The Legal Rights of Extraterrestrials

Robert A. Freitas Jr., "The Legal Rights of Extraterrestrials," *Analog Science Fiction/Science Fact* 97(April 1977):54-67

URL: http://www.rfreitas.com/Astro/LegalRightsOfETs.htm

(Author's personal note: This was my first-written and first-paid article ever to be published, and I proudly saved one crisp $1 bill – my first dollar earned as a professional writer for this piece – from the proceeds. I still have that $1 bill [Ser. No. L51805517D].)

This paper contains material drawn from the book Xenology (1979) by Robert A. Freitas Jr.

When an alien lands on the White House lawn, who should greet him (her? it?): someone from the Immigration and Naturalization Service, or someone from the Fish and Wildlife Commission?

How, one might ask, can an extraterrestrial (ET) visitor have any rights at all? The ET is not a member of our society, our species, or our planet. And, loosely speaking, these three qualifications are the most fundamental bases for justice under modern human law. Must we then sadly admit that any ET visitor must necessarily remain totally rightless?

In the most general sense, a right is a power or privilege, a fair claim of freedom of action inherent in one person as against all other persons. It may be based upon any one of a variety of legal theories, ranging from the doctrine of natural rights ("equal and inalienable rights of all members of the human family") and civil rights (equality of treatment for all inhabitants), to civil liberties or legal rights created by law and dependent upon the existence of civilized society (as opposed to natural rights).

In practice, it has proven exceedingly difficult to apply the doctrine of natural rights. In this country, as elsewhere, there exist no *absolute* privileges for any individual. There is no justice in a legal vacuum or state of anarchy.

Rights must therefore be defined by law. That is, the value society places on a particular right (through its laws) may be measured by the complexity of procedure and burden or proof that must be borne to destroy it. While one's driver's license can be revoked rather easily, the right of a person to his life is very highly valued by society, and can only be wrested away by substantial justification before several batteries of juries and appellate courts.

If rights are defined by law, then to whom are rights of various kinds accorded under American jurisprudence? In general, both our Constitution and our statutes speak of

"persons" as the entities to whom right may accrue. Nonpersons, such as animals, trees, rocks and machines, have no rights and are treated as property. Property may not bring legal actions on its own behalf, although the human owner of property may do so to recover his own losses. (Private groups and governmental authorities can also initiate lawsuits against an owner for misuse of his property, such as in nuisance or animal cruelty cases. But the reparation rarely flows to the benefit of the property itself.)

The history of the scope of protection and legal rights in general is most illuminating. In *The Descent of Man* (1871), Charles Darwin pointed out that among primitive tribal states it was widely accepted behavior to commit what we would regard as serious crimes (robbery, murder) against strangers or innocent travelers. As an example, he cited the "North-American Indian...[who] is well-pleased with himself and honored by others, when he scalps a man of another tribe.... In a rude state of civilization the robbery of strangers is generally considered as honorable."

The tales of Homer tell us that Odysseus, returning home after the Trojan wars, summarily executed at least a dozen of his slave girls – for suspected "misbehavior" in his absence. At that time, slave girls were regarded as mere property, possessed of no rights whatsoever. As one commentator put it, "the disposal of property was...a matter of expediency, not of right and wrong."

In early Roman times prior to the introduction of Justinian law, a father retained *jus vitae necisque* – the right of life and death – over his children. Male parents could banish or execute their children, or sell them into slavery. Children (nonadult humans) were thus not legal persons, in our modern understanding of the term.

More recently, certain other classes of humans have had less than complete rights under American law. For instance, in the well known *Dred Scott v. Sanborn* (1857) case, Supreme Court Justice Roger B. Taney wrote with solemn judicial punctilio that blacks were "a subordinate and inferior class of beings, who had been subjugated by the dominant race." A Virginia court (one year later) articulated this position with even greater clarity: 'So far as civil rights and relations are concerned, the slave is not a person but a thing." Hence, little more than a century ago in this country, human beings of a particular race were deemed nonpersons (and therefore mere property) in the eyes of the law.

Over the years, the status of personhood has gradually been extended to include blacks, children, women, aliens (foreigners) and prisoners, and has come to signify in most recent times a "human being." But it should be noted that in each case it was a long, hard battle to extend rights to any new class of entities. It will be no different in the case of the extraterrestrial.

