key concepts: (1) The search for extraterrestrial intelligence, described in different ways, has been with us since the dawn of human consciousness. (2) This “SETI Factor” has played a key role in human evolution for millennia (3) The social and psychological impact of the search for extraterrestrial intelligence will be substantial, regardless of the findings. (4) the time has come to “get ready for SETI” by exploring

how we think about our relationship with the universe as a whole”

### SETI will gives life a purpose

Allen Tough, 1998. [Prof. Allen Tough is a noted social scientist, author, educator, and futurist residing near Toronto, Ontario Canada.] Acta Astronautica, 42 (10-12), pages 745-748. Positive Consequences of SETI Before Detection.

Both as a society and as individuals, our sense of meaning and purpose can be enhanced by tangible SETI efforts to detect communications from other civilizations, or other information about them. Today's efforts may be the beginning of centuries of interaction with other intelligent beings in our galaxy. As the significance of SETI's potential sinks in, some people come to feel a deeper sense of meaning and purpose in the universe. Humanity may be on the threshold of finding its place among the variety of intelligent life in our galaxy. Being alive just when humanity is beginning its serious efforts to detect other advanced civilizations provides a special perspective for some people. It is an especially meaningful and hopeful moment in human history. Perhaps humanity's ultimate purpose is to be a happy and successful part of the cosmic evolutionary process--the continuing evolution of life, culture, communication, and cooperation throughout the galaxy.

### SETI is the first step to becoming universal citizens.

Frank **White** 19**90** [Frank White is the author of The Overview Effect: Space Exploration and Human Evolution. A member of the Harvard College Class of 1966, Frank graduated magna cum laude, and was elected to Phi Beta Kappa. He attended Oxford University on a Rhodes Scholarship, earning an MPhil in 1969. He is the author or co-author of five additional books on space exploration and the future.] The SETI Factor: How the Search for Extraterrestrial Intelligence Is Changing Our View of the Universe and Ourselves]

 What is at stake in the Search for Extraterrestrial Intelligence (SETI) is nothing less than our understanding of what it means to be human. SETI challenges us to come to terms with our identity and purpose in this vast universe of which we are a small but important part. Human beings learn and grow by asking questions about the nature of things and setting out to find the answers. The question begins with the small child asking, “Why?”; and, for the truly curious adult, the process never ends. The questions are at the heart of science and exploration, as well as personal growth and social evolution. The bigger the question, the harder it is to find the answer, and the greater the payoff. It’s likely a driving competition—competitors get points for how well they perform on the drives, but there is also a degree-of-difficulty rating. The harder the drive, the more points are awarded.

We form our identities by comparing ourselves to other people and societies. Without an idea of others, there can be no image of ourselves. Without an idea of others, there can be no image of ourselves. “I” am everything that isn’t the “other,” which can be another person, society, the universe, extraterrestrial or God. The more comprehensive our idea of others, the more we can learn about ourselves, and the greater the expansion of our identity. For example, if I ask myself, “What is my role as a citizen of my country?” that is a significant question and it makes me think deeply about myself. If I ask “What is my role as a citizen of planet Earth?” the stakes are higher, and the questioning more profound. But if I ask, “What is my role as a citizen of the universe?” the question has become as broad as it can be and I’ll have to think long and hard to come up with an answer. The search for extraterrestrial intelligence may hold the key to becoming citizens of the universe because it will yield so much knowledge about the nature of the universe itself. In asking how the universe is put together, we are trying to take what is now mysterious and unknown and turn it into useful knowledge. We can’t be good citizens of our country without understanding how our country works, what are its values and traditions. In the same way, we cannot take on this larger citizenship without a vast amount of new knowledge.

# \*\*2ACs\*\*

## 2AC T—Exploration

### Exploration is anything that seeks to answer questions about space, including the existence of other life.

NASA’s Guiding Principles for Exploration,“The Vision for Space Exploration” 2004, [http://www](http://www/).nasa.gov/pdf/55583main\_vision\_space\_exploration2.pdf)

NASA Guiding Principles for Exploration: Pursue Compelling Questions: Exploration of the solar system and beyond will be guided by compelling questions of scientific and societal importance. NASA exploration programs will seek profound answers to questions about the origins of our solar system, whether life exists beyond Earth, and how we could live on other worlds.

### SETI is space exploration

Frank White 1990 [Frank White is the author of The Overview Effect: Space Exploration and Human Evolution. A member of the Harvard College Class of 1966, Frank graduated magna cum laude, and was elected to Phi Beta Kappa. He attended Oxford University on a Rhodes Scholarship, earning an MPhil in 1969. He is the author or co-author of five additional books on space exploration and the future.] The SETI Factor: How the Search for Extraterrestrial Intelligence Is Changing Our View of the Universe and Ourselves]

The term “search” is defined in the dictionary as making “a thorough examination in order to find something; explore” The radio search does invoke looking for something, and it is a form of exploration. However, a broad definition of the term can include many activities not always liked with the search for signals.

### SETI is space exploration

Frank White 1990 [Frank White is the author of The Overview Effect: Space Exploration and Human Evolution. A member of the Harvard College Class of 1966, Frank graduated magna cum laude, and was elected to Phi Beta Kappa. He attended Oxford University on a Rhodes Scholarship, earning an MPhil in 1969. He is the author or co-author of five additional books on space exploration and the future.] The SETI Factor: How the Search for Extraterrestrial Intelligence Is Changing Our View of the Universe and Ourselves]

SETI is explicitly a search, a pure form of exploration. It is part of the ongoing reconnaissance that our species is confucting as we take our next step off the planet and into another evolutionary epoch. .

## 2AC Probe CP

### **Plan and CP are not mutually exclusive- humans and ET would send probes to examine each other**

Michaud ’07 [Michael, Deputy Assistant Secretary of State for Science and Technology, and as Science and Technology Counselor at the American embassies in Paris and Tokyo, “Contact With Alien Civilization”, 2007, page 129]

Searching for signals and sending out probes are not mutually exclusive strategies. An alien civilization that detected our emissions might send a probe to look us over. Remote detection could lead to direct contact.

