Three Ways to Persuade

By John Edlund

1 Over 2,000 years ago the Greek philosopher Aristotle argued that there were three basic ways to persuade an audience of your position: *ethos, logos,* and *pathos.*

Ethos: The Writer's Character or Image

2 The Greek word *ethos* is related to our word *ethics* or *ethical,* but a more accurate modern translation might be "image." Aristotle uses *ethos* to refer to the speaker's character as it appears to the audience. Aristotle says that if we believe that a speaker has good sense, good moral character, and goodwill, we are inclined to believe what that speaker says. Today we might add that a speaker should also appear to have the appropriate expertise or authority to speak knowledgeably about the subject matter. *Ethos* is often the first thing we notice, so it creates the first impression that influences how we perceive the rest. *Ethos* is an important factor in advertising, both for commercial products and in politics. For example, when an actor in a pain reliever commercial puts on a doctor's white coat, the advertisers are hoping that wearing this coat will give the actor the authority to talk persuasively about medicines. Of course, in this particular instance the actor's *ethos* is a deceptive illusion, but the character, background, and authority of the speaker or writer can be a legitimate factor in determining whether we find him or her credible.

3 A writer's *ethos* is created largely by word choice and style. Student writers often have a problem with *ethos* because they are asked to write research papers, reports, and other types of texts as if they have authority to speak persuasively, when in fact they are newcomers to the subject matter and the discourse community. Sometimes students try to create an academic image for themselves by using a thesaurus to find difficult and unusual words to sprinkle throughout their texts. Unfortunately, this sort of effort usually fails, because it is difficult to use a word correctly that you have not heard or read in context many times.

4 Sometimes a writer or speaker will use what is called an *ad hominem* argument, an argument "against the man." In this strategy, the writer attacks the character or personality of the speaker instead of attacking the substance of his or her position. This kind of argument is usually considered to be a logical fallacy, but it can be very effective and is quite common in politics. This type of argument undermines a speaker or writer's *ethos.* When you are writing a paper, consider the following questions.

Questions for Discussion:

1. What kind of image do you want to project to your audience?
2. What can you do to help project this image?
3. What words or ideas do you want to avoid in order not to harm your image?
4. What effect do misspelled words and grammatical errors have on your image?

***Logos:* Logical Arguments**

5 In our society, logic and rationality are highly valued and this type of persuasive strategy is usually privileged over appeals to the character of the speaker or to the emotions of the audience. However, formal logic and scientific reasoning are usually not appropriate for general audiences, so we must rely on a more *rhetorical* type of reasoning.

6 For Aristotle, formal arguments are based on what he calls syllogisms. This is reasoning that takes the form:

All men are mortal.
Socrates is a man.
Therefore, Socrates is mortal.

7 However, Aristotle notes that in ordinary speaking and writing we often use what he calls a rhetorical syllogism or an *enthymeme.* This is an argument in which some of the premises or assertions remain unstated or are simply assumed. For example, no one in ordinary life would think that Socrates could be immortal. We would simply *assume* that Socrates could be killed or that he would die of natural causes after a normal lifespan. As a result, we can logically say the following: Socrates is a man; therefore, Socrates is mortal. Not all assumptions are as obvious as this one, however.

8 For example, when the bubonic plague swept through Europe and parts of Asia in the 14th century, killing as much as three quarters of the population in less than 20 years, it was not known how the disease was spread. At one point, people thought that the plague was spread by cats. If one *assumes* that cats spread the disease, the obvious solution to the problem is to eliminate the cats, and so people began killing cats on sight. However, we now know that the plague is spread by fleas which live on rats. Because cats kill rats, killing off the cat population led to an increase in the rat population, a corresponding increase in plague carrying fleas, and thus an increase in cases of plague in humans. Killing off the cats was a logical solution to the problem of plague, but it was based on a faulty assumption.

9 Rhetorical arguments are often based on probabilities rather than certain truth. The people of medieval Europe really had no way to determine what the real cause of the plague was, but they felt that they had to do something about it, and the cat hypothesis seemed probable to them. Unfortunately, this is true of many of the problems we face even today. We cannot know with absolute certainty what the real solution is, yet we must act anyway.