On the other hand, there are a few liberal trends on the horizon. The law has long recognized that groups of humans – such as corporations and municipalities – may be considered as legal persons for some purposes. A corporation is sometimes referred to as a "citizen" of a country, though in reality it is just a fictitious entity. Also, there are many groups working for an increase in the rights of animals. (While enforcement remains a problem, dolphins and other marine mammals may be killed only in very well-defined and specific situations under federal law.) And at least one jurist has suggested that trees and rivers be granted a measure of legal personhood.

There is ample material to construct either a liberal or a conservative view of the ET visitor under American law. In any *prima impressionis* situation, the legislators and courts must draw upon all arguments available to them. But we must bear in mind that the law is primarily a product of social problems and conflicts. If there are few problems, there is little law. Hence, there is not and cannot be any body of substantive doctrine to direct us in assessing the rights of the ET.

There are, however, a few basic guidelines that have been established. "Metalaw" is that branch of theoretical law which deals with a generalized *jus naturale* (natural law) relating to all sentient beings, be they on Earth or on other worlds.

Metalaw Today

How *should* we treat extraterrestrial visitors? This fundamental ethical question must first be dealt with before we may address ourselves to their rights under the law. As we sift through the mountains of philosophical and sacred writings which represent our species' collective anthropocentric wisdom, we find the so-called "Golden Rule" cropping up again and again. For example: "What is hateful to thyself, do not unto they neighbor" (Babylonian Talmud); "A man should treat all living creatures as he himself would be treated" (Sutra-Kritanga); "You must expect to be treated by others as you have treated them" (Seneca); "Do naught to others which if done to thee would cause thee pain" (Hindu Mahabharata 5.1517); "We should behave to friends as we would wish friends to behave to us" (Aristotle); "Hurt not others with that which pains yourself" (Buddhist Udanavarga 5.18); and, of course, "As you wish men to do to you, so also do you to them" (Christian Bible, Luke vi. 31). Should we, then, apply the Golden Rule in dealing with sentient extraterrestrial beings?

The world's first space lawyer, the late Andrew G. Haley, addressed just this question at the Seventh International Astronautical Conference in Rome (September 17-22, 1956). The Washington D.C. attorney stated that Metalaw, defined as "the law governing the rights of intelligent beings of different natures and existing in an indefinite number of different frameworks of natural laws," would require a different moral basis than present earthly law.

The Golden Rule, Haley observed, is starkly anthropocentric. It promotes as a standard of ethical behavior the subjective needs and wishes of humans. In his paper 'Space Law and Metalaw – A Synoptic View," he pointed out that to treat other sentient creatures as *we* would desire to be treated might well mean their destruction. There is no equitable or ethical basis by which we may be allowed to impose our values on ETs. Instead, we must find out how *they* wish and require us to treat them.

Haley framed the Great Rule of Metalaw in a deceptively simple form: *Do unto others as they would have you do unto them.* This is that only way to ensure justice for beings that are "scarcely imaginable." Absolute equity is the only principle of the laws of mankind that we should permit ourselves to project into our considerations of intelligent extraterrestrial life forms. The Great Rule preserves this principle, by granting individual sovereignty to each sentient race in the cosmos.

What of the possibility of malevolent ETs? Surely we must violate the Great Rule and ruthlessly defend ourselves at all costs? Haley argued not unconvincingly that virtually all extraterrestrial civilizations will either be inferior to us by a fair margin, or will be far superior technologically. (This is also the finding of modern exobiological theory.) Of the inferior ones, we should have little trouble physically restraining them from doing us harm. Of the superior ones, they should have no fear of us whatsoever and will most likely treat us with benevolence as a result.

This is, of course, an old argument – and not fully satisfying, since it solves the problem by defining it away. The solution to our dilemma lies in the Great Rule itself and the principle of absolute equality. Each set of facts must be examined on its own merits. More specifically, we should authorize the use of "reasonable force" in dealing with less-than-benevolent ET visitors: Just enough force to restrain them from damaging us, but only exactly that much, and no more.

The next great leap forward in the development of Metalaw occurred in 1970, with the publication of the first full-length book on the subject. *Relations with Alien Intelligences*, written by the Austrian jurist Dr. Ernst Fasan, represents an excellent attempt to evolve a sophisticated set of metalaws consistent with *jus naturale*. Dr. Fasan relies on a theory of absolute equity in the form of an ethical "litmus test" – the Categorical Imperative, as proposed by the 18th century German philosopher Immanuel Kant.