## **2AC Communication Impossible**

### Communication will be comprehensible- transmitted pictures would develop into a language

Michaud ’07 [Michael, Deputy Assistant Secretary of State for Science and Technology, and as Science and Technology Counselor at the American embassies in Paris and Tokyo, “Contact With Alien Civilization”, 2007, page 279]

Contact optimists have tended to assume that alien messages would be relatively easy to understand. The communication of quite complicated information is not very difficult, claimed Sagan, even for civilizations with very different biologies and social conventions. Once pictures are transmitted, it will be extremely simple to develop language—by show and tell. “We are considering not cryptography,” Sagan declared, “but anticryptography, the design by a very intelligent civilization of a message so simple that even civilizations as primitive as ours can understand it.” Jill Tarter thought that an information-bearing message would be crafted for unambiguous transmission, because contact with us will not be the first encounter of a superior technology with an emergent one. If they are far ahead of us technologically, McDonough optimistically assumed, then they will be just as advanced in their ability to teach. They may have had thousands of experiences in teaching their language and culture to other primitive civilizations, and they would know how to do it very well- if they so wanted. However, teaching would be far more difficult if we receive messages from great distanced, cautioned Baird; it would be without the customary aid of immediate feedback from the teacher

Communication will be easy- alien probes will teach us their language

Michaud ’07 [Michael, Deputy Assistant Secretary of State for Science and Technology, and as Science and Technology Counselor at the American embassies in Paris and Tokyo, “Contact With Alien Civilization”, 2007, page 280]

Similarly, Bracewell speculated that an alien probe in our solar system would teach us the language of its originating civilization. In this case, the exchange would be much quicker. We expect the extraterrestrials to do the hardest work. As the process of decoding messages from another species may be too difficult for us, Vakoch proposed that it is a task best left to the more advanced species. However, that makes translation, like the operation of beacons, a question of alien intent. Similar historical backgrounds may be needed if we are to understand the set of symbols used by another civilization. Yet, the language of another intelligent community may have few points of contact with our own

## **2AC Tech Too Complicated**

### **We will find science in common- alien tech supported by advanced science**

Michaud ’07 [Michael, Deputy Assistant Secretary of State for Science and Technology, and as Science and Technology Counselor at the American embassies in Paris and Tokyo, “Contact With Alien Civilization”, 2007, page 281]

Those who are most optimistic about interstellar communication claim that we and the extraterrestrials will have science in common. University of Arizona mathematician Carl De Vito put it this way: We assume that the alien technology that we detect is supported by a reasonably advanced science; that there is an objective reality that is the same throughout the universe; that this reality can be recognized and understood by an intelligent beings; that science is the quantitative study of this reality. Some philosophers would challenge these assumptions; the same reality may be described, even quantitatively, in many ways.

### **ET will share information with us- they want to ensure the survival of the galactic heritage**

Michaud ’07 [Michael, Deputy Assistant Secretary of State for Science and Technology, and as Science and Technology Counselor at the American embassies in Paris and Tokyo, “Contact With Alien Civilization”, 2007, page 286]

The classic SETI paradigm is based on the assumption that extraterrestrials will export information by radio. Morrison and others have claimed that, after search and acquisition, communication will consist of massive information transfer, because the purpose of their transmission would be to inform us. The authors of Project Cyclops proposed that extraterrestrials would use transmissions to ensure the survival of the “galactic heritage” by attracting the attention of young races. Even more optimistically, they assumed that the senders would try to make the job of deciphering and understanding the messages as simple and foolproof as possible

### **ET’s knowledge will help resolve Earth’s biggest problems- will apply alien knowledge and biology to our species**

Michaud ’07 [Michael, Deputy Assistant Secretary of State for Science and Technology, and as Science and Technology Counselor at the American embassies in Paris and Tokyo, “Contact With Alien Civilization”, 2007, page 291]

Many of those most enthusiastic about SETI hope that contact will bring us solutions to our current problems. Optimists tend to assume universal problems with universal solutions, rather than the unique problems of individual societies and the solutions tailored to fit them. Most of the problems that we want solved, such as population growth, food shortages, energy supplies, dwindling resources, and environmental degradation, may be peculiar to our level of technological civilization. They also may be peculiar to our period of history. Alien advice is unlikely to meet our unique needs at this precise moment, argued Baird, unless the more advanced civilization sent messages appropriate for multiple levels in a hierarchy. Some forms of advice that we seek may be specific to our species. is enough like ours to make their information useful to us, or they have detailed knowledge of human biology. Consider one of the most popular categories: medical techniques. Our hope that extraterrestrials will send us cures for human diseases such as cancer rests on unlikely assumptions: either alien biology is enough like ours to make their information useful to us, or they have detailed knowledge of human biology.

## 2AC METI CP

### METI does not represent common interest

**Economist** **‘10** [ Chicheley, "Phoning ET.", Oct 27, <http://www.economist.com/node/17199376>]

Where things have become difficult is over whether or not researchers should be allowed to send signals into space pre-emptively, in order to attract the attention of any alien listeners who might be out there. This is called active SETI, or METI, where the "M" stands for messaging. Attempts to draft a second SETI protocol to deal with this foundered several years ago, and the chairman and two members of the IAA's committee resigned. The acrimony was aired on October 4th at a meeting organised by the Royal Society at Chicheley Hall, in Britain. Those opposed to METI argue that broadcasting signals into space announcing the location of Earth is tantamount to ringing a dinner gong for any carnivorous, colonising or anti-social aliens who might be listening. Although Earth would be a rather long way to go for lunch, the argument is that the decision to take such a risk is not one for a handful of scientists. Alexander Zaitsev, chief scientist at the Kotelnikov Institute of Radio Engineering and Electronics, disagrees. Dr Zaitsev has access to one of the world's most powerful radio transmitters, the Evpatoria, and he has already sent a number of "hello" signals to nearby star systems. He argues that radar astronomy, which is used to probe things like asteroids and the surface of Venus, already gives off signals that could be picked up by aliens. He is also on record, though, as saying that humans have a moral obligation to announce their presence. Even without the intervention of people like Dr Zaitsev, that may already have happened--if anyone is listening. Some people think signals emitted by television and radio stations would be detectable from nearby stars, thus rendering the debate irrelevant. Indeed, some at the meeting argued that if aliens were to use an astronomical phenomenon called gravitational lensing (in which the gravitational field of the sun bends and amplifies radio waves and light from Earth), human signals could be amplified to the point where even the light from cities would be visible. Michael Michaud, who resigned as chairman of the IAA's SETI group in 2007, said that METI is not science but rather "an attempt to provoke a reaction". He wants wider consultation. Seth Shostak, the group's current chairman, disagrees. He says consultation does not guarantee a "correct" answer; it seeks merely to "spread the blame if Earth gets wiped out"--though who would be left to point the finger is unclear. He also says that because there is a small but real risk to sending messages, any international consultation would be likely to conclude that the broadcasters should "shut up". David Brin, an author of science fiction who also resigned from the SETI group, accused it of attempting to stage-manage the discussion. He said that those proposing METI should involve more of humanity in the debate and must accept that a moratorium may be necessary. But he is also realistic. In the not too distant future, he thinks, so many people will have the power to send signals into space that it will not be possible to control intergalactic messaging. If that turns out to be true, then hope it is ET listening, not the Daleks.