10 Persuasion, to a large extent, involves convincing people to accept our assumptions as probably true and to take appropriate action. Similarly, exposing questionable assumptions in someone else's argument is an effective means for preparing the audience to accept your own contrary position.

Questions for Discussion:

1. Imagine some arguments that start from faulty assumptions, such as "If pigs could fly," or "If money grew on trees." What would be some of the logical consequences?
2. Do you think that logical arguments are a better support for a position than arguments that are based on authority or character? In other words, would you support a policy just because a celebrity or an important expert supported it?
3. Can you think of a time when you successfully used a logical argument to persuade someone of something? What was it?

***Pathos:* The Emotions of the Audience**

11 Most of us think that we make our decisions based on rational thought. However, Aristotle points out that emotions such as anger, pity, fear, and their opposites, powerfully influence our rational judgments. Due to this fact, much of our political discourse and much of the advertising we experience is directed toward moving our emotions.

12 Anger is a very powerful motivating force. Aristotle says that if we want to make an audience angry we need to know three things: 1) the state of mind of angry people, 2) who the people are that this audience usually gets angry at, and 3) on what grounds this audience gets angry at those people. While the actual causes of a war may be economic or political, and thus related to *logos,* the mobilization of a people or a nation to war inevitably consists of appeals to *pathos.* Leaders mobilize their followers to go to war by reminding them of their historical grievances against other groups or nations, blaming other groups for economic difficulties, and focusing on perceived insults, crimes, and atrocities committed against their own citizens by others. In the twentieth century, such appeals to *pathos* inspired the Holocaust in Germany, genocide in Rwanda, and ethnic cleansing in the former Yugoslavia. Individuals were inspired through *pathos* to attack, rape, or kill neighbors who had lived near them all their lives, simply because of their ethnicity or religion.

13 Many political decisions have an emotional motivation. For example, when a gunman with an assault rifle shot up a schoolyard full of children, people were suddenly interested in banning such weapons. In this case, several emotions are involved, but perhaps the strongest one is pity for the small children and their families. The logical arguments for banning or not banning assault rifles had not changed at all, but people were emotionally engaged with the issue after this event and wanted to *do* something.

14 Of course, not all appeals to *pathos* result in violence or political action. Advertisements for consumer goods often aim at making us insecure about our attractiveness or social acceptability and then offer a remedy for this feeling in the form of a product. This is a common strategy for selling mouthwash, toothpaste, chewing gum, clothing, and even automobiles.

15 Appeals to the emotions and passions are often very effective and are very common in our society. Such appeals are not always false or illegitimate. It is natural to feel strong emotions about tragedies, victories, and other powerful events as well as about one's own image and identity. You may find it effective to use *pathos* in your own writing.

Questions for Discussion:

1. Can you think of an advertisement for a product or a political campaign that uses your emotions to persuade you to believe something? Describe it, and analyze how it works.
2. When do you think it is unfair or deceptive to try to use emotions to persuade people?
3. Have you ever made a decision based on your feelings that you regretted later?
4. Did emotions ever serve you well in making a decision?

A Change of Heart about Animals

Los Angeles Times, September 1, 2003
By Jeremy Rifkin

They are more like us than we imagined, scientists are finding.

1 Though much of big science has centered on breakthroughs in biotechnology, nanotechnology and more esoteric questions like the age of our universe, a quieter story has been unfolding behind the scenes in laboratories around the world – one whose effect on human perception and our understanding of life is likely to be profound.

2 What these researchers are finding is that many of our fellow creatures are more like us than we had ever imagined. They feel pain, suffer and experience stress, affection, excitement and even love -- and these findings are changing how we view animals.

3 Strangely enough, some of the research sponsors are fast food purveyors, such as McDonald's, Burger King and KFC. Pressured by animal rights activists and by growing public support for the humane treatment of animals, these companies have financed research into, among other things, the emotional, mental and behavioral states of our fellow creatures.