In Kant's own terminology, the Imperative proposes a moral axiom which is true *a priori* for every sentient being: "Act in such a way that the maxim of your will can at the same time always be valid as a principle of general legislation." In other words, when considering a particular course of conduct, judge whether or not it is desirable that it become a general rule. For instance, if one contemplates murder, he should ask: 'Would it be desirable for everyone to murder?" Clearly it would not, since acceptance of this proposition would lead to the death of the murderer himself.

Using the Categorical Imperative, the Great Rule, and a few very basic assumptions about the character of the extraterrestrial creature (alive, three-dimensional and physically detectable, intelligent and possessing a "will to live"), Dr. Fasan derives eleven fundamental metalaws of general validity. In descending order of importance, they are:

(1) No partner of Metalaw may demand an impossibility.

(2) No rule of Metalaw must be complied with when compliance would result in the practical suicide of the obligated race.

(3) All intelligence races of the universe have in principle equal rights and values.

(4) Every partner of Metalaw has the right of self-determination.

(5) Any act which causes harm to another race must be avoided.

(6) Every race is entitled to its own living space.

(7) Every race has the right to defend itself against any harmful act performed by another race.

(8) The principle of preserving one race has priority over the development of another race.

(9) In case of damage, the damager must restore the integrity of the damaged party.

(10) Metalegal agreements and treaties must be kept.

(11) To help the other race by one's own activities is not a legal but a basic ethical principle.

Unfortunately, these fine metalegal concepts have not found their way into American law. Fasan's metalaws provide an elaborate ethical-legal superstructure upon which practical statutes and juridical decisions may eventually be constructed. But the rules do not now have the force of law – hence, they are not directly applicable to the early phases of first contact on planet Earth. What will our government, and our present legal system, do in a first contact situation?

First Contact Jurisdiction

There are innumerable ways in which first contact may occur. Relations may take place with the whole extraterrestrial race, or with representative organizations of their race, or with individual members. Similarly, interaction may occur with all of humanity, a part of humanity, or single persons. The scenario frequently discussed by exobiologists involving radiotelescope communication would be a case of race meeting race. Murray Leinster's science fiction classic "First Contact" is an example of a meeting between two representative organizations – a subgroup within each race.

Contact may also be classified according to the intensity of interaction. Remote Contact, probably the safest method, would involve interstellar or galactic radio links. Direct Contact might entail a well-publicized (authorized) landing at an Air Force base, with clear prior notice given us by the ETs – or perhaps an arranged rendezvous on the Moon. The most dangerous and controversial of all, however, is Surprise Contact – a sudden confrontation without warning or advance preparation.

Let us analyze such a case of Surprise Contact: A single extraterrestrial visitor, landed in a relatively conspicuous local (park, open field, etc.) in a typical state.

First of all, unless the ET is buzzing houses in his spacecraft, has a grossly nonhuman appearance, or is wreaking destruction far and wide, his presence may actually go unnoticed for quite some time. But eventually a passing motorist or pedestrian will spot the creature, who perhaps is garbed in a spacesuit or other unconventional attire. The local police will receive a report of a strange creature roaming the streets.

Since local authorities get mountains of crank calls, they probably won't dispatch a patrol unit until several reports have been received or until the ET inadvertently maims someone. The police cruiser will arrive at the scene shortly thereafter. Depending on the alienness of the extraterrestrial, the policemen may suspect a prankster at first (as has happened many times!), until the creature either reveals its primary physiological differences or displays command of superior technology.

If a large crowd has gathered, the ET may be in trouble. There are cases on record of crowds mobbing and killing "admitted space beings" (who were really human pranksters, as it turned out). The officers will immediately call in local reinforcements, which should arrive in ten minutes or less. The county sheriff will also be notified, as well as the State Police or Highway Patrol – these groups will dutifully respond within twenty minutes, but will make no decisions.

The police will also quickly alert the local Civil Defense authorities. From there the buck passes swiftly up through the county Civil Defense office to the state Civil Defense office, at which point the governor of the state will be apprised of the situation. He has the authority to declare a state of emergency or invasion and call out the National Guard (state militia) for assistance.

The militia maintains local bases equipped with jeeps, tanks, and cannons, should these be required. The Guard can probably be mobilized and on the scene in less than an hour to assist in the apprehension and detention of the extraterrestrial, and in crowd and riot control. The governor, in the meantime, will have notified the Federal Department of Defense, and, of course, the President.