### METI will be an arduous and imprecise task

**Harrison** **‘9** [Albert A., Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology

 "The Future of SETI: Finite Effort or Search without End?" October, http://www.sciencedirect.com/science/article/pii/S001632870900072X]

The challenges of contact may be profound, particularly for those among us who are intolerant of ambiguity. Although we can imagine constraints on the kinds of civilizations that we might discover, we really have no idea what ‘‘they’’ will be like. Under the standard SETI detection scenario, most likely all that we will detect is the functional equivalent of a dial tone—that is, a carrier wave. If this dial tone does carry a message, it might take decades or centuries to decode it. Once decoded, there is the issue of accuracy of the information. Even given the best of intentions, since radio and laser communications cannot exceed the speed of light, the information we receive from them will be dated, even as the Cosmic Call broadcasts will be 40 years out of date when they reach their destinations. Furthermore, if we responded instantly to their reply, we would have to wait another 80 years for an answer. There may be ways to minimize some of these problems, but establishing relations with extraterrestrial civilizations is unlikely to be a simple, rapid process, like chatting with neighbors.

## 2AC Aliens Evil

### AT SETI Scientist have considered that aliens may not be nice but still remain optimistic

Squeri, Lawrence. "When ET Calls Is SETI Ready." Journal of Popular Science 37.3 (2004): 478-96. Lawrence Squeri is professor of history and department chairman at East Stroudsburg University of Pennsylvania. He is researching a book on SETI.

SETI activists assume that extraterrestrials have the best of human traits, especially altruism, and have outgrown the negatives. The reality may not be so sanguine. Creatures that have evolved in different physical contexts may have different body chemistries and modes of thinking. Contact with these creatures may not be pleasant. How will humanity react if extraterrestrials inform us that their religion mandates the eating of first-born children? Even a gentle extra- terrestrial culture may cause problems. Earth’s history shows that technologically superior people can inflict enormous culture shock on backward societies. Contact between the West and non-Western peoples have resulted in loss of confidence, enervation, and cultural despair. Will the knowledge that human science and medical knowledge are clearly inferior to ET’s make us feel that our culture is also inferior? Will humans split between those who wish to adopt ‘‘alien’’ ways and those who believe in traditional culture? The different forms of stress that contact can precipitate are endless. SETI writers are quite aware of these potential problems, yet they remain optimistic. They believe that contact with ET is part and parcel of our cultural evolution and in the long run will benefit humanity. If they did not believe this, they would not be so anxious to make contact with extraterrestrials.

### Only benefits- no threat of galactic imperialistic aliens

Hanson, R. (1998). "Burning the Cosmic Commons: Evolutionary Strategies for Interstellar Colonization." Working paper. <http://hanson.gmu.edu/workingpapers.html> (Robin Hanson is an associate professor of economics at George Mason University and a research associate at the Future of Humanity Institute of Oxford University)

Astronomers Carl Sagan and William Newman are even willing to assume zero-population growth, which implies a very slow rate of expansion (Newman & Sagan, 1981). They reason

Those civilizations devoted to territoriality and aggression and violent settlement of disputes do not long survive after the development of apocalyptic weapons. Civilizations that do not self-destruct are pre-adapted to live with other groups in mutual respect. This adaptation must apply not only to the average state or individual, but, with very high precision, to every state and every individual within the civilization ... the result is that the only societies long-lived enough to perform signiﬁcant colonization of the Galaxy are precisely those least likely to engage in aggressive galactic imperialism. (Sagan & Newman, 1983)

### Listening to ETI is only beneficial- they can’t actually invade earth

Shuch, H. Paul. "The Search for Extraterrestrial Intelligence." Futurist 37.3 (2003): 52. Military & Government Collection. EBSCO. Web. 18 July 2011. (H. Paul Shuch serves as executive director of the SETI League, an international alliance of amateur and professional radio-astronomers and others engaged in circuit design, software development, and grassroots SETI research.)

But wait--SETI is all about communication, not contact. Unless we've got the laws of nature all wrong, beings of an advanced civilization at the far end of the galaxy will still take 50,000 to 70,000 years to get here, assuming they want to know about us.

That distant cousin of yours in Kansas receiving your Christmas card might just take your casual "drop by sometime" seriously and show up on your doorstep next Thanksgiving, but extraterrestrial beings? Not likely.

For one thing, they haven't been invited. We inhabit a paranoid planet. Pressures from governing bodies and private citizens alike have prompted most scientific organizations and SETI research facilities to adopt a policy that prohibits interstellar transmission lest we give ourselves away. With only a few minor exceptions, we have refrained from shouting in the jungle. The act of listening in no way reveals our position or our interest; it makes us no more vulnerable to invasion and domination than we would by turning a deaf ear to the universe. Given that SETI is a passive activity, it would seem we have nothing to lose in listening. And everything to gain

### Benefits of finding aliens outweigh the risks

Project Cyclops: a Design Study of a System for Detecting Extraterrestrial Life. Moffett Field, CA: NASA/Ames Research Center, 1971

