

Seeing 'Green': The Movement, the Color, the Graphics

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Abstract

A great deal of promotional material has been created to advance the causes associated with the environmental movement in the U.S., especially since 1970 when the movement hit college and university campuses with the first Earth Day on April 22. This paper will analyze the evolution of several environmental organization's logos as well imagery, color use, inherent values, and the intent of promotional material produced by the University of Colorado Boulder Environmental Center from 1970-2010. Comparing changes in use frequency of these elements over time reveals some interesting trends: logo evolution across multiple organizations shows a similar progression, the analysis of promotional pamphlets, fliers, and posters suggests a shift in intents, and use of imagery shows some interesting correlations with significant historical events.

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Introduction

Posters, flyers, and pamphlets oft spring into existence mere moments after a movement has been conceptualized in the minds of the founders. The year 1970 is marked as the official start of the environmental movement on college and university campuses across the nation, with April 22 henceforth to be known as Earth Day, and the “green” movement became a greater part of the public lexicon. Much has been written on the ethics, policy, and activism surrounding the environmental movement in the United States; however, few have investigated how environmental issues have been represented in printed graphics or the iconic imagery and colors that have come to be associated with the movement. This paper will discuss the topology of designed graphics used by the University of Colorado Boulder Environmental Center to promote Earth Day, Recycling, and activist issues, how these elements have changed since 1970, and how technological advances, social-political climate, and the economy have impacted design and messages. Additionally, the evolution of the Environmental Center’s logo since 1970 will be analyzed and the transition will be compared to logos of other national and international organizations like the Sierra Club, The Nature Conservancy, and the World Wildlife Fund.

The Environmental Center on the University of Colorado Boulder’s campus is “the nation's largest and most accomplished student-led center of its kind,” according their website, and was originally founded in 1970 by the same students that took part in organizing the first Earth Day (E-Center). With a long history of impacting campus policy, as well fundamentally shaping the perspectives students on an individual level, the archives and scrap books kept by the center and the university library offer a wealth of

data on the awareness and activism campaigns surround multiple environmental issues, Earth Week events, and Recycling.

In order to broaden the scope of this discussion slightly, and to give some national context, the organizational logos of five other organizations, will be compared to the E-Center's logo and how all of them have followed a trend in their evolution. Organizations are not the only things to have an emblem associated with them; Earth Day and Recycling also have what can be considered iconic symbols as well.

The analysis of signs, symbols, and pictograms have been discussed by several authors and experts in the field of graphic design and typography, and several of their categorization methods will be useful in this discussion. I will be using the work of Paul Rand, Jean-Marie Floch, and Ryan Abdullah to discover the underlying value systems used, how the appeals are made, and to categorize the types of images used.

Using University of Colorado Boulder's Environmental Center as the subject for a case study of environmental movement print media, the research question for this project has three parts. First, how have environmental campaign messages changed over the years in terms of imagery, language, and color. Second, what value systems are inherent in the language used in posters, flyers and ads and do messages seek to influence the audiences thought, will, or emotion through the use of imagery and language. Third, how have environmental organizations logos, including the E-Center, changed over the years, and are there any common elements or themes inherent in those changes.

Research Question: The modern environmental movement has increased awareness and rallied for public support in the U.S. since 1970s, but how do the values inherent in campaign messages and the graphic elements and logos utilized differ from today, have they changed, and has technological advancements or the social, political, and economic climate, had an effect on the content?

- How have the graphic elements, like color and use of imagery changed?
- How have environmental organizations', including the Environmental Center, logos evolved over the years, and is there a common trend?
- Have the values inherent in the printed promotional material changed?
- Has the intent of printed promotional material changed?
- Has technological advancement had an effect on the content of both ads and logos?

Chapter 1: Perspective

In order to give context to the discussion, it is first necessary to give a brief overview of the environmental movement in the United States and to touch on the social, political, and technological elements that influence the design of promotional material. Additionally, some discourse on the significance of the color green, what makes a good logo, and why logos are important in the environmental movement will be useful.

The Environmental Movement: A VERY Brief History

From the founding of the United States in 1776, religious, social, scientific, and economic forces have put the human population at odds with the rest of the ecosystem. Forests, animals, and natural resources of water, minerals, and land were viewed as elements to be conquered, utilized, and exploited for the advancement of mankind. A great deal of history predated the modern environmental movement. “The United States Environmental Movement is the result of numerous historical events, many of which occurred long before the nation was established” (Kline). A central environmental debate prior to the twentieth century involved whether or not humans, as a species, have the right to change the ecosystem and profit from exploiting it, to the detriment of all other living things. Many have believed that it is a God-given right to exploit nature. “Western society assumes that humanity and nature are essentially disconnected and that the environment is subordinate to human needs, whether explained by Judeo-Christian tradition or by scientific rationale” (Kline). However, the ideology did not originate in the United States as the individuals holding the belief were immigrants or descendants of immigrants.

The Age of Exploration and the Colonial Period.

Whether by divine decree or simply due to the progress of industry and social development, Western Europe became a global leader in technology and began the age of exploration with the desire to capitalize on trade with the East Asia. “During this period, commercial capitalism, with its reliance on money rather than service, soon supplanted the feudal system and its stagnating agricultural economy, which had dominated medieval Europe” (Kline). Christianity was changing too, and out of the Protestant Reformation came the Calvinist philosophy that wealth was a sign of God’s favor and a sign of saved. The advances in traveling technology allowed Europeans to colonize much of globe and, as growing social tension, caused by religious persecution, political strife, and rapidly growing human population pushed people to seek new land, they brought their capitalistic and religious values with them to the New World.

Scientists of the time further separated humanity from the rest of nature as they “opposed the medieval European belief in nature as an ever-changing living organism, replacing it with the concept of a great machine driven by mechanical certainty” (Kline). A peer of the Founding Fathers, Adam Smith, also strongly influenced thought. “By the time the United States was established with the Declaration of Independence in 1776, western European culture had developed a philosophy toward nature that emphasized materialism and humanities right to dominate the environment” (Kline). These same values motivated colonists and led to the expansion that crept across the entire continent. However, before the official founding of the country, the new settlers came in contact with the native peoples, who have often been looked back on as the first environmentalists.

The Native Americans utilize the resources of nature to meet their needs, but they didn't develop the types of technology which allowed the newcomers to exploit and destroy the environment with great efficiency. The indigenous peoples did not value owning a specific piece of land, made a practice of utilizing every part of the animals they killed, and understood the importance of not decimating entire populations. "Their example... continues to influence environmentalists who seek a philosophy more compatible with an environmentally 'friendly' lifestyle" (Kline). In stark contrast to such an approach:

"A massive assault was directed at the New World environment in the name of civilization and Christianity. Progress became synonymous with exploitation. Men slashed the earth in pursuit of raw material. The strength of individualism and competitiveness in the American value system supported the pioneer's (and his descendant, the entrepreneur's) insistence that the land he owned could be used as he willed. The long term interest of society made little difference. Consideration of immediate profit dictated the relationship with the land. A scarcity of natural resources? Absurd! Over the next ridge was a cornucopia of wood, water, soil, and game!" (Nash).

With the 1803 Louisiana Purchase, territorial expansion and conquering new frontiers was a frenzied pursuit, and official United States borders continued to expand with purchases and annexations for the next fifty years. "The colonial period in United States history is important to the environmental movement not because such a movement existed then (it did not), but because many presumptions about nature's subservience to human needs, which today's environmentalists oppose, were established during these years" (Kline).

While most of the nation was caught up in the frenzy of expansion of the 1800s there were a few voices that spoke against the unchecked materialistic exploitation.

Among those who tried to warn against the irresponsible use and lack of foresight were Thoreau, Emerson, and Catlin, but Manifest Destiny, or the belief that God had ordained and prepared the way for expansion of the nation, was used to justify of the zealous crusade that was westward expansion. As millions of immigrants continued to pour into the land of opportunity to feed the fire of the industrial revolution, the force behind expansion only increased. The progress of conquering wild lands and beating back the “uncivilized” natives that had not already been wiped out by small pox continued unabated. Aided by construction of the transcontinental railroad, after the Civil War the Federal Government utilized the Army to round up and kill or sequester the remaining native populous to prescribed reservations.

Simultaneous to the utter destruction of nature and the cultivation of wild lands, there was a transcendentalist movement taking place in the 1800s. Bolstered by writings of Thoreau, who would come to be considered a founder of the environmental movement, and others, there was an opposition to the industrial model that valued nature and its intrinsic spiritual elements. “Emerson, Thoreau, and Catlin marked a growing awareness among Americans that the unchecked assault on nature was destroying a part of the American character that could not easily be replaced” (Kline). Unfortunately, the norm of sacrificing the environment for the sake of industrial progress continued, and “the environmentalists’ cause would take a backseat to the material needs of the nation and remain a minor social issue until the twentieth century”(ibid). The accomplishments of the nation builders are astounding, and while a few mourned the loss of the idealized, often romanticized,

untouched wilderness, there was no real desire to give up modern convenience and go back to a more harmonious arrangement with the rest of the natural world.

In the first two decades of the 1900s, realization that continual industrial development, coupled with exponential human population growth, is not infinitely sustainable, led to concern over saving some resources for future generations. “Correcting the reckless habits of the past would be difficult, but as a product of the Progressive Era, there grew a determined group of government officials and citizens who fought for a more responsible use of nature’s resources, and this was the beginning of the conservation movement” (Kline). However, this movement did not seek to “save” nature for nature’s sake, but to utilize resources more responsibly and reduce needlessly wasting them. It was at this time that the Sierra Club (1892), along with the Boy Scouts (1910) and Girl Scouts (1912), was founded with the purpose to conserve and appreciate wilderness areas. President Theodor Roosevelt had a utilitarian approach to conservation, as “he believed that the proper use of nature benefited the nation’s economic health” (Kline). Nevertheless, he is seen as one of the champions of the cause, as his policies were integral to the movement advancing.

Pinchot vs. Muir.

The idea that resources needed to be managed responsibly became generally accepted in the political arena, though western entrepreneurs railed against having to limit their maximum exploitation approach, and the initial values debate in the environmental conversation began. Conservation versus Preservation was the debate. Gifford Pinchot, formerly the chief forester of the U.S. Department of Agriculture, was appointed as the head of the new U.S. Forestry Service in 1905, and was a champion of conservation.

“The first great fact about conservation is that it stands for development, Conservation does mean provision for the future, but it means also and first of all the recognition of the right of the present generation to the fullest necessary use of all the resources with which this country is so abundantly blessed” (Pinchot).

Muir, on the other hand, had a very different perspective on why it was important to curb the rampant exploitation of natural resources. A founders of the Sierra Club, Muir believed that “everybody needs beauty as well as bread, places to play in and pray in, where Nature may heal and cheer and give strength to the body and soul” (Muir). The debate came to a head in 1912 when the controversy over the infamous Hetch Hetchy Valley dam project got national attention.