4 Studies on pigs' social behavior funded by McDonald's at Purdue University, for example, have found that they crave affection and are easily depressed if isolated or denied playtime with each other. The lack of mental and physical stimuli can result in deterioration of health.

5 The European Union has taken such studies to heart and outlawed the use of isolating pig stalls by 2012. In Germany, the government is encouraging pig farmers to give each pig 20 seconds of human contact each day and to provide them with toys to prevent them from fighting.

6 Other funding sources have fueled the growing field of study into animal emotions and cognitive abilities.

7 Researchers were stunned recently by findings (published in the journal Science) on the conceptual abilities of New Caledonian crows. In controlled experiments, scientists at Oxford University reported that two birds named Betty and Abel were given a choice between using two tools, one a straight wire, the other a hooked wire, to snag a piece of meat from inside a tube. Both chose the hooked wire. Abel, the more dominant male, then stole Betty's hook, leaving her with only a straight wire. Betty then used her beak to wedge the straight wire in a crack and bent it with her beak to produce a hook. She then snagged the food from inside the tube. Researchers repeated the experiment and she fashioned a hook out of the wire nine out of 10 times.

8 Equally impressive is Koko, the 300-pound gorilla at the Gorilla Foundation in Northern California, who was taught sign language and has mastered more than 1,000 signs and understands several thousand English words. On human IQ tests, she scores between 70 and 95.

9 Tool-making and the development of sophisticated language skills are just two of the many attributes we thought were exclusive to our species. Self-awareness is another.

10 Some philosophers and animal behaviorists have long argued that other animals are not capable of self-awareness because they lack a sense of individualism. Not so, according to new studies. At the Washington National Zoo, orangutans given mirrors explore parts of their bodies they can't otherwise see, showing a sense of self. An orangutan named Chantek who lives at the Atlanta Zoo used a mirror to groom his teeth and adjust his sunglasses.

11 Of course, when it comes to the ultimate test of what distinguishes humans from the other creatures, scientists have long believed that mourning for the dead represents the real divide. It's commonly believed that other animals have no sense of their mortality and are unable to comprehend the concept of their own death. Not necessarily so. Animals, it appears, experience grief. Elephants will often stand next to their dead kin for days, occasionally touching their bodies with their trunks.

12 We also know that animals play, especially when young. Recent studies in the brain chemistry of rats show that when they play, their brains release large amounts of dopamine, a neurochemical associated with pleasure and excitement in human beings.

13 Noting the striking similarities in brain anatomy and chemistry of humans and other animals, Stephen M. Siviy, a behavioral scientist at Gettysburg College in Pennsylvania, asks a question increasingly on the minds of other researchers. "If you believe in evolution by natural selection, how can you believe that feelings suddenly appeared, out of the blue, with human beings?"

14 Until very recently, scientists were still advancing the idea that most creatures behaved by sheer instinct and that what appeared to be learned behavior was merely genetically wired activity. Now we know that geese have to teach their goslings their migration routes. In fact, we are finding that learning is passed on from parent to offspring far more often than not and that most animals engage in all kinds of learned experience brought on by continued experimentation.

15 So what does all of this portend for the way we treat our fellow creatures? And for the thousands of animals subjected each year to painful laboratory experiments? Or the millions of domestic animals raised under the most inhumane conditions and destined for slaughter and human consumption? Should we discourage the sale and purchase of fur coats? What about fox hunting in the English countryside, bull fighting in Spain? Should wild lions be caged in zoos?

16 Such questions are being raised. Harvard and 25 other U.S. law schools have introduced law courses on animal rights, and an increasing number of animal rights lawsuits are being filed. Germany recently became the first nation to guarantee animal rights in its constitution.

17 The human journey is, at its core, about the extension of empathy to broader and more inclusive domains. At first, the empathy extended only to kin and tribe. Eventually it was extended to people of like-minded values. In the 19th century, the first animal humane societies were established. The current studies open up a new phase, allowing us to expand and deepen our empathy to include the broader community of creatures with whom we share the Earth.

Jeremy Rifkin, author of *The Biotech Century,* is the president of the Foundation on Economic Trends in Washington, D.C.