By revealing our existence, we advertise Earth as a habitable planet. Shortly thereafter we are invaded by hordes of superior beings bent on colonizing the Galaxy. Mankind is annihilated or enslaved. Although this is a recurrent theme of science fiction, the facts do not appear to justify it as a real danger. If, as we suspect, interstellar travel is enormously expensive even for an advanced culture (see Chap. 4), then only the most extreme crisis would justify mass interstellar travel. We feel we can dismiss the quest for additional living space as a motive since any race capable of interstellar emigration would have already solved its population problems long ago by internal means. It is not inconceivable that a race might seek to avert extinction by mass exodus before its primary star leaves the main sequence, if so, we would conjecture that they would not wish to add the problems of combat to those of the journey itself and would seek habitable but uninhabited worlds. Such planets might have been located long in advance by the galactic community or by probes sent by the race in question. If so, affiliation with a galactic community might confer security rather than risk. If, on the other hand, interstellar travel is much easier than we predict, we would argue that to maintain radio silence is no real protection, for in this case a galactic survey would not need to depend on beacons. The question to be answered in this case is Enrico Fermi's: Where are they? Exploitation The possibility has been voiced that to a very advanced race we might appear such a primitive life form as to represent delightful pets, interesting experimental animals, or a gourmet delicacy.1 The arguments against invasion as a threat apply with even more force to these fears, for the motivations are less compelling. In addition, we might argue, albeit anthropocentrically, that compassion, empathy, and respect for life correlate positively with intelligence, though counterexamples are not hard to find. Subversion A more subtle and plausible risk is that an alien culture, under the guise of teaching or helping us might cause us to build devices that would enable the alien culture to gain control over us. A computer-controlled experiment in biochemistry, for example, might be used to create their life form here. There is no limit to the kinds of threats one can imagine given treachery on their part and gullibility on ours. Appropriate security measures and a healthy degree of suspicion are the only weapons. Cultural Shock Finally, there is the possibility that mere contact with an obviously superior race could be so damaging to our psyches as to produce retrogression rather than cultural advancement even with the best intentions on the part of the alien culture. Although many scientists might accept with equanimity positive proof of superior life on other worlds, is mankind as a whole prepared for this? The concept is certainly anathematic to most religions. Sociologists point out that historically contact between two terrestrial cultures has usually, if not always, resulted in the domination of the weaker by the stronger. We would argue that there is no example where such domination has occurred by radio only. The domination has always involved physical contact and usually territorial expansion by the stronger culture. Where such aggression has been absent the lesser culture has often survived and prospered. The natives of certain South Sea Islands have greatly improved their well-being as a result of improved skills and medical knowledge gained through contact.

## 2AC Aliens No Exist

### ETI exists – Interstellar Travel is just uber slow

Hanson, R. (1998). "Burning the Cosmic Commons: Evolutionary Strategies for Interstellar Colonization." Working paper. <http://hanson.gmu.edu/workingpapers.html> (Robin Hanson is an associate professor of economics at George Mason University and a research associate at the Future of Humanity Institute of Oxford University)

Others, including the most prominent astronomers who discuss ETI, tend to see interstellar travel as slow and expensive, per-capita wealth as limited (Drake & Sobel, 1992), and recent human population trends as historical aberrations (Newman & Sagan, 1981). Such assumptions can imply slow expansion rates, allowing our galaxy to be full of ETIs while Earth is untouched. This can support optimism in the search for ETI. For example, Harvard astronomer Michael Papagiannis argues that

The limits of growth in a ﬁnite system, which will be imposed on all stellar civilizations by the colossal distances that separate the stars, will affect the natural selection of these civilizations. Those that manage to overcome their innate tendencies toward continuous material growth and replace them with non-material goals will be the only ones to survive this crisis. As a result the entire Galaxy in a cosmically short period will become populated by stable, highly ethical and spiritual civilizations. (Papagiannis, 1984)

# \*\*Misc\*\*

## Heg Addon

### SETI can help control Country reactions to contact

Harrison et. al 2000, Albert Harrison, (Harrison works at the Department of Psychology at the University of California Davis campus. Dr. Harrison is a social psychologist whose interests include organizational and environmental psychology and works at the University of California Davis), “When SETI Succeeds: The Impact of High-Information Contact”, Foundation for the Future, edited by Allen Tough, Section V, pdf pg. 71

Political science is of high relevance but low visibility within SETI. Political scientists who, like economists, draw on mathematical models, empirical observation, and historical analysis, could aid our understanding of public support for the search and ways to organize the search at the national and international levels. Additionally, if the search is successful, we may expect political repercussions that political scientists could both predict and help shape. Under some scenarios, a positive search outcome could alter the balance of power, and conceivably, extraterrestrial societies could become “players,” of sorts, in human political affairs. Political science can also analyze how governments might react to a confirmed detection, including motivations for secrecy. This could be particularly relevant if the first detection were made accidentally by a government installation designed for other purposes. SETI enthusiasts from many fields have raised questions of security, international coordination, and the like, but these questions have received only minimal attention (Michaud, 1972-1998).

## Racism Addon

### Hysteria over alien threats is an expression of our displaced racial anxieties—the 1AC’s analysis is key.

Christopher F. Roth, Anthropology—University of Northern Illinois, DeKalb, 2005

E.T. Culture: Anthropology in Outerspaces, ed. Debbora Battaglia, p. 91-2

An occasional hope expressed by ufo enthusiasts is that encounters with extraterrestrial intelligence will somehow act as a catalyst that will lead to world peace or the bridging of differences among human groups. (The dark side of this is the common conspiracy theory that, for example, a faked alien invasion by global elites will be used as the excuse to impose a mono­lithic New World Order on humanity; see, e.g., Hayakawa 1993) But, as we have seen, differences, the very idea of ethnicity and race, are part of American cultural conceptions of what it is to be human. Insofar as aliens are incorporated into preconceived notions of humanity, they will be ac­commodated as a part of—not a transcendence of—existing evolutionary, racial, and ethnic dimensions on which our conceptions of human diver­sity are already arranged. This is what gives us George Hunt Williamson projecting anti-Semitic fears onto an alien infiltration of our social institutions; Betty and Barney Hill abducted and probed by "men" who morph from Irishmen to Chinese to specimens from an ethnological slide show; thousands of white middle-class Americans reporting that they have been kidnapped and raped by high evolutionaries trying to save their race and ours simultaneously; nightmare fantasies of genocide, for which we can blame the aliens, not whites; and a growing number of abductees and their children believing that they themselves are downtrodden immigrants, adding grey or green to the palette of white, brown, red, black, and yellow Americans.

I have tried to leave aside here the question of what, if anything, abductees and contactees are really experiencing, which may or may not be a phenomenon better categorized as neurological, spiritual, or something else. But the narratives and imagery they employ are immediately woven into an existing coherent and evolving folk anthropology that is already structuring most thinking about race and difference, a folk anthropology that dips into and out of academic anthropology at surprising junctures. Academic anthropologists, after all, have (for good scientific and political reasons) stopped making pronouncements on racial difference, but, since most Americans "know" that race is real and must mean something, some­one has to be providing some answers.