The Conservationist fought in the name of progress and the needs of the city of San Francisco, which having exhausted local water supplies, was facing a serious water shortage. Preservationist, in opposition to the cause of development above all, fought to save the spectacular beauty of the glacier carved valley. The ‘practical’ argument of human development and progress won out in the end, but it was a milestone event because “Hetch Hetchy helped put wilderness preservation squarely on the public agenda” (Kline). The defeat was disheartening, but the preservationist cause was now in the public discourse. Muir and the Sierra Club had great success on other occasions during the Progressive era due in part to “their skill in using magazine articles to rally public support”(ibid). Among their victories by 1916: the creation of 13 National Parks, or nature preserves, and the Federal backing to protect them with the National Park Service.

National parks became a battle ground for preservationists as the new technology of the automobile brought hundreds of thousands tourists to national parks each year and

threatened to pollute, destroy, and alter the very thing that tourists were traveling to see. The Sierra Club and the National Audubon Society (1905) continued to rally public support and raise awareness, and out of this period came one of the most influential writers of the environmental movement, Aldo Leopold, who introduced the new perspective of “land ethic.” Instead of focusing on the wellbeing of humanity from an economic, political, religious, or aesthetic standpoint, Leopold suggested a new idea of responsibility.

Perhaps for the first time, the ecological perspective that humans, as the most powerful species of the living community, have a responsibility to look out for the interests of all members, was given voice. Leopold also believed that the land had inherent value beyond the extractable resources. “By value, I of course mean something far broader than mere economic value; I mean value in the philosophical sense” (Leopold). With the Great Depression of the 1930s, and the subsequent implementation of the New Deal, the environmental cause fell by the wayside as Franklin Roosevelt and the country worked diligently to restore economic stability. Unfortunately, “the public at large did not begin to comprehend the environmental damage caused by two hundred years of uncontrolled industrial expansion” until much later (Kline).

Through the 40s, and after WWII, Americans had become so confident in the technological advancements of the day that problems caused by the destructive, contaminating force of industry were acceptable since it was believed that they could be fixed in the future. “Because science could and would solve any future problems, ‘present the repair bill to the next generation’ became the unspoken slogan of those who exploited nature for short-term gains” (Kline). However, by the late 40s, the consequences of pollution, industrially produced chemicals, and the waste of rampant consumerism began

to accumulate, and people started dying from the effects. As difficult facts came to light, many Americans, “rather than investigate the environmental predicament, preferred to contemplate the romanticized naturalist of the past” (Kline). The work of John Muir became very popular and either purposefully or unintentionally, the public remained ignorant of how modern convenience, which they held so dear, was poisoning the environment. The illusion was shattered by Rachael Carson’s book *Silent Spring* in 1962.

The revelation of unintended side effects of industrial pesticides and agricultural runoff was met with great criticism by stakeholders in the chemical companies, but Carson’s science held up to the harsh scrutiny, and her book is oft heralded as the “beginning of the modern environmental movement” (Kline). The 1960s was a time of social and political upheaval in the U.S. with civil movements, activist campaigns, and assassinations. Rallies became a frequent occurrence, and “mobilization of environmentalists reflects the mood of the times as people organized to promote their cause” (Kline). Established environmental groups became more active, using promotional media, and many new organizations were formed. A former director of the Sierra Club, David Brower, founded Friends of the Earth with the distinct purpose of promoting environmental issues (Mitchell). “Although the means were not yet fully established, much of the philosophy and most of the methods needed to construct an active environmental movement had been well formed during the first half of the twentieth century” (Kline). The stage was set for the next chapter of the environmental movement.

1970s: All You Need is Love?

Around 20 million people participated in the first Earth Day; the generation of the post WWII “baby boom” was fed up with the pollution and degradation and surprised the

entrenched conservation groups which played little or no role in the organization of the event. April 22nd, 1970 was the first organized, official Earth Day, and is often marked as the beginning of the environmental movement on college and university campuses across the country. The event spurred a new wave of environmental awareness, activism, and “witnessed an unprecedented surge in environmental legislation as the public responded to the environmental disasters of the 1960s” (Kline). The momentum continued and membership in environmental organizations and the creation of new ones grew by the hundreds. However, differing ideologies led to a split between mainstream groups which operated within the established social, economic, and political systems, while the alternative groups took a more direct approach, using protest and civil disobedience to effect policy change. Alternative views emerging in the 70s include: deep ecology, eco-feminism, Gaia, and green politics. The associated alternative groups that organized around these ideologies included Friends of the Earth, Greenpeace, and the National Resource Defense Council.

This decade saw great strides forward in environmental policy with the establishment of the EPA, revision of the Clean Air Act, and implementation of the Clean Water Act, but there was also some backlash. Growing criticism for a lack of concern over social justice and the economic consequences of the 1973 OPEC oil embargo both contributed to a loss of public support for the movement. “The initial enthusiasm for the environmental cause was tempered by economic concerns and a growing criticism that environmentalists were more concerned about narrow ecological themes than human needs” (Kline). As the decade drew to a close, the “heyday” of the movement had come and gone and the following decade would be a struggle to hold the ground that had been won.

1980s: Back to the Future?

The environmental movement was pushed back several steps after a decade of so much success, which is somewhat surprising, in the face of such issues as ozone layer depletion, global warming, and the green house effect. “Bolstered by widespread support from business people and landowners, President Ronald Reagan dismantled many existing environmental regulations... a backlash from the perceived liberal agenda of the 1970s” (Kline). However, the push back slowed in Reagan’s second term and his vice president, presidential predecessor George Bush, promised to be an “environmental president.” Unfortunately, President Bush’s noble intent was impeded by the economic recession and growing unemployment rate. The general public cared more about the economy than the environment and this pushed some activist organization to take a much more direct approach.

Frustration over the setbacks, and in reaction to the perceived threat to environmental protection, “many activists took a more violent approach to promote their causes”(ibid). Groups like the Animal Liberation Front and People for the Ethical Treatment of Animals took extreme measures in the absence of political support and vandalized and attacked industries they viewed as animal abusers. Labeled as fanatical eco-terrorists, those espousing the ideology of “nature before humanity” contributed to the public apathy toward environmental issues. Nevertheless, the extremists had some success by putting themselves in the line of fire, and helped to keep the movement alive in spite of the efforts of the Reagan/Bush administration. Until the mid-80s the environmental movement was primarily a phenomenon occurring only in the United States, but in the following decade with growing global concern, the movement hit the world stage.

1990s: Show Me the Green!

The environmental movement was much less aggressive following the decade that attempted to dismantle it completely. “Earth Day 1990, the first nationally organized celebration since 1970, had a far less confrontational tone than the original, triggered a frenzy of corporate green marketing, and was optimistically heralded as the beginning of another green decade (Kline)” However, two years later, the historic 1992 Earth Summit took place in Rio de Janeiro, and the U.S. under Bush declined to sign the Biodiversity Treaty or make any real commitment to solving global environmental problems. “Bush offered the American public the choice of a strong economy or environmental protection,” in spite of the fact that “most American believed the nation could have both”(ibid). When Bill Clinton took office the next year, he signed the treaties that his predecessor had turned down. Though he made it clear that the economy was his top priority, he believed that using technological advancements and regulation to make industry cleaner and having a healthy economy were not mutually exclusive.

Environmental justice became a movement in the 90s, with a growing concern for disproportionate impact of pollution on urban minority groups. Another countermovement that gained notice was the wise-use movement, which sought to limit government restrictions of land use. “In contrast to the intensifying conflict between environmentalists and wise-users, 1993 saw a rebirth of green products and packaging, which consumers buy specifically because they are marketed as having environmental benefits” (Kline). ‘Shop to save the environment’ was an approach that truly only addressed economic concerns, but helped to ease the public conscience over environmental concerns. This “Light Green” approach or supporting environmental issues

as long as one's standard of living is not reduced, was a stark contrast to groups like Earth First! which employed monkey-wrenching tactics like cutting fuel lines and creating human barricades to save trees. The Earth Liberation Front took eco-terrorism to a new level in 1998 when they caused 12 million worth of damage by setting fire to a Vail ski resort.

The public awareness of environmental problems both at home and globally was at a record high by the end of the 90s, but awareness did not equal action as the issues seemed overwhelming and insurmountable. "The sheer volume, complexity, and apocalyptic nature of the debate often left people confused and numbed" (Kline). Buying "green" and other solutions that were mostly just perceived action helped to ease public concern, but lacked any real substance.

2000s: Please 'Like' the Environments Facebook Page

As the new millennium dawned, Y2K and global environmental problems seemed like the biggest challenges that would face humanity. Many predicted that the coming decade would finally be the one when humanity came together and solved or fixed the problems that were threatening their very existence. Then, one morning in September of 2001, a new global crisis arose that made all other issues fade to the background. With the public distracted by a two front global war on terror, the narrowly elected George W. Bush, continuing in his father's footsteps, increased efforts to dismantle environmental regulatory policy. Once the war was well underway, with no foreseeable end date, climate change again became a major concern worldwide.

After Barrack Obama was elected in 2008, there was renewed 'hope' for increased environmental action and EPA administrators claiming that "business as usual" would not continue and that they were using the tools and technology available to move forward. "It

was a strong and clear statement, which in the best of times might be considered 'hopeful' by most observers, but within the economic crisis that hit the world in 2008 it seemed almost quixotic" (Kline). In spite of the war, the recession, and the health care reform project, the Obama administration made strides forward in the environmental cause by implementing the first-ever corporate regulations for vehicle greenhouse gas emission and fuel efficiency. The decade that started out with so much hope drew to a close as "the Obama administration failed to pass climate-energy legislation and the nation was struck by the greatest environmental crisis in its history—the BP oil spill in the Gulf of Mexico"(ibid). As a witness to a large scale catastrophe so close to home, "the American public was not ignorant or complacent about the threat of the environmental crisis but it had yet to be significantly mobilized for the cause" (ibid). With the economic crisis and the looming danger of international terrorism, the environment was nowhere near the top of the list of perceived necessary government spending.

The environmental movement in the United States has seen many ups and downs over the years, and the extent of and extremeness of activist groups has varied as well. Government policy, the economy, and social movements have played key roles in the advance and decline of the causes, and there has yet to be a time when the environment topped the list of national priorities. Having a historical perspective of the movement is important background in the discussion of the design aspect of the print media created in the name of the environmental movement. Public promotion of environmental campaigns was a technique first used by the Sierra Club, and continues to the present.

The Color Green

Green, as a color has several cultural connotations in the United States: envy, money, go at a stoplight, new life, and more recently, sustainable practices. Sustainability is based on the premise that “everything that humans require for their survival and well-being depends, directly or indirectly, on the natural environment” (Environmental). Current corporate business practices, which overtax natural resources and degrade the environment for quarterly gains, do not bode well for the opportunities of future generations. With the increased public consciousness, many businesses have gone through a ‘greening’ process and sport “We’ve Gone Green” or “Eco-friendly” slogans to denote their efforts.