The Defense Department will place the Army Area Commander in immediate charge of maintaining order, and the local Air Force and Naval District authorities will probably also enter the picture, but with clearly subordinate roles. Pending direct Presidential orders, the Army commander remains in temporary control.

The President will undoubtedly notify Congress immediately, calling an emergency session to obtain legislative direction. But it is important to realize that, on his own, the President already possess sweeping authority should he care to exercise it. A vigorous, "expansionist" Chief Executive would be likely to assume far greater personal control than a more passive, wait-and-see President. The personality of the person in the White House may therefore be a decisive factor in the early stages of first contact.

The United States is presently in a state of national emergency. (It has been continuously since the early 1930s!) This fact is not generally known or appreciated by the public. The Presidential proclamations of national emergency issued under Roosevelt (1933), Truman (1950), and Nixon (1970, 1971) were not terminated when the crises that spawned them had passed. Our country remains under four separate active declarations of emergency.

This means that broad Presidential authority is available to dispose of the ET as the Chief Executive sees fit. Another declaration of national emergency could also be forthcoming at this point. But even if the President does assert full, immediate control, considerable confusion will still result.

Federal agencies will jockey for jurisdiction, based on entwining statutes and overlapping authority that would put a Gordian knot to shame. The CIA and FBI, suspicious of the possibility of a foreign hoax and the dangers to national security caused thereby, may try to intervene at the holding area and assert some influence of their own. Even more important, they will be trying to protect the ET – a potentially valuable military resource – from foreign agents, saboteurs, kidnappers and assassins. (The entire American defense establishment will probably be placed on full alert status.) The Treasury Department, also suspecting a hoax and fearing for the President's life, may try to get into the act by sending in Secret Service agents to verify the authenticity of the ET. Of course, Army Intelligence, Naval Intelligence, Air Force Intelligence, and the Defense Intelligence Agency will all be vying for power as well.

The Public Health Service, under the Department of Health, Education and Welfare (HEW), will want to establish local quarantine and detention authority under 42 U.S.C. §264 et seq of the Federal Code. (The Department of Agriculture may try a similar trick under 21 U.S.C. §101 et seq, if they argue that the extraterrestrial is an animal and not a "person" – see discussion below). The Attorney General, under 8 U.S.C. §1222, has the legal authority to order immigration officers to "temporarily detain" the ET in contemplation of deportation proceedings. And naturally, the Department of Transportation will be anxiously searching for the space traveler's vehicle, as will the military and various intelligence agencies.

A host of civilian organizations will clamor to be heard, probably within hours of first contact. The SPCA, Humane Society and other animal protection groups will want assurances that the ET is receiving "adequate housing, ample food and water, reasonable handling, decent sanitation, sufficient ventilation, shelter from extremes of weather and temperature" and so forth, as required by the Animal Welfare Act (7 U.S.C. §2131 et seq, as amended to include any warm-blooded animal used for "laboratory purposes") and state animal cruelty laws. NASA will probably have some complaints to make, along with the national Academy of Sciences, assorted astronomical and zoological societies, and many other scientific groups. And, sooner or later, the United Nations will get wind of the "capture." Although the UN has no real authority within domestic borders, vehemently unfavorable world opinion could easily be roused to a fever pitch.

My point is simply this: Our federal laws provide no clear and unambiguous legal direction. Without the leadership of a strong President, tremendous confusion and jurisdictional squabbles will erupt almost instantly. And we have assumed a rather passive, obeisant extraterrestrial. If he is in any sense more active, there could be fearful and unfortunate complications.

The creature will at last be safely in military custody, under very heavy guard and probably under quarantine. (I suspect a contingency plan lies dusty in some half-forgotten Pentagon file.) As for his future legal rights, our visitor must await a final adjudication by Congress.

Animal or Person?

As suggested earlier, an entity cannot be said to hold legal rights unless some judicial or administrative body is authorized to review the actions of those who threaten to usurp those rights. Furthermore, most of our laws, codes, statutes and constitutions afford rights only to "persons." The distinction between animals and persons is therefore of critical importance.

The strict legal definition of "animal" is: "Any living being, not a human, endowed with the power of voluntary motion." The ET is clearly not a member of the species *Homo sapiens*, and is therefore nonhuman. He does, however, appear capable of voluntary motion. Hence, a rebuttable presumption of animalhood will arise: the ET will be considered a legal animal by default.