## Contact Will Be Quick

### Proof of ETs could be found in 25 years

Moskowitz 10 [Moskowitz is a Senior Writer at Space.com, [http://www.space.com/8958-proof-aliens-25-years-scientist.html. 08/16/](http://www.space.com/8958-proof-aliens-25-years-scientist.html.%2008/16/) “Proof of Aliens Could Come Within 25 Years, Scientist Say”]

Proof of extraterrestrial intelligence could come within 25 years, an astronomer who works on the search said Sunday. "I actually think the chances that we'll find ET are pretty good," said Seth Shostak, senior astronomer at the Search for Extraterrestrial Intelligence Institute in Mountain View, Calif., here at the [SETI con convention](http://www.space.com/8951-aliens-exist-love-bach.html). "Young people in the audience, I think there's a really good chance you're going to see this happen." Shostak bases this estimation on the [Drake Equation](http://www.space.com/8952-father-seti-honored-50-years-search-alien-life.html), a formula conceived by SETI pioneer Frank Drake to calculate the number (N) of alien civilizations with whom we might be able to communicate. That equation takes into account a variety of factors, including the rate of star formation in the galaxy, the fraction of stars that have planets, the fraction of planets that are habitable, the percent of those that actually develop life, the percent of those that develop intelligent life, the fraction of civilizations that have a [technology](http://www.space.com/8958-proof-aliens-25-years-scientist.html) that can broadcast their presence into space, and the length of time those signals would be broadcasted.

# \*\*Neg\*\*

## Discovery Fails

#### Discovery will not destroy anthropocentrism and we can be unique and turns Copernican Revolution

Michaud 07, Michael A. G Michaud, 2007 (Author of over one hundred published works, Michael Michaud was a U.S. Foreign Service officer for 32 years before turning full time to writing.  During his diplomatic career, he served as Acting Deputy Assistant Secretary of State for Science and Technology, Director of the State Department’s Office of Advanced Technology, Minister-Counselor for Environment, Science, and Technology at the American Embassy in Tokyo) “Paradigm Shift” in “Contact with Alien Civilization” <http://www.springerlink.com/content/r01697143065120g/fulltext.pdf> pg. 343

After centuries of debate, we still are arguing about our status in the universe. Opposition to the search reflects an underlying fear that success would lower our status and undermine our self-esteem. The search can be seen as another step in our long journey away from anthropocentrism. Is the continuation of this journey inevitable? Anthropocentric beliefs may continue to have weight until unambiguous evidence of extraterrestrial intelligence is discovered. Even a confirmed detection might not demolish anthropocentrism. The durability of this idea suggests that contact might drive anthropocentrists to look for another way of arguing that humans are special. What if our search does not succeed? Nobel Prize-winning biochemist Baruch Blumberg, first head of NASA’s Astrobiology Institute, thought that a failure to detect extraterrestrial life would be a step backward from the Copernican revolution. **Finding that there are no other intelligent life forms, White observed, could reinforce religious views of humans as unique**.11 Asimov speculated that a failure to find other intelligences would cause a new kind of loneliness and desolation, a fear of a vast impersonal universe in which we are lost.12 That would bring us full circle, back to Blaise Pascal in the seventeenth century. Until we detect others, we are effectively alone. So far, we have found nothing to exclude that possibility. If we are alone, argued Easterbrook, there are two poles of possibility. One is that life is a fluke without inherent significance. The other is that human life is precious beyond words.13 Achenbach went even farther. **Until there is reason to believe otherwise, we have the right to view our planet and its inhabitants, and especially its sentient creatures, as the treasures of the known universe.**14

## Aliens Bad

#### Aliens bad – resemble us to much or nonexistent

Conway, Morris C. "Predicting What Extra-terrestrials Will Be Like: and Preparing for the Worst." *Phil. Trans. R. Soc. A* 369 (2011). Department of Earth Sciences, Downing Street, University of Cambridge

It is difﬁcult to imagine evolution in alien biospheres operating in any manner other than Darwinian. Yet, it is also widely assumed that alien life-forms will be just that: strange, un-nerving and probably repulsive. There are two reasons for this view. First, it is assumed that the range of habitable environments available to extra-terrestrial life is far wider than on Earth. I suggest, however, that terrestrial life is close to the physical and chemical limits of life anywhere. Second, it is a neo-Darwinian orthodoxy that evolution lacks predictability; imagining what extra-terrestrial life would look like in any detail is a futile exercise. To the contrary, I suggest that the outcomes of evolution are remarkably predictable. This, however, leads us to consider two opposites, both of which should make our blood run cold. The ﬁrst, and actually extremely unlikely, is that alien biospheres will be strikingly similar to our terrestrial equivalent and that in such biospheres intelligence will inevitably emerge. The reasons for this revolve around the ubiquity of evolutionary convergence, the determinate structure of the Tree of Life and molecular inherency. But if something like a human is an inevitability, why do I also claim that the ﬁrst possibility is ‘extremely unlikely’? Simply because the other possibility is actually the correct answer. Paradoxically, we and our biosphere are completely alone. So which is worse? Meeting ourselves or meeting nobody?

#### No benefits from aliens- if they existed they would be like people because of convergent evolution and already have conquered our planet

Conway, Morris C. "Predicting What Extra-terrestrials Will Be Like: and Preparing for the Worst." *Phil. Trans. R. Soc. A* 369 (2011). Department of Earth Sciences, Downing Street, University of Cambridge

I argue, against much received neo-Darwinian wisdom, that what we see here is at least broadly, and I suspect much more precisely, what we will find on any comparable Earth-like planet. Accordingly, and with specific reference to SETI, as well as the sine qua non of terrestriality, the evolution of intelligence and cognitive sophistication (including numerosity), manipulative skills, tool-making and technology, not to mention the increasing appropriation of resources are all evolutionarily inevitable because all are convergent. So too the seemingly mundane, be it anatomical (such as walking) or biochemical (as with respiratory proteins), will be highly constrained. Our alien may look unfamiliar, but if she does (yes, sex is also inevitable, as will be parental imprinting, sex determination, viviparity and milk), it will be a skin-deep difference. More probably, as Bieri [1] pointed out many years ago, they will not look like thinking ‘pancakes. In all probability they will look an awful lot like us’ (p. 457).