Letters to the editor in response to "A Change of Heart about Animals"

1 Re "A Change of Heart About Animals," Commentary, Sept. 1: Jeremy Rifkin argues that science has shown that the differences between animals and humans are less than we think and that we should extend more "empathy" to animals. I disagree. In nature, animals naturally kill and eat each other. If the hawk does not care about the feelings of the rabbit that it eats, why should humans be any different? Is Rifkin saying that nature is wrong?

2 Rifkin goes so far as to say that pigs need social contact and should be provided with toys. There are many real human children in the world who do not have these things. Are animals more important than human children? Should our society spend scarce resources on toys for pigs?

3 Anyone who has owned a pet knows that animals can feel pain, happiness, anger, and other simple emotions. Most people have heard a parrot or a mynah bird talk, but this is just imitation and mimicry. We don't need science to tell us that animals can do these things. However, does a parrot understand what it is saying? Can an animal write a poem, or even a grocery list?

4 Rifkin is simply an animal rights activist hiding behind a handful of scientific studies. He wants to ignore human suffering and focus on animal discomfort. He wants animals to have more rights than humans. Let's not be fooled.

Bob Stevens

1 Much thanks to Jeremy Rifkin for showing us that science supports what we pet owners and animal rights activists have known in our hearts all along: animals have feelings and abilities not very different from humans. I found the stories about Koko the gorilla who is fluent in sign language, and Betty and Abel, the tool-making crows, intriguing and heart-warming. When will more people begin to realize that we share this world with many creatures deserving of our care and respect?

2 However, Rifkin should take his argument farther. Animals have a right to live without being confined, exploited, tormented or eaten. That means no animal experimentation, no fur or leather clothing, and a vegan or vegetarian lifestyle. Meat eating and animal abuse lead to spiritual disturbance and physical disease. Let's free ourselves from the evils of the past and live in harmony with our fellow creatures!

Lois Frazier

Hooked on a Myth

Los Angeles Times, October 8, 2006|
By Victoria Braithwaite

Do fish feel pain? A biologist says we shouldn't be so quick to believe they don't.

1 Every year, sportsmen around the world drag millions of fish to shore on barbed hooks. It's something people have always done, and with little enough conscience. Fish are ... well, fish. They're not dogs, who yelp when you accidentally step on their feet. Fish don't cry out or look sad or respond in a particularly recognizable way. So we feel free to treat them in a way that we would not treat mammals or even birds.

2 But is there really any biological justification for exempting fish from the standards nowadays accorded to so-called higher animals? Do we really know whether fish feel pain or whether they suffer—or whether, in fact, our gut sense that they are dumb, unfeeling animals is accurate?

3 Determining whether any type of animal really suffers is difficult. A good starting place might be to consider how people feel pain. When a sharp object pierces the human body, specialized nerve endings called nociceptors alert us to the damage. Incredibly, no one ever seems to have asked before whether fish have nociceptors around their mouths. My colleagues and I in Edinburgh, Scotland, recently looked in trout and found that they do. If you look at thin sections of the trigeminal nerve, the main nerve for the face for all vertebrates, fish have the same two types of nociceptors that we do—A-delta and C fibers. So they do have the necessary sensory wiring to detect pain.

4 And the wiring works. We stimulated the nociceptors by injecting diluted vinegar or bee venom just under the skin of the trout. If you've ever felt the nip of vinegar on an open cut or the sting of a bee, you will recognize these feelings as painful. Well, fish find these naturally irritating chemicals unpleasant too. Their gills beat faster, and they rub the affected area on the walls of their tank, lose interest in food and have problems making decisions.

5 When I have a headache, I reach for the aspirin. What happens if we give the fish painkillers after injecting the noxious substances? Remarkably, they begin to behave normally again. So their adverse behavior is induced by the experience of pain.

6 But just because fish are affected by pain, does that mean they actually "feel" it? To answer that, we need to probe deeper into their brains (and our own) to understand what it means to feel pain.

7 To determine what fish go through mentally when they experience painful stimuli, we also need to determine whether they have a capacity to feel emotion and to suffer.