An unfortunate side effect of having widespread public support and recognition of the green symbology of the environmental movement is ‘greenwashing,’ or the attempt of businesses to capitalize on a new marketing angle. “Greenwashing is not a recent phenomenon; since the mid-1980s the term has gained broad recognition and acceptance to describe the practice of making unwarranted or overblown claims of sustainability or environmental friendliness in an attempt to gain market share” (Dahl). Using the cause as a marketing angle is misleading, dishonest, and unethical because consumers are rarely informed enough to know what is more natural or less damaging to the environment. “Although greenwashing has been around for many years, its use has escalated sharply in recent years as companies have strived to meet escalating consumer demand for greener products and services” (Dahl). Sustainability and being ‘green’ are fairly recent trends in mainstream U.S. society, and one of the most visible elements of the trend are the logos that appear on product packaging which identify them as ‘green.’

What is a Logo Anyway?

A logo, in essence, is simply a symbol that has a certain meaning or connotation based on an ongoing cultural and societal dialogue. “Logo design as we know it today is a strategy that rose to popularity with brands and corporations of the twentieth century; however, people and organizations have been identifying themselves with an enormous variety of marks, signatures, and emblems for centuries” (Redding). As organization, both corporate and non-profit, grow and evolve over time, the graphics and logos they use to identify their products and campaigns also change either gradually or by taking new forms entirely. Design of a logo is important to the success of an organizations identity, but how a logo comes to have meaning is a product of human culture.

Humans have used symbols to convey meaning since the first cave paintings and early forms of language scratched into clay. “A logo has meaning because it draws on centuries of signs and symbols (including the alphabet) in human literary and visual language” (Redding). Modern organizations are participating in the same age old tradition of royal families, militaries, and nations which have implemented crests, seals, flags, banners, and uniforms to create unified identity and evoke loyalty and belonging.

There are many elements that contribute to good logo design. Paul Rand has designed many successful corporate logos, including IBM, ABC, Enron, and UPS. He suggests that the effectiveness of a logo depends on seven things: distinctiveness, visibility, usability, memorability, universality, durability, and timelessness. However, he admits that “ultimately, the only thing mandatory, it seems, is that a logo be attractive, reproducible in one color and in exceedingly small sizes” (Rand). These principles can be seen in his work as well as other successful corporate logos.

Corporate businesses, however, are not the only organizations that utilize the identifying power of a logo. “Any public campaign benefits from having an iconic image — something that captures the essence of the message and engraves it indelibly on our memories” (Kemp). Environmental groups have used logos and info graphics to raise support and awareness from day the beginning of the movement. There are many iconic images that have been used by environmental organizations as logos, but one of the most noteworthy and globally recognizable, is the recycling symbol.

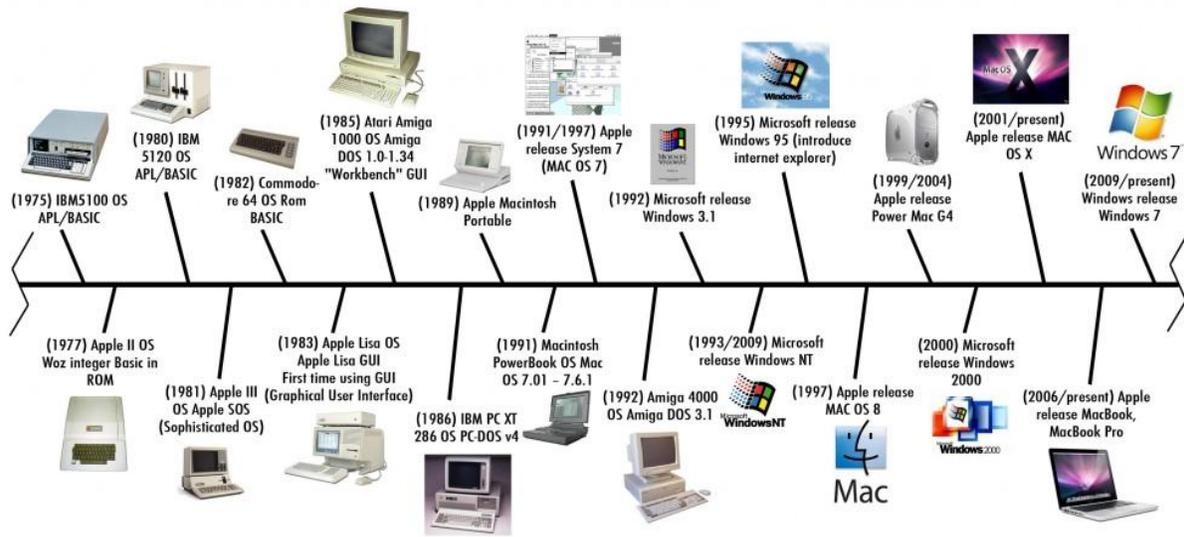
How Recycling Got Its Symbol

The image of three chasing arrows in a triangle has come to signify the practice of recycling, and it is one of the most recognizable symbols associated with the efforts of environmentalism. “The recycle logo, more commonly known as the ‘recycling symbol’, is certainly one of the most popular and instantly recognizable logos in the world; it is used to designate recyclable materials” (Recycle Logo). The unlikely creator of this iconic symbol, a 22-year old architecture student named Gary Anderson, was the finalist in a competition held by the Container Corporation of America, in association with the first Earth Day, to create a symbol to print on its paperboard products. “Over the past 40 years, the chasing arrows recycling symbol has come to represent something far beyond a product’s recyclability. In many ways it has helped to propel the recycling movement forward,” and is a prime example of the power a symbol can come to possess through associated meaning (Kalish). The triangular symbol possesses many of the qualities that Paul Rand mentions, namely that it clear and universal, recognizable in either black ink or color, and identifiable even at very small sizes. Once the symbol was established and became widely know, there

was no reason to change it because the basic principles behind recycling haven't changed.

Environmental groups and organizations, on the other hand, often experience significant changes in mission, purpose, and goals; consequently, the official logo usually evolves as well. Like many organizations, in the past forty-four years, the Environmental Center has changed its logo several times. Some of these changes coincided with new full-time staff members or directors being hired, and the most recent change was due to new campus-wide branding guidelines being implemented. It has been fairly standard practice for conservation and environmental groups to start with a 'homespun' look of a hand-drawn logo that emphasizes a specific plant or animal, and then evolve to a more abstract corporate design as the organization grows. "They have evolved in response to shifts in the media landscape, corporate life and...this logo evolution, is sometimes slow and incremental, and sometimes rapid and radical" (Nicholls). One of the most likely contributing factors in logo evolution is technological advances, especially in regard to computers, digital design software, and printing capabilities.

Through the Lens of Technology



(PC Timeline)

Computer technology changed nearly everything in the process of designing and creating promotional material and logos during the timeframe of this cases study. The first vector processor was the Cray I, a four year project completed in 1976, and was the “fastest machine of its day,” but this early example in no way resembled a personal desktop computer (Exhibits). The next milestone in 1981 included the first workstations designed by Apollo, with more power and versatility than the micro computers and at a lower price point, and Sun Microsystem with the purpose of running engineering graphics programs. 1983 saw the first of many personal computers with graphical user interface. Lisa, introduced by Apple was revolutionary, and set the standard for future development. The very next year, 1984, “Apple Computer launched the Macintosh, the first successful mouse-driven computer with a graphic user interface,” and was the machine featured in the notorious Orwellian, Super Bowl commercial” (Exhibits). Revolutionary new programs included “MacPaint, which made use of the mouse, and MacWrite, which demonstrated

WYSIWYG (What You See Is What You Get) word processing” (Exhibits). IBM followed the trend, and in 1987 released the PS/2 with a 3 ½” floppy drive and video graphic array, features that henceforth became the standard.

1990 saw the birth of the World Wide Web with Tim Berners-Lee’s contribution of HTML and URL and HTTP specifications. “Berners-Lee based the World Wide Web on Enquire, a hypertext system he had developed for himself, with the aim of allowing people to work together by combining their knowledge in a global web of hypertext documents” (Exhibits). Little did he know how this creation would change the everyday lives of people all over the world from the way they did business, found information, and communicated with friends and family. Three years later, the release of the Mosaic web browser allowed access to internet content in a graphical format (Exhibits). Since the mid 90’s computer technology continued to advance with faster processors, a multitude of powerful programs, new and improved operating systems, and larger higher resolution screens, but the basic user interface format has remained relatively unchanged since the advent of the keyboard, screen, and mouse set up.

Digital printing technology also potentially plays a role in the material produced for printed media as well as logo design. Wood block printing can be traced back to the T’ang Dynasty in 600s A.D. China, and printing presses were used to mass-produce material through the industrial age, but it was not until the mid 1950s that companies such as Xerox, Epson, Cannon, and Hewlett-Packard began developing digital printing technology. “Starting in the late 1970s, inkjet printers that could reproduce digital images created by computers were developed,” and by 1984, both inkjet and laser printers for desktops

became available (Print Country) . The digital printing age, roughly 1984-2007, not only saw advances in ink and paper quality, but also a rise in interface technology between printers and computers including wireless communication, and direct camera docking to print photographs. With the release of the iPhone in 2007, the iPad in 2010, and the falling price of 3D printers on the market, there is a case to be made that we are now in a “New Printing” age of printing that does not involve paper (Print Country).

Chapter 2: Analytical Methods

The analysis of visual data is challenging due to the fact that categorization and classification of subjective content can be problematic. In order to give intelligibility, distinctiveness, and pertinence to the data the use of semiotics will be implemented.

Type of Data

The first subject of analysis is the logos of several national environmental organizations and how their logos have changed over the years from their various official established dates to 2013. The organizations include the Sierra Club, The Nature Conservancy, the Forest Stewardship Council, The World Wildlife Fund, Friends of the Earth, and Fauna & Flora International. Some of these organizations are national institutions with a long history and a rich heritage, while others hang their hat on being more cutting-edge. These differing values likely come from the different generations that founded them and may play a role in the evolution of the organizations logo. The University of Colorado Boulder Environmental Center's logo has gone through many changes over the years, and will also be included in the analysis.

The second subject of analysis is printed media created to promote issues, campaigns, and events associated with the environmental movement. Because much of modern environmental activism began on college campuses across the country in the early 1970s, the University of Colorado Boulder Environmental Center has been selected as the subject for a case study. Promotional material produced by the Environmental Center from 1970 through 2010 will be the time frame for the study. In order for the resulting data

analysis to be as objective as possible, I chose to end the case study the year before I began attending the University of Colorado Boulder as a student so that I would be seeing all of the material for the first time. My position as a student employee of the Environmental Center influenced my decision to choose this thesis project, and access to the centers scrap-books and historical collections, along with campus archives, provide an adequate amount of data for the analysis.

Categories of Analysis

The material collected is evaluated in several ways, primarily, content, value systems, and advertizing intent. The content, including color use, and the types of symbols, is used to evaluate and analyze the logos. For the promotional material produced by the Environmental Center, these same categories are applied along with an analysis of values that are inherent in the messages portrayed and the intent of the material.