There are several kinds of animals. Under Roman law all animals were considered *ferae naturae* (wild animals) – they were regarded as common property having no owner. As the law developed, and animals began to play more important roles in society, the courts created a second class, *domitae naturae* (domesticated animals). These were further subdivided into "generous" (of commercial value to man – cows, sheep, and other herbivores) and those of "base nature" (animals not useful for work – household dogs, cats, etc.). Domestic animals can be the subject of ownership, and can therefore be *estrays* (a kind of wandering property). Estrays may be impounded as public nuisances and destroyed after thirty days if no owner makes a claim.

If the ET visitor is to be regarded as an animal, he will undoubtedly be classified as *ferae naturae*, no proof of tameness or ownership being evident. A wild animal running loose on private property may be hunted and killed, and thus reduced to personal possession. Such an animal on federal lands is subject to the Department of the Interior's Fish and Wildlife Commission: on state lands, it is subject to the state's department of fish and game. Either authority may declare a "special open season on said game," or the department itself may destroy the animal causing damage to property.

Even if the extraterrestrial is somehow regarded as being tame, his position is not improved. The fact that animal cruelty laws exist in virtually all states does not alter the creature's basic rightlessness. Also, most cruelty statutes specifically exclude invertebrate animals. If our ET resembles a cross between a sea scorpion and a grasshopper, he'll be out of luck.

The whole idea of treating the extraterrestrial visitor as an animal may seem outrageous to many at first, but this is the letter, if not the spirit, of the law. We've seen that human beings have often been denied the elementary status of personhood. (It should come as no surprise that in the thirteenth century, a law was passed in England proclaiming humans of the Jewish faith to be "men *ferae naturae*, protected by a quasi-forest law. Like the roe and the deer, they form an order apart.")

But with a little luck we can chart a course to legal personhood for the ET. This may best be accomplished by demonstrating the wider implications of humanness. While some may myopically argue that the essence of humanity is strictly defined by the human genome, the sounder view is that the essence of man is mind – the rationality of a sentient organism. Attempts to articulate this elusive characteristic have included "mental ductility," "ability to

transmit culture," "ability to fashion tools," "ability to symbol," "predisposition to learn from experience," and "self-awareness."

Raw intellect is not enough, however, to qualify one for personhood. Dolphins and whales, elephants, dogs, pigs, and other animals are able to demonstrate surprisingly high intelligence in certain situations – and the law doesn't consider them legal persons. Yet infants, drugged people, insane or retarded people, all are considered legal persons, though their mental faculties may be practically nonexistent. Intelligence is perhaps a necessary, but not sufficient, condition for personhood.

High technology is not good enough either. Although *they* have visited *us*, and so possess superior technology *a priori*, this does not presuppose the existence of intelligence. For instance, it is possible that a society of antlike creatures could develop a technology without any single member possessing independent intelligence.

In his book *Persons – A Study of Possible Moral Agents in the Universe*, Dr. Roland Puccetti, Professor of Philosophy at the University of Singapore, proposes another kind of test for personhood. The basic assumption – and it is a persuasive one – is that "moral persons" should also be considered "legal persons." The Puccetti Test thus asks the following of the extraterrestrial: Can he take a moral attitude? Alternatively, is he capable of making moral judgements? If so, if he possesses some system of ethics, Puccetti would class him as a moral and legal person. (Puccetti allows that intelligent machines could be considered persons using this test – a perfectly acceptable result.)

If the ET visitor can pass the Puccetti Test, and demonstrates his intelligence, Congress would doubtless be justified in granting him legal personhood under our laws.

Extraterrestrial Persons

In ancient and medieval times, as well as in primitive tribal states, the general tendency was to view the foreigner as an outlaw, criminal, or enemy. The *jus gentium* (the equitable law of nations) of the Romans, and the unity of all humans promoted by Christianity ("You shall have but one law for alien and native alike." Leviticus xxiv. 22), helped to encourage a greater universality of attitude.; However, it was not until modern times that the legal alien acquired significant rights under law.

As far as basic rights for the extraterrestrial visitor are concerned, once he has been declared a legal person he has crossed the most fundamental juridical threshold. Our Constitution speaks of the rights of "people" and "persons," and the 14th Amendment extends this mantle of protection into state jurisdictions as well. Hence, any person physically present within the borders of our country will be protected by the Bill of Rights – whether citizen, alien, or extraterrestrial.

As far as the specifics of classification are concerned, there are many ways to judicially view the ET. For example, he may be considered a refugee. A refugee is a technically stateless person – he is neither citizen (or national) nor subject of any foreign government on Earth. one definition of the refugee is as follows: "Any person uprooted from his home, who has crossed a frontier – natural or artificial – and looks for protection and sustenance to a government other than his former one." This seems to fit the extraterrestrial rather well.