8 This is a much harder problem. It goes to the very heart of one of the biggest unresolved issues in biology: Do nonhuman animals have emotions and feelings? Are nonhuman animals conscious?

9 Scientists and philosophers have long debated consciousness and what it is and whether it is exclusively human. There are multiple definitions and, frankly, we haven't really come to grips with what it means to be conscious ourselves. Are we conscious because we are capable of attributing mental states to others, or perhaps because we have a qualitative awareness of feelings, whether positive or negative? And if we can't define our own consciousness, can we expect to detect it in fish?

10 Perhaps not, but we can look for behaviors and abilities that we believe contribute to human consciousness—for example, complex cognitive abilities and specialized brain regions that process emotion and memory.

11 It turns out that the stereotype of fish as slow, dim-witted creatures is wrong; many fish are remarkably clever. For example, they can learn geometrical relationships and landmarks—and then use these to generate a mental map to plan escape routes if a predator shows up.

12 And their brains are not as different from ours as we once thought. Although less anatomically complex than our own brain, the function of two of their forebrain areas is very similar to the mammalian amygdala and hippocampus—areas associated with emotion, learning and memory. If these regions are damaged in fish, their learning and emotional capacities are impaired; they can no longer find their way through mazes, and they lose their sense of fear.

13 None of this tells us that fish are "conscious," but it does demonstrate them to be cognitively competent: They are more than simple automata.

14 So do we have to change the way we treat fish? Some still argue that fish brains are so less well developed than those of birds and mammals that it isn't possible for fish to suffer. In my view, that case is not proven.

15 Moreover, we actually have as much evidence that fish can suffer as we do that chickens can. I think, therefore, that we should adopt a precautionary ethical approach and assume that in the absence of evidence to the contrary, fish suffer.

16 Of course, this doesn't mean that we necessarily must change our behavior. One could reasonably adopt a utilitarian cost-benefit approach and argue that the benefits of sportfishing, both financial and recreational, may outweigh the ethical costs of the likely suffering of fish.

17 But I do find it curious that it has taken us so long even to bother to ask whether fish feel pain. Perhaps no one really wanted to know. Perhaps it opens a can of worms—so to speak—and begs the question of where do we draw the line. Crustacean welfare? Slug welfare? And if not fish, why birds? Is there a biological basis for drawing a line?

Victoria Braithwaite, a behavioral biologist at Edinburgh University, is on sabbatical at the Institute for Advanced Study in Berlin.

Of Primates and Personhood: Will According Rights and "Dignity" to Nonhuman Organisms Halt Research?

SEEDMAGAZINE.COM, December 12, 2008
By Ed Yong

1 Two major legal developments in the past few months are deepening a schism between leading primatologists, biologists, and ethicists around the world. A pending Spanish law that would grant unprecedented protections to great apes, and a recent extension to a Swiss law that protects the "dignity" of organisms, are the latest fronts in a battle to redefine the meaning of human rights, and indeed whether such rights are the exclusive domain of humans.

2 At the forefront of the battle is the Great Ape Project (GAP). Established in 1993, it demands a basic set of moral and legal rights for chimpanzees, gorillas, bonobos, and orangutans. This June, GAP persuaded the Spanish Parliament's environmental committee to approve a resolution supporting those goals.

3 Other countries, including the United Kingdom and New Zealand, have taken steps to protect great apes from experimentation, but this is the first time that actual rights would be extended to apes. The resolution establishes a set of laws based on GAP's principles, which Spain promises to implement by the end of the year. Those laws would ban the use of apes in experiments or entertainment or commercial ventures, and they would set higher standards for their conditions in captivity. The message is clear: These animals are not property. "It's a historic breakthrough in reducing the barrier between humans and nonhuman animals," says Peter Singer, an Australian philosopher and the head of GAP.

4 Not everyone is comfortable with GAP's rights-based approach, however. Primatologist Frans de Waal of Emory University says, "I do think we have special obligations to the great apes as our closest relatives, but if we give rights to apes, what would be the compelling reason not to give rights to monkeys, dogs, rats, and so on?"