Content: Colors, Imagery, Typeface

A key way in which technological advancement will likely be visible in the evolution of print media is in the ability to print in color. As discussed in the background section, printer and computer technology saw important advances during the timeframe of the case study. Accordingly, the number of colors of ink used per piece are tracked as well as the frequency of the colors green, blue, and brown, as they are the primary colors associated with earth, land, water, and the environmental movement.

Semiotics: Icons, Pictograms, Signs, and Symbols

Semiotics is a term that I recently heard for the first time in a digital media course, but the concept has been around for a century. Roughly defined, semiotics is the “systematic study of signs and symbols and their use or interpretation” (Abdullah). In

order to create some clarity in the analysis of imagery, which can be very subjective, I will be using semiotics to identify the forms that logos take.

“The invention of semiotics - the analysis of signs or symbols and their use - is attributed to the American pragmatist Charles Sanders Peirce (1839- 1914), who saw the entire universe as an extended network of signs. He adopted a method of classification, which divided all signs into the three categories of icon, symbol and index based on the relation of the sign to its referent by resemblance (icon), convention (symbol) or existential connection (index)” (Abdullah 12).

Herbert W. Kapitzki classified pictorial signs into slightly different categories, and his classification system is used to analyze the data for the case study. “Only by distinguishing it from other signs is it possible to pinpoint the status and the meaning of the pictogram” (ibid). The classifications of sign categories, according to Herbert W. Kapitzki, are the following:

Iconogram: Illustrative representation. An iconic sign which, as an illustrative representation, emphasizes the points in common between the signifier and the signified.

Pictogram: Pictorial representation, ISOTYPE. An iconic sign which represents complex facts, not through words or sounds but through visual carriers of meaning.

Cartogram: A topographical representation with complex functions (statistics etc.) and iconic facts, for example an atlas or the ground plan of a house.

Diagram: Functional representation. A visual sign which is partly still an iconic representation, but is more a functional carrier that illustrates, for example, a sequence of facts or functions.

Ideogram: *Representation of a concept. Corresponds to the sign as a symbol which relates to the object or concept referred to, independently of any formal identification with it.*

Logogram: *Conceptual representation like writing. A visual, referential linguistic sign that does not take the phonetic dimension into consideration.*

Typogram: *Typographical representation. A sign, also a composed sign, derived from a written repertoire such as the alphabet.*

Phonogram

Phonic representation. A sign which is used to signify linguistic or other sounds, for example a whistle” (Abdullah).

Semiotics “is first and foremost a practical relation to meaning,” a quality that is invaluable when venturing into an analytical realm of such great subjectivity (Floch). The three main categories to which semiotics has a “value-added” effect are: the effort to acquire more intelligibility, more pertinence, or more differentiation. It would be difficult to discuss the topic of this case study if the only means of differentiating pieces of promotional material was by format (poster, pamphlet, or newspaper ad) rather than the content. “Semiotics provides a relatively solid, if not powerful, means for structuring, organizing, and clarifying what is potentially meaningful” (Floch).

Values: Practical, Utopian, Ludic, Critical

Another aspect of semiotics useful in analyzing the data present in promotional material is to classify the value systems that are valorized in the visually communicated message.

-Practical (Utilitarian): or the 'Convenience' position

-Utopian (Existential): 'life values' position

-Ludic (Non-utilitarian): 'diversionary' position, also hedonistic

-Critical (Non-Existential): negation of life values 'critical' position (Floch)

It is important to note that the four terms are somewhat arbitrary, and are adapted from a 1986 interpretative model for consumer representation and expectations outlined by Jean-Marie Floch. This model is useful for this project as viewers of promotional material can be classified as consumers, and looking at what values system promoters appeal to in their audience, reveals some interesting data about how what is important to people changes over time

Intent: Indicative, Imperative, Suggestive

The purpose of posting an ad or handing out a flyer is primarily an attempt to influence people in one of three ways: thought, the will, or feelings. "The indicative intention is merely to inform the receiver, but he is left to make his own decision about how to act" (Abdullah 17). A pictogram that has an indicative message 'indicates' to the viewer that an activity or action is permitted in an area. For example, and off leash dog park may have a sign with an pictogram that indicates dogs are allowed and leashes are not

required, but it in no way implies any moral or ethical values surrounding dog ownership, nor does it imply that a person has to have a dog to utilize the area. This intent seeks to influence thought; “it is therefore up to the receiver what he does with this information”(ibid). The next form of intent is the imperative, and seeks to influence the will or behavior of a person. To continue with the previous example, if a sign at a park has a pictogram of a dog in a red circle with a line through its intended purpose is to influence those who own dogs and may want to bring them to the park to not bring them because it is prohibited. Finally, “the suggestive intention is to influence the subconscious mind of the receiver through his feelings, that he will act in a particular way”(ibid). This method appeals to emotions and usually involves an appeal to a larger issue rather than to a specific time or place and often has a moral or ethical undertone. For example a pictogram illustrating that abusing a dog makes it sad, suggest that a dog has the right to a happy and healthy life that abusing a dog is ‘bad.’

Sample Analysis

To add a degree of clarity to the results of the findings, I have included three examples of posters that were part of the analysis. Each example illustrates differing inherent values and advertizing intent since these concepts are more convoluted and ambiguous than the year, typeface, or number of ink colors used.

Example 1



Year Code: 3 (1980-1984)

Ink Colors: 1 (black)

Typeface: Hand Lettering

'Earth Colors': 0 0 0 (blue, green, brown)

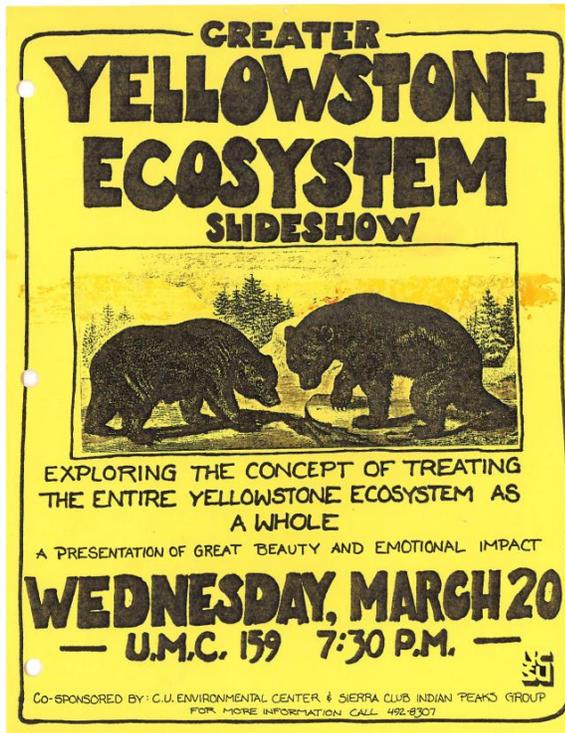
Imagery Present: animals, humanity
(not present: globe, landscape, industry)

Values: Utopian (social/community)

Intent: Suggestive (moral/ethical)

This is a typical example of the hand-drawn style of posters that were designed in the 80s, though not all of them contained this level of detail. It is classified as valorizing Utopian values because it implies that the solution to saving the wolves is a community effort rather than an individual action. The language of this poster, and the apparent emotional distress of the wolf being shot, is the source of the Suggestive Intent classification. Words like DAMN, brutally, no justification, and blood of the innocent all have a moral tone and appeal to a viewer's emotions, sense of ethics, and moral outrage.

Example 2



Year Code: 4 (1985-1989)

Ink Colors: 1 (black)

Typeface: Hand Lettering

'Earth Colors': 0 0 0 (blue, green, brown)

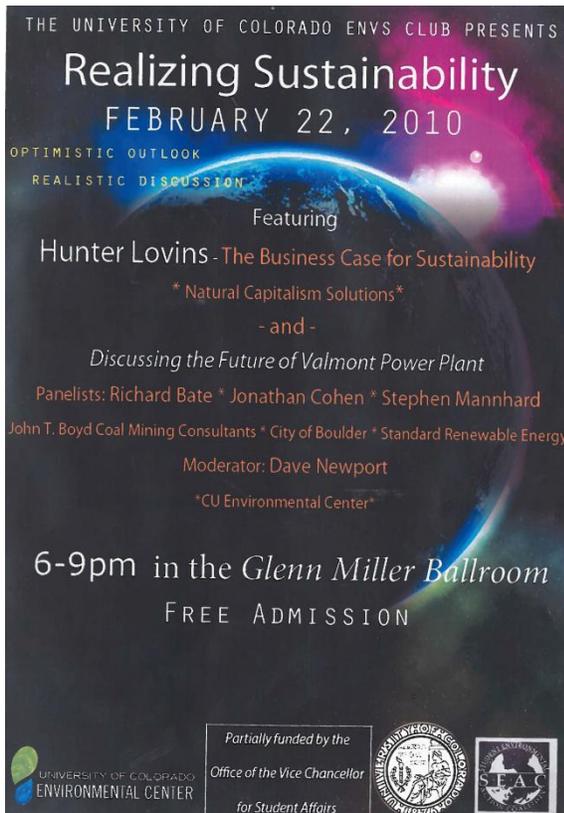
Imagery Present: animals, landscape
(not present: globe, humanity, industry)

Values: Ludic (enjoy the beauty)

Intent: Imperative (come see the show)

Another hand-drawn, single ink-color poster, this one from the second half of the 80s (year code: 4), promotes an entirely different message while still having a theme of concern for wildlife. This example is classified as valorizing Ludic values because the presentations beauty and the viewers personal, pleasurable experience of that beauty is the draw of the event. The Intent of the poster is not explicitly stated, but seems to be “come see the slide-show,” making the intent Imperative. This one is a little difficult to discern because it could also be argued that the Intent is Indicative, or informing viewers about the slide-show, but it seems like the purpose of creating and distributing this poster is to get people to show up. Because Indicative Intent is more about providing information without an attempt to influence a viewer’s behavior, this poster is classified as Imperative.

Example 3



Year Code: 8 (2005-2010)

Ink Colors: 5

Typeface: Sans serif

'Earth Colors': 1 1 0 (blue, green, brown)

Imagery Present: globe (not present: animal, landscape, humanity, industry)

Values: Practical (problem and solution)

Intent: Indicative (providing information)

As a final example, this more recent poster not only shows a stark contrast in the design elements of color, font, and imagery, but also illustrates the difference in style and visual presences between digital design and hand drawn work. The value system seems very straight forward, Practical and utilitarian. The Intent, on the other hand is, again, a bit ambiguous. Because the poster contains so much information, and the topic of the event is to acquire more information on a specific subject, it is classified as Indicative. While the end goal of advertizing an event is to bolster attendance, this does little to entice viewers to do so, and gives no reason for viewers to attend. There is no mention of how a viewer can benefit from this discussion, or what an individual is supposed to do with the information once they receive it.