So why should we ‘prepare for the worst’? First, if intelligent aliens exist, they will look just like us, and given our far from glorious history, this should give us pause for thought. The alternative is more paradoxical, but revolves around the observation that if I am correct in my supposition of evolutionary convergence in reflecting the outcomes of evolution on any Earth-like planet, then we should not be here. This is simply because solar systems depending on metal-rich stars would have begun to form some billions of years ahead of ours. We can juggle the figures as we see fit, but reminding ourselves that much of the nervous system has a molecular inherency that extends far deeper than animals and within this group advanced cognition has evolved independently at least five times, then let us say that only one in a thousand biospheres spawns technology and of those one in 10 000 finally leaves its solar system then this planet would still have been colonized by people who kept trilobites for pets. And what about our ancestor, that is the earliest fish [94]? Animals like Myllokunmingia, swimming above what is now the city of Kunming. Best on toast. But that did not happen, and it will not happen. We never had any visitors, nor is it worth setting up a reception committee in the hope that one day they might turn up. They are not there, and we are alone. So which do you prefer: neighbours with the culture of the Aztecs or a howling silence?

#### ETI dangerous- ETI may fall back into Technological Adolescence

Denning, Kathryn. "Ten Thousand Revolutions: Conjectures about Civilizations." *Acta Astronautica* 68.3-4 (2011): 381-88. Assistant Professor, Dept. of Anthropology, York University

In a recent paper mentioned above, Lemarchand carefully expands upon Sagan's concept of the “Technological Adolescent Age”, i.e., the period during which we have newly acquired the capability to drive ourselves to extinction (through technology, environmental degradation, or pronounced inequalities between groups), and are at real risk of doing so [[31]](http://www.sciencedirect.com.turing.library.northwestern.edu/science/article/pii/S0094576509005694%22%20%5Cl%20%22bib31). Assuming that this stage is finite, terminated either by extinction or by transition into the “Technological Mature Age”, Lemarchand sets about estimating the time it will take for Earth civilization to make this transition. He bases his estimate upon three indicators: projected time to the completion of a global demographic transition (assuming this transition has begun); projected time to a population-exterminating war (extrapolating from historical data on wars); and the speed of the diffusion of state-level democracy (assuming that democracy is a disembodied technology, superior to other modes of social organization). Lemarchand concludes that we began our TAA after WWII and may grow out of it after the middle of this century.

Finally, Lemarchand discusses the implications for the Drake factor *L*: if we accept the Principle of Mediocrity (i.e., we are average), and assume that that “life and intelligence will develop by the same rules of natural selection wherever the proper surroundings and the needed time are given”, then “we may also assume that the average lower boundary for a technological civilization lifetime with interstellar communication capabilities would be close to*L*≈150–200 years” [[32]](http://www.sciencedirect.com.turing.library.northwestern.edu/science/article/pii/S0094576509005694%22%20%5Cl%20%22bib32).

This is fascinating work, which makes a laudable effort to extract as much information as possible from our own civilization. One social scientific knee-jerk response to it, however, is to isolate all the additional premises which are essential to Lemarchand's argument, but which are unacknowledged and contestable. To begin with, adolescence is such a human metaphor, grounded in our own specific biological realities…is this the best framework for understanding social-technological turbulence? And it certainly is interesting that humanity's capacity for efficient auto-extinction developed more or less concurrently with our ability to transmit signals to space, but is this a necessary coincidence that would occur elsewhere? Similarly, it is unquestionably useful to consider what we know about war, and what we know about population growth, and what we know about the spread of technology, but quantifying these, extrapolating, and then transferring to another context involves leaps too big for most social scientists. Even if we could agree that the TAA might be in principle a universal stage, it makes little sense to a social scientist to think that it can be usefully measured in Earth years, rather than in a measure relative to the life spans or social cycles of an ET civilization.

There are more questions, of course, as must be the case with any bold conjecture extrapolating from history to the future, from Earth to the universe. But my main purpose here is not to ask all those: rather, I wonder if the production of a new lower limit for “*L*” is the best use of all the intellectual effort involved in a substantial undertaking like this? What if one tried instead to describe in words the interrelationships of population growth, war, and technological diffusion? Would this not be just as worthwhile as a number necessarily laden with caveats?

## Aliens Bad—Slavery

### Finding aliens is bad – we’d pretty much become slaves

Shuch, H. Paul. "The Search for Extraterrestrial Intelligence." Futurist 37.3 (2003): 52. Military & Government Collection. EBSCO. Web. 18 July 2011. (H. Paul Shuch serves as executive director of the SETI League, an international alliance of amateur and professional radio-astronomers and others engaged in circuit design, software development, and grassroots SETI research.)

We will be far better served if our cosmic communicators have advanced only a little bit beyond us. If they lead us by, let us say, a million years, then they might make their culture known to us much as we communicate with household pets. This is speculative to be sure, but what if they regard us much as we regard dogs? What do we stand to gain? And to lose?

One could argue that Canis familiaris (domestic dog) enjoys a longer life span and better nutrition than his wild ancestor; that by taking him under our protection, humans have given him a higher standard of living. Pulling our sleds, herding our sheep, guarding our children, and leading our blind are small prices for him to pay for the benefits we benevolently bestow. But did anyone ever bother to ask Fido how he feels about the arrangement?

Science fiction is full of cautionary tales of humanity being subdued and subjugated by advanced aliens. Surely if their technology is capable of announcing its presence across the cosmic gulf, they have the capacity to come here in conquest. Better to let well enough alone, some argue.

## SETI Fails

### SETI won’t solve- we can’t understand intelligence billions of years ahead of us.

Shuch, H. Paul. "The Search for Extraterrestrial Intelligence." Futurist 37.3 (2003): 52. Military & Government Collection. EBSCO. Web. 18 July 2011. (H. Paul Shuch serves as executive director of the SETI League, an international alliance of amateur and professional radio-astronomers and others engaged in circuit design, software development, and grassroots SETI research.)

A common myth holds that our brothers and sisters in space will hand us a silver platter loaded with solutions to all of humankind's problems: cures for disease and poverty and ignorance and prejudice, which everyone knows are trivial matters for those advanced beings conquering the interstellar gulf.

Everyone is most likely wrong. Since ours is a relatively young planet orbiting a fairly new star, it's a cinch to speculate that we're the newcomers on the block. Top astrophysicists have estimated that other civilizations could well be anywhere from a thousand to a billion years older than our own. If the first extraterrestrial civilization we encounter is at the upper end of that age continuum, SETI scientists will be lucky to even recognize its artifacts as manifestations of intelligence, let alone interpret them. Such an ancient race would be as far ahead of us as we are beyond bacteria.