5 GAP's goals are, for now, focused on apes, but Singer agrees that there is no clear place to draw the line. "Speaking personally, I feel we should extend rights to a wide range of nonhuman animals," he says. "All creatures that can feel pain should have a basic moral status."

6 That list would include other mammals, including the bulls regularly killed in Spanish stadiums. This iconic sport, along with Spain's lack of any ape research of its own, makes it an odd location from which to launch an opening salvo. Nevertheless, it's where GAP's efforts first gained traction, and it will be the origin of future efforts.

7 Such moves are already under way. "The Green Party in Germany is preparing two bills supporting the Great Ape Project," says GAP's Pedro Pozas. In Austria this August, GAP member David Diaz visited Hiasl, a former research chimpanzee who has become an ape-rights icon as his sanctuary faces bankruptcy and he faces homelessness. Hiasl's fate hangs on being legally declared a person, an effort in line with GAP's greater mission. The matter is now being debated in the Strasbourg Court of Human Rights.

8 In the US, there is greater resistance to the idea of ape rights, though Congress has begun to make inroads. In April, three representatives, including former animal researcher Roscoe Bartlett, introduced a bill called the Great Ape Protection Act. It calls for scientists to cease invasive research on great apes and "rigorously apply existing alternatives" but stops short of extending rights to the animals themselves. Weaker than its Spanish counterpart, the bill would nevertheless have an impact in a country that performs more ape research than any other.

9 In the EU, renowned chimpanzee researcher Jane Goodall has called for a gradual end to all biomedical animal experimentation. However, the paragon of the animal rights movement is the unaligned nation in the EU's midst. Switzerland's strict constitutional laws on animal experiments are based on a slippery concept; since 1992, they have demanded that researchers respect the "dignity of creation." They protect animals from "unjustified interventions on their appearance, from humiliation and being disproportionately instrumentalized." As of September 1, these laws even require that animal owners keep social species, such as dogs, goldfish, and guinea pigs, in groups of two or more.

10 At its most extreme, the Swiss concept of dignity could soon be applied to plants. A discussion paper by the Federal Ethics Committee on Non- Human Biotechnology defines the "decapitation of wild flowers at the roadside without rational reason" as "morally impermissible." While this clause is generally viewed as being rhetorical, more worrisome is the Committee's preliminary stance on the genetic engineering of plants: only permissible if their "reproductive ability and adaptive ability are ensured."

11 Kevan Martin, of Zurich's Federal Institute of Technology, is one researcher whose work has already been affected by this dignity-based approach. He uses live macaques to understand how the brain changes during learning, and his experiments have been approved by ethical reviews many times over. But in 2006 the Swiss Health Department refused to renew Martin's license after a local advisory committee protested that his work had no immediate clinical relevance. "The result is that basic science on primates is effectively not possible," says Martin. "This research is not a luxury. The failure of gene therapy and AIDS vaccines is due to pressure to produce 'cures' before understanding the underlying biological mechanisms, which cannot be accessed by experiments with humans."

12 In the US, Edwin McConkey, a biologist on the team that initially proposed the Chimpanzee Genome Project, agrees that apes should be treated with more respect. He acknowledges, however, that there is at least one area in which applying human standards to apes would hinder important experimentation. "To understand the genetic basis for human uniqueness, it is necessary to compare both gene structure and gene expression in humans and apes," says McConkey. "This means obtaining early embryos from apes by surgical termination of pregnancy."

13 One kind of primate experiment seems to be safe in this debate. "I would strongly argue for continued noninvasive studies," says de Waal, "ones we wouldn't mind applying to human volunteers." Far from harming apes, such research could even enrich their lives—the chimpanzees that de Waal works with are so enamored of computers that they will actually line up for cognitive tests. Once their work is done, many can now be relocated to places like ChimpHaven, an outdoor facility that acts as a retirement home.

14 De Waal sits on that facility's board of directors. The care it extends to chimps is typical of the approach he favors. "What if we drop all this talk of rights and instead advocate a sense of obligation?" he asks. "In the same way that we teach children to respect a tree by mentioning its age, we should use the new insights into animals' mental life to foster in humans an ethic of caring in which our interests are not the only ones in the balance."