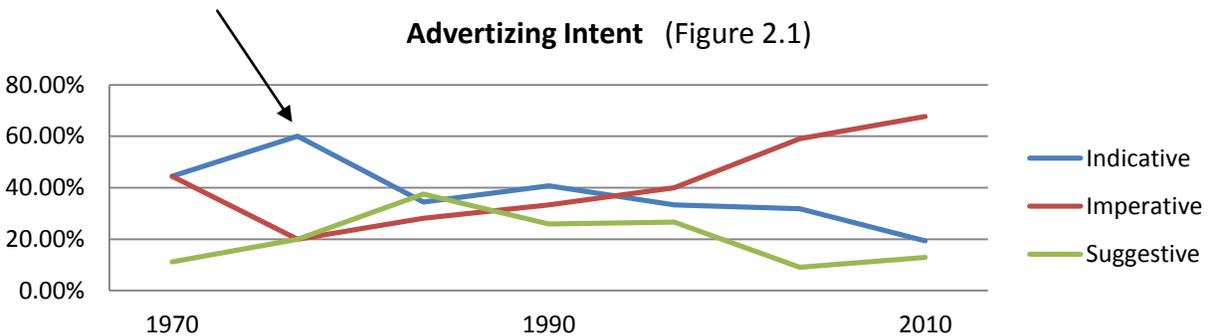
Data Analysis Details

The method used to derive the percentages over time illustrated by the line graphs in the results section is based on the number of ads in the year span that contain the element being expressed in the graph. Table 2.1 represents the data collected for several categories.

(Table 2.1)

Year Span	1970s	1980-84	1985-89	1990-94	1995-99	2000-05	2005-10	Totals
Year Codes	1 &2	3	4	5	6	7	8	n/a
Number of Ads	10	10	32	27	30	22	31	162
Avg. Colors per ad	1	1	1.03	1.37	1.17	3.05	5.45	n/a
Indicative	4	6	11	11	10	7	6	55
Imperative	4	2	9	9	12	13	21	70
Suggestive	1	2	12	7	8	2	4	36
Critical	0	0	2	2	8	2	1	15
Ludic	3	1	4	3	6	1	3	21
Practical	0	3	13	10	9	5	14	54
Utopian	7	6	13	12	7	14	13	72

For example, during the 1980-1984 year span, there are 10 promotional print pieces analyzed, 6 of those 10 ads contain Indicative advertizing intent, so the graph reflects that 60% of ads during that year span are Indicative (see Fig. 2.1).



Chapter 3: Analysis & Results

There are several points of interests to be discussed in this section, primarily how the imagery and content of official logos have evolved over time, and how common trends can be observed across organizations in logo evolution, as well as distinct shifts that can be seen in the intent, values, imagery, and color use in promotional material produced by the Environmental Center.

Logos

Of the graphics used by organizations and corporations, the most prominent and significant image is the official logo. A logo not only serves as a sort of representative public face, but is integral to building and maintaining recognition, loyalty, and support. Having a strong logo is key to branding and corporate identity, but what a logo actually looks like and the form it takes is less important than the meaning it holds. A logo's purpose is to act as a pointing device, but "only after it becomes familiar does a logo function as intended; and only when the product or service has been judged effective or ineffective, suitable or unsuitable, does it become truly representative" (Rand). In other words, the relationship between an organization and its logo is reciprocal; one adds or detracts from the value of the other and vice versa. Having a well designed logo only adds to the value of an organization, and is one of the primary reasons logos are changed to reflect the times.

Discussing logos that are not widely known, especially ones which have been retired from use or replaced, is of little value without visual references. Consequently, the evolution of each organization's logo will be briefly categorized chronologically with

images, and then a comparison of components across organizations will be represented graphically to illustrate correlations and differences.

A Closer Look

Fauna & Flora International

FFI is an organization that champions conservation and sustainability for the good of humanity. Their mission



1950



1994



Image 3.1 (Nicholls)

statement is: “To act to conserve threatened species and ecosystems worldwide, choosing solutions that are sustainable, based on sound science and take into account human needs” (FFI). Conserving biodiversity and maintaining a global community are primary goals and the logo features an oryx, which FFI played a key role in saving from extinction in the early 1960s, and represents a triumph in conservation in the group’s early history.

Friends of the Earth

Friends of the Earth, founded by a former director of the Sierra Club, is an organization dedicated to



1961



1990s



2001

Image 3.2 (Nicholls)

the principles of sustainability, connectivity, and systemic change. Using advocacy campaigns and media to change public perception and policy, the group “defends the environment and champions a healthy and just world” (FOE). Their logo evolution lacks the congruity seen in many other groups, and this may be a reflection of the changing focus of issues they advocate for.

Forest Stewardship Council

The FSC was a late comer to the list, founded in 1993 with a mission “to promote environmentally sound, socially beneficial and economically prosperous management of the world’s forests,” and an overarching vision to “meet



Image 3.3 (FSC)

our current needs for forest products without compromising the health of the world’s forests for future generations” (FSC). The Forest Stewardship Council has only had one officially endorsed, legally registered logo, but “in the early days FSC used a picture of some trees together with the letters FSC, but this was considered not snappy enough” (Karmann). The early unofficial logo would have been the standard look of an environmental group in the 60s or 70s, but for an organization founded in the 90s, a simplified corporate logo was practically mandatory. The FSC logo likely did not undergo the same type of evolution as other groups due to the organizations late founding date.

The Nature Conservancy

TNC was founded in 1951 and works around the world to “protect ecologically important



1960



1987



2007

Image 3.4 (Nicholls)

lands and waters for nature and people” (TNC). Their logo has a clear progression from small scale, local and personal with the single leaf to large scale global with multiple leaves wrapped around a globe. The white oak is the central, consistent design element and gives a sense of continuity through the transition.

Sierra Club



*not official seal, but used intermittently between 85' and 93'

Image 3.5 (Sierra Club)

The oldest of the environmental organizations, the Sierra Club was founded in 1892 by John Muir, and has existed half to a full century longer than most environmental groups.

The Sierra Club has been integral in the formation of national parks and conserving nature from the very beginning; their mission statement is:

*“To explore, enjoy, and protect the wild places of the earth;
To practice and promote the responsible use of the earth's ecosystems and resources;
To educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives.”*

(Sierra Club)

The logo, or seal has gone through nine iterations, but the content and elements have changed very little since the 1894 Willis Polk, design of the “Sequoiadendron gigantea in the foreground, with Yosemite's Half Dome behind it, and larger mountains in the distance” (Sierra Club). The style and arrangement of the elements have shifted slightly over the years, but the long successful heritage and widespread public recognition of the organization has likely influenced the consistent look of the seal over the past 120 years.

World Wildlife Fund

WWF, not to be confused with the World Wrestling Federation, has a mission to “conserve nature and reduce the most pressing threats to

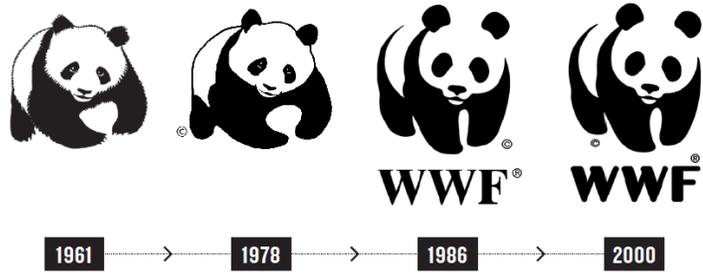


Image 3.6 (Nicholls)

the diversity of life on Earth,” and a vision to “build a future in which people live in harmony with nature” (WWF). The famous Giant Panda logo came into being partly due to a small budget, “with colour printing then out of the question for a fledgling charity, this narrowed the options to a shortlist of black-and-white species, and the popular panda emerged” (Nicholls). This is one explanation, but the London Zoo, the city in which the founders were deciding on a logo in 1961, long maintained a panda exhibit.

University of Colorado Environmental Center

The University of Colorado Boulder Environmental Center has had five logos, designed by staff and students, used on letterhead and a wide array of posters, pamphlets, and fliers since 1970. Unfortunately, the current official logo has to meet requirements that align with the campus branding standards and no longer reflects the design aesthetic of the center



1970s The first logo to be used on letterhead and printed material appeared in the 1970s and consists of a simple bird silhouette which is infrequently accompanied by the hand-drawn block lettering shown. From a design standpoint, the simple contrast of the cutout on in a black oval meets many of the criteria that Paul Rand considers

to be good logo design, but for a small unknown student group, there is no way for a viewer to identify who this logo belongs to, what the symbol is supposed to mean, or any clue as to the purpose of the organization.



Early 80s Nineteen eighty was the year the first full time non-student director was hired, and this

more detailed bird in flight came to be used as a sort of logo and graphic element combination that sometimes acted as part of a border element and sometimes stood alone. This logo brings in landscape imagery along with the continued use of the bird element and gives a viewer more visual cues to the mission of the Environmental Center and has a contact number. However, it is difficult to interpret the landscape elements and the fish in the birds grasp even when printed full size.



Mid 80s - 1993 The third iteration of the Environmental center logo still utilizes a bird as the primary graphic element, this time a bald eagle,

which is a widely recognizable and known endangered species, with a landscape element as a back drop. The lettering is hand drawn block letters that for the first time identify the Center as being associated with the university. If the lettering had been more carefully constructed, this logo would have a professional and well designed appearance that communicated identity as well as a sense of organizational purpose.



1993-2008: It is also interesting to note that the Intermediate Processing Facility (IPF) for recycling operations was built on campus in 1992 and UCSU received the first of many EPA awards. The focus in

the 1990s became less about changing the world abroad and more about focusing on real action and change that could take place closer to home. The tree symbol has the connotation of roots and semi permanence that seems more grounded and relatable than the ethereal quality of an endangered bird. The type is a commercial, serif typeface instead of hand drawn or script-like fonts used in the past, and lends this logo a more professional appearance. Generally, it is very clean and balanced, but it lacks the information to associate the Center with the University of Colorado Boulder.



2008-2011 The leaf and water drop logo was the first time color and symbolism of humans was added to the logo. The leaf and water droplet form

an abstract footprint which simultaneously recognizes the awareness of human impacts on the environment, carbon footprint, and the importance of maintaining a healthy environment for the sake of humanity. The the typeface is a more modern san-serif, and the contrast and balance is clean and professional. Reluctantly, this logo was phased out as new policy implemented in 2011 required strict adherence to the format outlined in the new campus branding guidelines.