In many foreign countries, where the United Nations Convention relating to the Status of Stateless Persons is operative, refugees are guaranteed minimal legal rights commensurate with foreign nationals. In the United States, however, even stateless persons are protected by the Bill of Rights.

Another way the ET may be viewed is as an alien, defined as “any person owing allegiance to an foreign government.” The home planet of the extraterrestrial is certainly “foreign,” in a very broad sense, and so the ET may be classified accordingly.

There are several kinds of aliens. An *illegal alien* is one who has entered the country illegally, without passing through the normal channels of admission (i.e., the U.S. Immigration and Naturalization Service, under the Department of Justice). Our extraterrestrial has certainly made an illegal entry, and theoretically should be subject to immediate deportation proceedings. But a decision to “deport” the ET would create more problems than it would solve.

Another kind of alien is the *alien enemy* (a citizen of some hostile foreign power). If the President proclaims that the landing of the ET is a prelude to or threat of invasion and war, he is authorized under 50 U.S.C. §21 to order a federal marshal to “apprehend, restrain, secure and remove” all alien enemies. This course of action seems unlikely in the extreme, since the creature is already in Army custody and, in a practical sense, cannot be “removed” (deported – where?).

A way around the immigration problem is to classify the ET as an *essential alien*. 50 U.S.C. §403h provides that, with the concurrence of the Director of the CIA, the Attorney General, and the Commissioner of Immigration, any alien deemed “ essential to the furtherance of the national intelligence mission” or vital to the interests of national security may be admitted for permanent residence (and ultimately naturalization and citizenship) without regard to admission procedures. This would seem quite possible in the case of the extraterrestrial, since a major foreign policy consideration will be the creature’s advanced technology. Any nation on Earth in possession of the visitor and his hardware would theoretically gain a significant psychological and military advantage.

The ET might also be classed simply as an *alien amy* – a friendly alien. Although this normally requires proper immigration, there are ways around this rule. *Alien crewmen* of foreign vessels, and *aliens in transit*, are exempt because their stay in the country is very temporary. If the ET is viewed as having entered the country for “business or pleasure,” or as a “bona fide student, scholar, specialist, or leader in a field of specialized knowledge or skill,” he is again exempt under 8 U.S.C. §1101 as a *visiting alien*.

Another distant possibility is the granting of ambassadorial status to the extraterrestrial. As a full diplomat, the ET would serve as the representative of his own government while on Earth. (Diplomats have full immunity from prosecution.) Or the ET may be seen only as a consul, a mere commercial agent for his government, entitling him to fewer immunities. Normally, however, there must be diplomatic reciprocity before a foreign envoy of any kind is afforded ambassadorial rank. Since we know nothing of the extraterrestrial government, such unilateral diplomatic relations are highly improbable.

As a last resort (in my view the wiser course), Congress may decide to entirely junk the above anthropocentric pigeonholes. A new legal classification might be created – the “extraterrestrial person” or “pseudoperson” – which grants the ET a measure of rights and responsibilities in keeping with the basic principles of Metalaw. At long last, *jus naturale*, galactic conscience and universal equity may find a home in American jurisprudence.

References

Fasan, Ernst. *Relations with Alien Intelligences*. Berlin-Verlag: Arno Spitz, 1 Berlin 33, Ehrenbergstrafse 29, 1970. (A sophisticated formulation of metalegal principles – very highly recommended.)

Haley, Andrew G. “Space Law and Metalaw – A Synoptic View.” Rome: Associazione Italiana Razzi, Proceedings of the Seventh International Astronautical Congress, 1956. (The landmark work in the field – the first pioneering effort in Metalaw.)

Haley, Andrew G. *Space Law and Government*. New York: Appleton-Century-Crofts, 1963. (A more detailed exposition of Haley’s work on the Great Rule.)

Puccetti, Roland. *Persons – A Study of Possible Moral Agents in the Universe*. London: Macmillan and Company, Ltd., 1968. (A study of the ethical and moral meaning of the term “person.”)

Stone, Christopher D. *Should Trees Have Standing? Toward Legal Rights for Natural Objects*. Los Altos, California: William Kaufmann, Inc., 1974. (Suggests that natural objects, and the environment in general, should be treated as having legal rights.)

Last updated 30 December 2008