### METI rather than SETI is a viable option for contact

Vakoch, Douglas A. "Responsibility, Capability, and Active SETI: Policy, Law, Ethics, and Communication with Extraterrestrial Intelligence." *Acta Astronomica* (2011): 514-19 (Department of Clinical Psychology, California Institute of Integral Studies, Center for SETI Research, SETI Institute)

One assumption in the above quote is especially noteworthy. This assumption is that the standard ‘‘galac- tic protocol’’ necessarily involves the more advanced civilizations transmitting and the less advanced civiliza- tions listening. The difficulty with this claim is that if indeed humans have no way to anticipate what a ‘‘galactic protocol’’ involves, then how can we be so sure that it requires the more advanced civilization to take the initiative? It would, to be sure, be beneficial to humans if this asymmetry of responsibility actually holds. As Tarter [25] notes, ‘‘Transmitting is a harder job than listening, and so we put the burden of transmitting on the older technologies.’’ (p. 19). What is not so clear, however, is whether the advanced civilizations will feel the responsibility to take on this burden. After all, we see cases on our own planet of cultures that provide benefits for individuals within their own culture, but they do not place much emphasis on providing for the well-being for individuals in other cultures. Perhaps this assumption really reflects our ethical assumption that if a civilization has the resources to transmit messages for our benefit, it should transmit messages. Fasan indirectly addresses the question of the obliga- tion to transmit when he examines how metalegal principles may affect the actions of extraterrestrial civilizations [26]. He provides the following hypothetical scenario, which is quite close to the standard SETI paradigm in which we, the younger civilization, attempt to detect electromagnetic signals from other worlds, with the hope that simply knowing that it is possible for a civilization to live for an extended time may provide encouragement to humankind during our own technolo- gical adolescence. ‘‘[W]hat should be the law when some epidemic breaks out among the members of another race, which can be cured by [electromagnetic] waves?,’’ Fasan asks. ‘‘Are we then legally obligated to deliver such waves to the suffering aliens? As long as we remain within the limits of strict legality we have to answer this question in the negative. For no race may damage another one. No race has therefore the right to demand from the other that it harm itself. But every enlargement of entropy is by definition damage to a certain degree. Were we to provide the other race with certain electromagnetic waves, we would use up energy. But using up energy increases entropy and is self-damaging. Therefore our negative answer is correct.’’ (p. 65). Thus, Fasan [26] concludes that there is no legal obligation for one civilization to transmit electromagnetic signals for the benefit of another—even under circum- stances that call for greater compassion (an epidemic that can be cured with intervention) than does humankind’s current situation. Nevertheless, he quickly adds that at least according to human ethical standards, the civiliza- tion that can help should help: ‘‘This solution is, as we have said, a purely legalistic one. The highest principles of human ethics would, of course, demand that we should, and very quickly, help the other race and provide the necessary energy.’’ (pp. 65—66). Indeed, elsewhere Fasan [17] argues that among the appropriate ideas to commu- nicate in messages to extraterrestrial intelligence is the following: ‘‘If we can help you in any way, please tell us. It is an ethical principle for us to extend help to you.’’ (p. 134) The challenge we face in attempting to anticipate whether extraterrestrials will feel themselves bound by comparable ethical guidelines is that we have no direct knowledge of such putative beings. From the perspective of an extraterrestrial’s ethical system, perhaps it is the younger civilization, which arguably has the most to gain from an interstellar exchange, that should be expected to take on the burden of transmitting. Rather than benevo- lently transmitting, more advanced civilizations may instead be selective in deciding to whom they will reply. A young civilization may not have a galactic right to intercept transmissions from other civilizations simply by virtue of its youth; young civilizations may need to earn the knowledge that other civilizations exist by first showing that they are willing to transmit messages of their own.

### We won’t find anything—ETI could not manifest their intelligence in technology

Denning, Kathryn. "Ten Thousand Revolutions: Conjectures about Civilizations." *Acta Astronautica* 68.3-4 (2011): 381-88. Assistant Professor, Dept. of Anthropology, York University