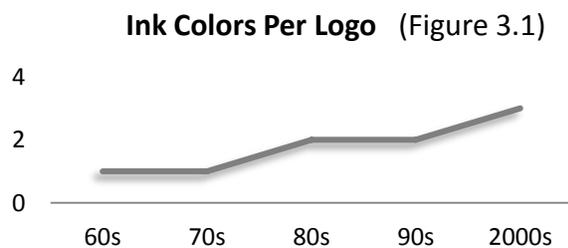


2011-Present There is little commentary on the current logo since it is not an Environmental

Center design. It is, unfortunately, the cost of being associated with a large university, that campus policies override the unique identity of the smaller organizations within it. Helvetica Neue is a great universal font and the layout is very corporate and professional in appearance, but logo now looks like that of every other department or official group on campus, and that makes it much less distinctive and memorable.

Summary and Graphs

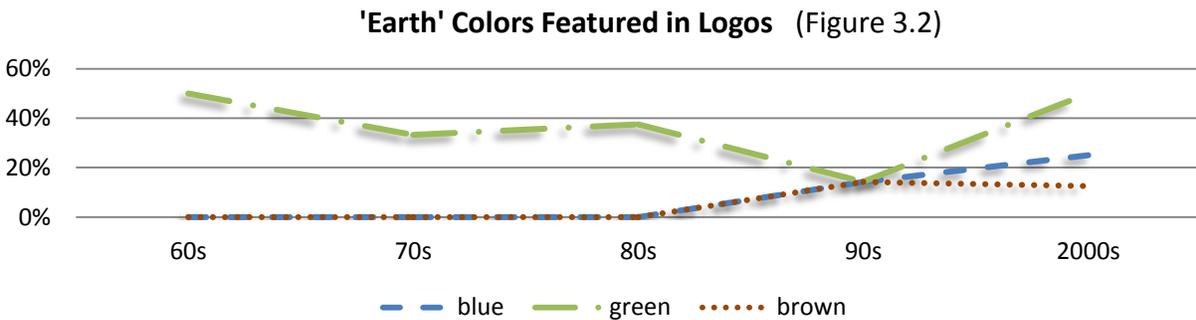
A graphical representation of the collected data reveals some interesting trends in the use of color, typeface, imagery, and symbols used. As organizations grew and developed, and technology for print and design became more widely available over the decades, increased funding and advances in technology likely affected the logo designs. It is not surprising to see that the number of colors used per logo steadily increases, an increase in the use of sans serif typeface, and the type of symbols or pictograms used. An additional trend is in the imagery utilized. Specifically, there decline of animal imagery and the increase in both global imagery and graphic elements; however, this trend is more likely to be linked to societal inputs rather than technological ones.



The average number of colors used per logo in the 1960s and 70s was just one, as can be seen in Figure 3.1, and that one color was primarily black or green. Black ink was the obvious choice when color

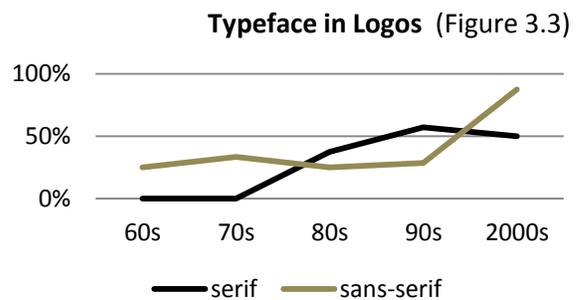
printing with multiple colors out of the budget of most organizations early on, and allowed for logo to translate well on photocopies made for mass distribution. Green seems a logical color choice for organizations concerned with conservation of natural resources, if a color other than black is used. It is somewhat surprising that the use of green did not continue to increase as the environmental movement progressed, and even though groups like the WWF continued to use only black, the data overall is consistent with the increase color printing availability throughout the decade of the 90s.

Figure 3.2 illustrates this trend and the chart percentages represent the percent of logos in use during the given decade that contained, specifically, the colors blue, green and brown.



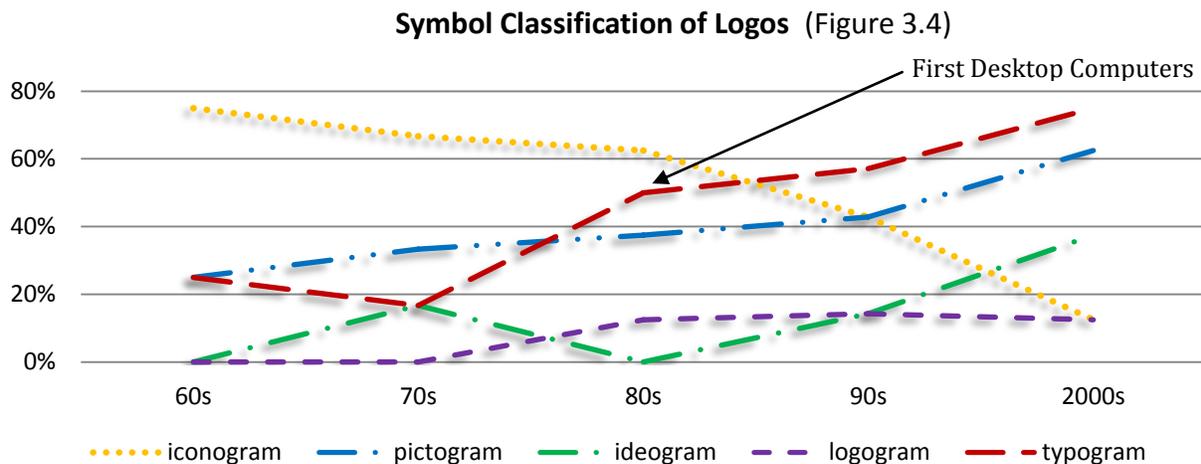
The five organizations represented in this analysis are: Fauna & Flora International, Friends of the Earth, The Nature Conservancy, World Wildlife Fund, and the Environmental Center. Because the Sierra Club was founded over a half century before the other groups, and the Forest Stewardship Council at least three decades later, they skew the data in such a way that makes it difficult to interpret, so they were not included in the data analysis results.

Another trend that became apparent with the modernization of the environmental movement, and the organizations that moved it forward, was the transition for older classical, embellished font styles to the no-nonsense, universal font faces. This was the trend in corporate advertizing in the mid 60s as professional consultation from advertizing design companies became the norm. The hand lettering and script fonts were tossed out with the cheesy cartoons and overly posed photographs. The environmental movement looks to have mirrored this trend, but lagged



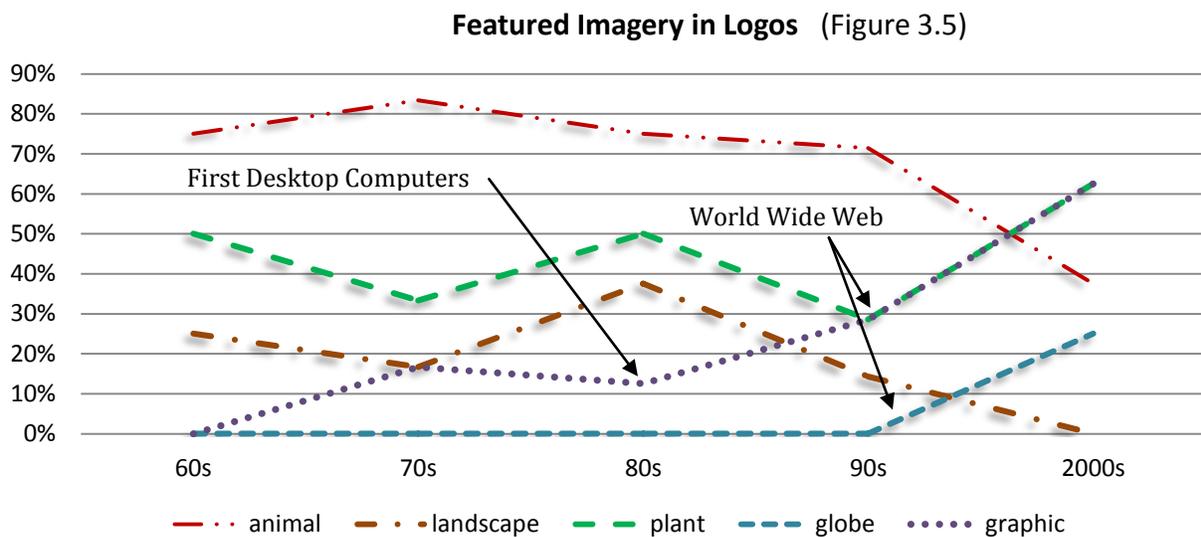
a few decades behind as much of what the organizations stood for put them in direct opposition to the corporate machine.

Nevertheless, as the extremist activism of the 60's and 70's began to mellow, the economic and political advantage of being taken seriously became apparent and the need for modern, professional logos on par with corporate America began to appear. The 'iconograms' of sketched animals, landscapes, and trees were first traded in for more modern streamlined pictograms with similar imagery and often accompanying lettering of a 'typogram.' The evolution continued as more abstracted referential 'ideograms' paired with 'typograms' to identify the group became more prevalent and the use of 'iconograms' continued to decline (Figure 3.4).



This trend of grassroots to corporate presence is further supported in the use of imagery, both realistic and representational, that is featured in logos during the forty-year evolution, and also has some interesting ties to the socioeconomic and political influences of the time. Figure 3.5 illustrates a possible shift in organization's priorities. Animal imagery slowly declined till the 90s, when it took a sharp drop, as floral, global, and graphic

elements show a similarly angular increase in the percentage of logos in which they appear. It is somewhat surprising that early logos did not contain more global imagery with Earth Day as a focusing event for the environmental movement, starting in 1970 and gaining momentum and support ever since, and the first images taken from space propagating the media of the time. However, the scrappy activists and students who founded these organizations may have consciously chosen to use images that represented their initial narrow mission and purpose to keep the feeling of the group small, local, and communal.



There is much that can be inferred from the reoccurring trends uncovered by the analysis of environmental organizational logos, but there are always exceptions. The Sierra Club, for example has maintained a logo which has evolved from a drawing, or ‘iconogram’ of the famous giant sequoia tree with Yellowstone landmarks in the background, surrounded by an ovular shape representing the trunk, and associated rings to a ‘pictogram’ of the same elements.

Promotional Print Material

Analysis of nearly two hundred ads, pamphlets, posters, and flyers produced and distributed by the University of Colorado Boulder Environmental Center from 1970-2010 also show changes over time. Throughout all of the Environmental Center's history, however, one thematic trend appears with great frequency throughout promotional media, and while it may not be relevant to a broader discussion on the progression of graphic design, it definitively places the data on a university campus. Free Food!



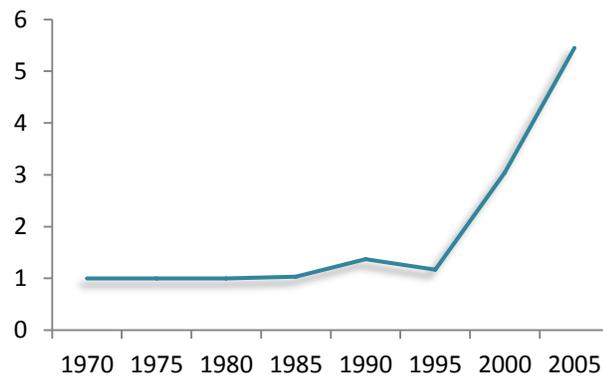
Free Pizza was the most consistent theme across the whole timeframe studied, and while entertaining, is not necessary significant or important in this study. As discussed in the methods section, the promotional print material produced by the Environmental Center was evaluated and classified on several elements: year produced, use of color, font face, types of imagery, inherent value systems, and advertizing intent.

Summary and Graphs

As with the logos, a graphical representation of the collected data from promotional material reveals trends in color usage and imagery, but unlike the logos, there are also trends in values and intent. Similar to the previous analysis, use of colors increased, and the fluctuation in the presences of certain imagery has possible ties to the social, economic, and political climate of the time.

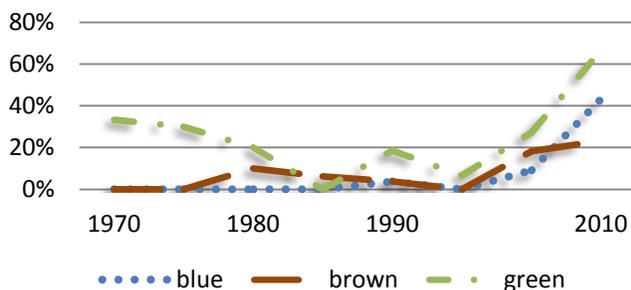
The number of ink colors used per ad is measured as an average number of colors for the material produced in the given time frame. Figure 3.6 illustrates the exponential increase in the number of colors used starting in the mid 90s. The decade of personal computing and digital printing,

Ink Colors Used Per Ad (Figure 3.6)



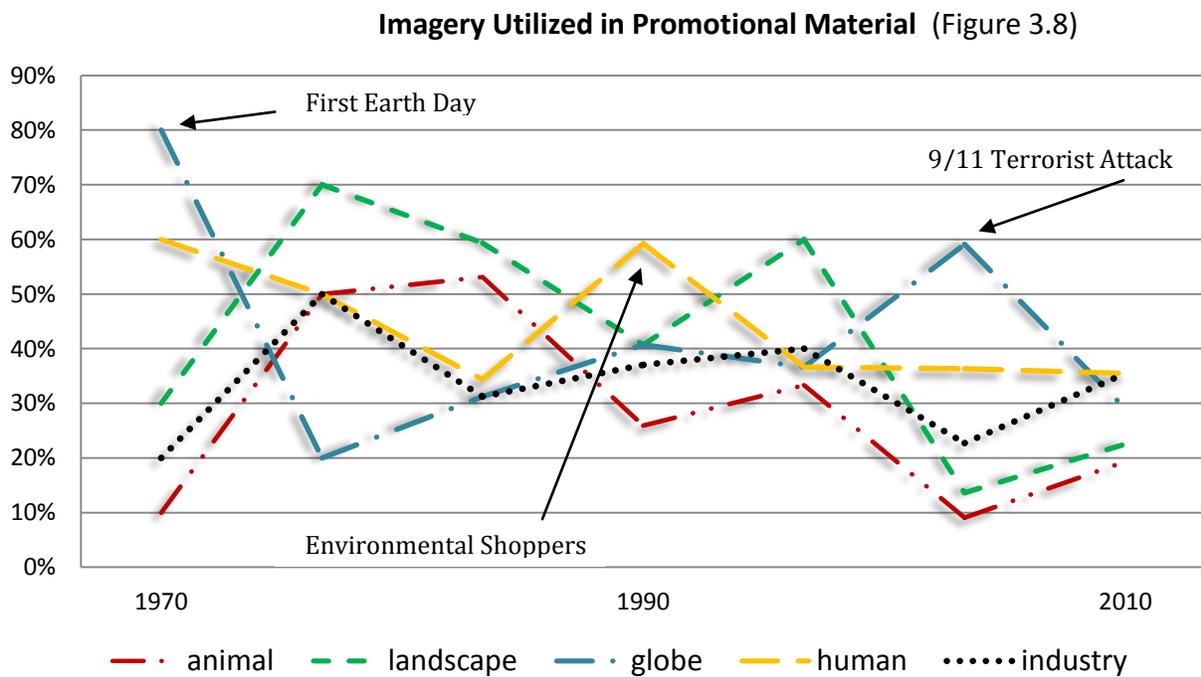
it is not surprising to see this change. The frequency of 'earth' colors used in promotional material corroborates this trend, as seen in Figure 3.7. Green was used frequently early on, and much of the initial Earth Day print material used only green ink. Green dropped off as

'Earth' Colors in Promotional Material
(Figure 3.7)



the sole ink color through the 80s and 90s, though it was still used, and then overall color use grew exponentially. It was also during the 90's that blue becomes more popular as a color choice.

The next topic of analysis for promotional media is imagery use. The categories include animals and or representations of animals, landscape including plants, trees, and geological elements like rocks or mountains, global imagery, human references as parts or whole bodies, and industry which includes things like buildings, machinery, and objects or structures related to industrial for profit activities. Figure 3.8 tracks the percentage of ads, posters, and pamphlets during each time frame that contained each type of image. Many featured more than one, but it is of interest to see how the use of each fluctuated over time.



In addition to the categories of imagery on this graph, another trend became apparent in material produced in the decade of the 1990s. Of the pieces that have a definitive economic theme, two thirds of them were created in the 90s. Investment and shopping were promoted as part of the solution for saving the earth in this decade as the need to ease the public's growing concern resulted in solutions that were based on perception rather than substance.

ECO-SHOPPER

SHOPPING FOR THE 90's
(AND BEYOND!)

Celebrate Earth Week 1990 by purchasing and obtaining information on products that don't harm animals or the environment

WEDNESDAY APRIL 18th
10:00am to 6:00pm

THURSDAY APRIL 19th
10:00am to 3:30pm

Featuring the vegetarian cookbook "Eat Beans, Not Beings"

Animal Rights Group

Glenn Miller Ballroom, UMC

Checks and cash accepted

CU ENVIRONMENTAL CENTER

Where is Your Investment Going?

- Sweatshops?
- Human Rights Abuses?
- Rainforest Destruction?
- Cigarette Sales?

Campus Earth Summit Panels on Investment
Tuesday, April 21

10:30-11:45
UMC 157
Shell, Philip Morris and CU: Strange Bedfellows
Which corporations are CU and its retirement funds investing in and how are they impacting our world?

12:00-1:30
UMC 157
What Kind of World Are We Saving For?
Panel discussion on the state of investing practices at CU and its retirement funds—with socially responsible investment professionals and fund administrators.

2:45-4:15
UMC 157
Pulling It All Together
A panel discussion on improving CU's investing practices.

12-1:30 and 2:45-4:15 sessions moderated by Patricia A. von Lintow

What Control Do YOU Have?

Campus Earth Summit
University Memorial Center, April 20 & 21, 1998
(303) 492-8308

ENVIRO-ECONOMICS
"THE SIX TRILLION DOLLAR QUESTION"

International Policy, Business Practices, the Earth and You

CONFERENCE TOPICS:
Environmental Racism
Sustainable Development
Environmental Careers
Greenwashing
Student Activism
Economics as if the Earth really mattered
The effects of the corporate economy on biological and cultural diversity

CONFERENCE SPEAKERS:
Susan Meeker Lowry - Catalyst
Dana Alston - Panos Institute
Senator Tim Wirth
Jane McAlevey - The Highlander Center
Herbert Gunther - The Public Media Center
... and many others!

FEBRUARY 14 & 15
UMC GLENN MILLER BALLROOM

CU Students FREE non-students \$20 registration fee
Sponsored by UCSU Environment Center

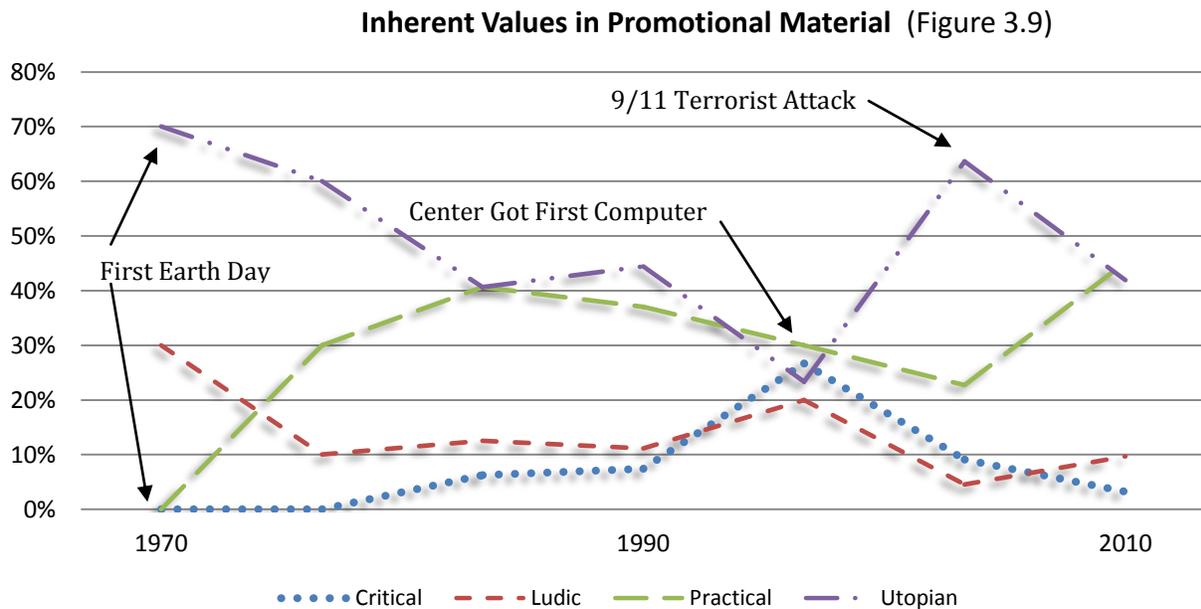
For more info contact: CU Environmental Center, UMC 331-A 492-8308

The WORLD BANK and the Environment

Drawing: Lewis Brink

(These examples showcase how the social, political, and economic situation of the time.)