It is often noted by astrobiology optimists that life emerged on Earth nearly as soon as it was remotely possible for it to do so, and by extension, that the same will be true on other worlds [[33]](http://www.sciencedirect.com.turing.library.northwestern.edu/science/article/pii/S0094576509005694%22%20%5Cl%20%22bib33). Life, in this view, is both immanent and imminent wherever there is suitable chemistry. There is a parallel sense of inevitability in some writings on SETI concerning technology, i.e., that technology arises and evolves as soon as intelligence provides the necessary ingredients. This is not strongly supported by the archaeological and anthropological record of our own species, however. Human beings have always been technological—our dependence upon tools is one of the defining characteristics of our species—but it seems equally clear that humans do not always use as much technology as they can. To the best of our knowledge at present, the florescence of durable human technology began tens of thousands of years after the emergence of *Homo sapiens sapiens*, probably as a result of worsening climate and changing social patterns. Specifically, during the last Ice Age, some human communities began to aggregate in larger groups, which led to increased territoriality, sedentism, specialization of labour, and more elaborate tool kits. Once those trends were set in motion, they were somewhat autocatalyzing and ultimately led, in some places, to the complex states of today. However, it is inescapable that many other human groups with the same biological capabilities did not follow this particular social and technological path. Indeed, gathering-hunting lifeways with quite minimal technology worked very well under some circumstances, and persisted in many parts of the world until very recently, until these communities were forced by political circumstances to change. If we compare all human cultures, we must conclude that there has been no uniform endogenous trend towards greater technological complexity. A related point emerges from Davies’ remarks upon the evolution of human intellectual capabilities: The case of the Australian Aborigines is intriguing. These people remained almost completely isolated from the rest of the world for 40 000 years until the arrival of the Europeans. Yet they are today essentially indistinguishable from Europeans in their artistic, linguistic and musical abilities and, when educated, in their mathematical ability too. This suggests that either the ‘maths’ gene and others were selected for more than 40 000 years ago, and have remained hidden and ‘unexpressed’ for countless generations, or that these higher abilities have developed in parallel with the rest of humanity as a bizarre form of biological convergence with no apparent use. Either way, there is a mystery as far as orthodox Darwinism is concerned [[34]](http://www.sciencedirect.com.turing.library.northwestern.edu/science/article/pii/S0094576509005694%22%20%5Cl%20%22bib34). There is, however, no mystery as far as anthropology is concerned. All humans on Earth today are of the same species and have the same essential genetic endowment of intellectual abilities—but we do use them differently. Just because a group of people has the capability to do higher mathematics in a written form, or to build and use complex scientific instruments, does not mean that they must do so. Nor does the absence of written math or modern science among a people mean that their intellectual capacity is latent or unused; it is typically being used in another way. This is simply because biological capabilities enable but do not determine cultural activities. As a whole, *Homo sapiens sapiens* is now a highly technological species. However, the data we have about ourselves do not indicate that we became this way because technological prowess is an inevitable result of technology-capable intelligence. Perhaps the contingency of the Ice Age was merely a catalyst for a technological florescence which was waiting to happen. Or perhaps without the Ice Age, this change would never have taken place. We do not at present have the necessary data to determine which alternative is true. Indeed, we may never have such data [[35]](http://www.sciencedirect.com.turing.library.northwestern.edu/science/article/pii/S0094576509005694%22%20%5Cl%20%22bib35). Why is all this important? It is a matter of defining the set of phenomena which are useful to consider. It is a given in SETI that we will only encounter other technological civilizations, and so it can be argued that intelligence which does not result in detectable technology need not concern us. With this in mind, Tarter has defined “intelligence”, for SETI's purposes, as the “the ability to construct and operate large transmitters”, while noting that this and other related definitions are “more than a tongue-in-cheek exercise. They encompass, and specifically acknowledge, all the anthropomorphic biases with which we are burdened, while admitting that there is nothing we can do about them until such time as we discover an example of life (including perhaps, intelligent life) as we do not yet know it [[36]](http://www.sciencedirect.com.turing.library.northwestern.edu/science/article/pii/S0094576509005694%22%20%5Cl%20%22bib36). This is obviously a cogent argument. However, there is usually something, however small, to be done about biases, and it is often worth it to try. Why might it be worth it in this case? Not because of search strategies, implications for the Drake factors *f*i or *f*c , not because of a “bottom line” projection for *N*, and not for the purposes of assigning a probability that technology will arise in an intelligent species. We simply have no solid bases upon which to assign those numbers. But that is not of much import, since no matter which number we assign, the size of the universe provides a multiplication factor that makes even hugely improbable events possible, and this of course makes the search worthwhile. Rather, I think it is worth it to tackle our biases as much as we can, to think constructively and clearly about what technology really is, and how it interacts with intelligence, by striving to thoroughly understand the ontogeny of our own technology. If we explore this relationship, past and present, without concern for numerical values, and without trying to decide the degree of inevitability, we could achieve some interesting understandings which just might be of use in the event of a future contact.

## METI CP

### METI rather than SETI is a viable option for contact

Vakoch, Douglas A. "Responsibility, Capability, and Active SETI: Policy, Law, Ethics, and Communication with Extraterrestrial Intelligence." *Acta Astronomica* (2011): 514-19 (Department of Clinical Psychology, California Institute of Integral Studies, Center for SETI Research, SETI Institute)

One assumption in the above quote is especially noteworthy. This assumption is that the standard ‘‘galactic protocol’’ necessarily involves the more advanced civilizations transmitting and the less advanced civilizations listening. The difficulty with this claim is that if indeed humans have no way to anticipate what a ‘‘galactic protocol’’ involves, then how can we be so sure that it requires the more advanced civilization to take the initiative? It would, to be sure, be beneficial to humans if this asymmetry of responsibility actually holds. As Tarter [25] notes, ‘‘Transmitting is a harder job than listening, and so we put the burden of transmitting on the older technologies.’’ (p. 19). What is not so clear, however, is whether the advanced civilizations will feel the responsibility to take on this burden. After all, we see cases on our own planet of cultures that provide benefits for individuals within their own culture, but they do not place much emphasis on providing for the well-being for individuals in other cultures. Perhaps this assumption really reflects our ethical assumption that if a civilization has the resources to transmit messages for our benefit, it should transmit messages. Fasan indirectly addresses the question of the obligation to transmit when he examines how metalegalatic principles may affect the actions of extraterrestrial civilizations [26]. He provides the following hypothetical scenario, which is quite close to the standard SETI paradigm in which we, the younger civilization, attempt to detect electromagnetic signals from other worlds, with the hope that simply knowing that it is possible for a civilization to live for an extended time may provide encouragement to humankind during our own technological adolescence. ‘‘[W]hat should be the law when some epidemic breaks out among the members of another race, which can be cured by [electromagnetic] waves?,’’ Fasan asks. ‘‘Are we then legally obligated to deliver such waves to the suffering aliens? As long as we remain within the limits of strict legality we have to answer this question in the negative. For no race may damage another one. No race has therefore the right to demand from the other that it harm itself. But every enlargement of entropy is by definition damage to a certain degree. Were we to provide the other race with certain electromagnetic waves, we would use up energy. But using up energy increases entropy and is self-damaging. Therefore our negative answer is correct.’’ (p. 65). Thus, Fasan [26] concludes that there is no legal obligation for one civilization to transmit electromagnetic signals for the benefit of another—even under circumstances that call for greater compassion (an epidemic that can be cured with intervention) than does humankind’s current situation. Nevertheless, he quickly adds that at least according to human ethical standards, the civilization that can help should help: ‘‘This solution is, as we have said, a purely legalistic one. The highest principles of human ethics would, of course, demand that we should, and very quickly, help the other race and provide the necessary energy.’’ (pp. 65—66). Indeed, elsewhere Fasan [17] argues that among the appropriate ideas to communicate in messages to extraterrestrial intelligence is the following: ‘‘If we can help you in any way, please tell us. It is an ethical principle for us to extend help to you.’’ (p. 134) The challenge we face in attempting to anticipate whether extraterrestrials will feel themselves bound by comparable ethical guidelines is that we have no direct knowledge of such putative beings. From the perspective of an extraterrestrial’s ethical system, perhaps it is the younger civilization, which arguably has the most to gain from an interstellar exchange, that should be expected to take on the burden of transmitting. Rather than benevolently transmitting, more advanced civilizations may instead be selective in deciding to whom they will reply. A young civilization may not have a galactic right to intercept transmissions from other civilizations simply by virtue of its youth; young civilizations may need to earn the knowledge that other civilizations exist by first showing that they are willing to transmit messages of their own.