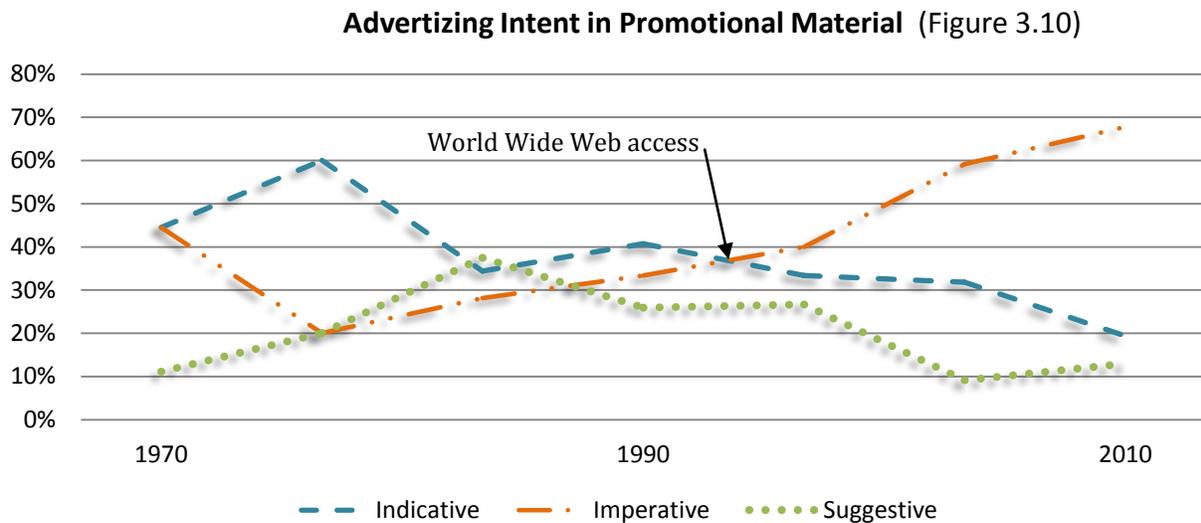
Values in advertizing are difficult to define and discuss, so for this case study, they are broken down in to four very broad categories Practical (utilitarian), Ludic (non-utilitarian), Utopian (existential), and Critical (non-existential). The strongest convergence of opposite values occurs in the late 90s when Utopian values declined and Critical values increased. Utopian values had a strong presence early on, with a steady decline, and then a sharp increase again in the early 2000s. With the tragic events occurring in September of 2001, it is not much of a stretch to say that people in the U.S. needed something bigger than themselves to believe in.



It is not surprising to see the dramatic increase in Utopian themes in the content produced between 2000 and 2004. Figure 3.9 shows the trending values to which the promotional material either appealed to or valorized in the statements made. In addition to the spiritual higher powers, Utopian values also include the power of human cooperation and the community effort as the thing that is bigger than the individual and sometimes it is

necessary to do something for the sake of the whole rather than for your own maximum pleasure (Ludic).

The final piece of the analysis consists of categorizing the intent of the produced promotional material. Is the intended purpose to inform viewers (indicative), to get them to act in some way (imperative), or an appeal to the viewer’s emotions or sense of morality (suggestive)? Figure 3.10 illustrates the trend early in the timeframe studied to inform viewers about all of the environmental problems and challenges that face humanity. Over time, this trend steadily decreased and simultaneously the use of imperative statements saw a marked increase.



There are several things that can be inferred from the data collected from the promotional material produced by the Environmental Center over the 40 year time period. Firstly, the increase in the use of colored ink implies that at some point in the 90’s the center either got a color printer, or an increase in the printing budget. Secondly, the print media produced was affected by the world events outside of campus. Finally, as the

campus-wide environmental movement progressed and became part of campus policy, it is possible that the goal of promotional material was less about informing people of the problems, because most were already aware, to getting them to act on the information. For example: “this is how to recycle” vs. “we need to CU recycling.”

Chapter 4: Discussion

The findings show evidence that content of logo design and promotional print media did, in fact, change over the span of years studied and those changes were likely influenced by technological advancements as well as social, political, and economic factors associated with each decade. There is a notable correlation between the trends seen in the graphical representation of the data and key dates that can reasonably be connected to the changes.

Change Over Time

Based on the data collected, there were several elements that seem to show more significant and definitive directional changes during the timeframe studied, and they include:

- A fairly consistent evolutionary progression of logo designs
- An increase in the number of colors used in both logos and promotional material
- A decline in the use of animal imagery in both logos and promotional material
- A higher percentage of globe imagery in later logo designs as well as in promotional material in the 70s and early 2000s
- A decrease in indicative and an increase in suggestive advertising intent

Logos across the organizations generally began as hand drawn or “homespun” looking images that are typical of grassroots movements without a lot of funding. The logos evolved as the organizations grew and missions changed, some maintaining elements from the original, and others scraping the design completely. Eventually, most followed the corporate trend and ended up with graphic logos that were produced using digital technology with clean lines and clear simple fonts. Use of multiple colors increased in both

logo designs and promotional material. This is likely the element that was most impacted by advances in technology as color printers became available and more affordable and computer based design programs became the norm.

The presence of animal imagery in both logos and promotional material, on the other hand, saw a marked decline. Four out of five of the initial logos featured animals where only two out of five of the current ones do. While the decline of animal imagery use in promotional material was not as extreme as with the logos, it is a general theme that is visible in both sets of analysis. Global imagery was more prevalent in both early and late promotional material, but only saw an increase in the later logo designs. “The image of Earth as a giant space cabin sailing through space with human astronauts on board came to dominate the ecological debates in the late 1960s and 1970s” (Anker). The appearance of global imagery in the 70s Earth Day event is expected.

Earth Day, Spaceship Earth, the World Wide Web, and the Global War on Terror

Spaceship Earth became a key term in the ecological conversation after it was utilized in connection with the first Earth Day in 1970 and concerned environmentalists who used it to address the desperate need of global leadership in addressing ecological issues. “Spaceship Earth signaled a new commitment to ‘globalism,’ which unlike ‘internationalism,’ sought to analyze the world in terms of ‘the degradation of the environment, the destruction of ecological balances, the limited capacity of the biosphere, the possible depletion of natural resources, the population explosion, the finiteness of the planet, and perhaps even the finiteness of knowledge” (Anker). The initial use of global imagery in the 1970s was likely strongly influenced by the scientific and technological

advancements that allowed images of the entire Earth to be taken from an extra terrestrial perspective. “In the last week of 1968 Apollo 8 sent photographs of Earth and seen from space,” forcing the realization that humans are dependent on the ecological stability of the “space cabin” in a way that had not been visualized before. “This realization was a crushing blow to anthropocentrism, since the astronaut,” humanity, “could not survive if the ship did not sustain its own ecological balance” (Anker).

The advent of the World Wide Web changed life as we know it in many ways and connected humanity in a way that it had never experienced before. Nearly all of the knowledge that mankind has ever recorded is accessible to anyone living today with just the click of a mouse and a few keystrokes. International business, online profile identities, and a multitude of programs have simultaneously had a connecting and isolating effect. While people now have access to order anything they could possibly need or want from Amazon.com, and have the capability to converse with every other human being on the planet with access to a computer, this also means that one could go through life without any real human contact. It is a strange dichotomy indeed. The new global connection of people organization and businesses likely influenced the widespread transition to global imagery in logo design. The advertising intent of ads showed strong directional trends as well. With the increased awareness and public support of environmental issues, it is likely that the emphasis of the movement was no longer to inform (indicative) and the priority shifted to getting people to act on the information (imperative).

A global war on terror sounds like it would be more of a crusade against a treacherous foe than a directed invasion of two specific countries, but in the U.S. it likely had a significant impact on the values people prioritized for a time. A tragedy of the

magnitude of 9/11 shakes people to their core and causes them to reevaluate what is important in life. People reached out to their families, communities, churches, and anything that gave them a sense of strength in the midst of a situation that made them feel helpless and vulnerable. Buildings in the U.S. have fallen due to terrorist attacks in the past, but never at this scale, or as an attack by another nation. The need to rely on something bigger than oneself may have been a factor in the increased occurrence of the existential Utopian value set during the years spanning the tragic event.

Project Analysis and Suggestions

This project was quite an interesting undertaking, since there is very little literature on this specific topic, and was a great way for me to explore the intersection of my major, Environmental Studies, and my minor, Technology, Arts, and Media, as well as using the resources available to me through my employment as a graphic designer for the Environmental Center. The findings in this paper are not a direct reflection of the philosophy or opinions of Environmental Center staff member, past or present, but my own observations as a viewer of the material for the first time. I chose to limit my study from 1970 to 2010 in order that I would only be analyzing data that I had not seen before to be as objective as possible.

Further analysis of this topic is necessary to draw any definitive conclusions about the best approach for designers of promotional material to take in the future. It would require much more time to coordinate the gathering of archival material from multiple environmental organizations, as well as employing the assistance of multiple viewers to

analyze the data for a more objective set of results. Enlisting the assistance of a statistically significant number of alternate observers, 30 or more, to corroborate or possibly oppose my findings would have been ideal, but was not feasible given the time constraints and likely necessity to compensate individuals for participating. Researching the history of designs produced by the students and staff who created promotional material and logos in the past, and how the values and intent change over time, as well as how the use of certain types of imagery ties to social and political events, was intriguing and informative.

In the process of completing this project, I gained a much greater sense of: my place in the history of the organization that I work for, the role they have played in campus environmental policy, and social impact that students have contributed to the Center. An organization that has a high turn-over of young, passionate students has a great capacity to grow and change with the times, perhaps more so than a large legacy organization like the Sierra Club. When the Environmental Center was part of the amazingly successful initial Earth Day Teach-In, the Sierra Club was surprised that there was so much public support. College and university campus have a history of incubating and being the center of social causes, and the environmental movement is certainly one of them.

It is not clear what path the environmental movement will take in the future. “Lately, we have seen backlash against the proliferation of environmental regulations that have intruded into almost every aspect of our lives...but there is also increased apathy toward environmental issues, as economic concerns and the perception that we have done enough to protect nature weaken the fervor that once invigorated the environmental

movement” (Kline). Based on historical patterns, as long as economies struggle, wars are waged in the world, development and growth are considered absolute necessities, and inequality and injustice are present, it seems that solving environmental problems will never be a priority for humanity.

Whatever changes come with the future for the environmental movement, the use of logo graphics and symbolic imagery will undoubtedly continue. Logos and graphic imagery are powerful identifying tools that can evoke support or repulsion due to the actions of the organization they are associated with. Designers like Paul Rand developed the symbols to point attention toward the organization they represent, but in the end, the reputation of the organization is what determines the meaning of the logo. “As graphic artists and designers, we possess the power (just as any two year-old with a crayon does) to ascribe meaning to the world around us” (Redding). Perhaps what the world needs is not, in fact, more government regulation, but better graphic designers.

Bibliography

- Abdullah, Ryan. *Pictograms, Icons, and Signs*. New York: Thames & Hudson, 2006.
- Anker, Peder. *From Bauhaus to Ecohouse: A History of Ecological Design*. Baton Rouge: Louisiana State University Press, 2010.
- Atticks, Kevin M. "Media Effect on the Recyclign Movement." Univeristy of Colorado Boulder School of Journalism and Mass Communication, 1998.
- Booker, Christopher, North, Richard. *Scared to Death*. London, New York: Continuum, 2007.
- Bryant, Jennings, Zillmann, Dolf. *Media Effects: Advances in Theory and Research*. New Jersey: Lawrence Erlbaum Associates, Inc., Publishers, 2002.
- Cramsie, Patrick. *The Story of Graphic Design*. New York: Abrams, 2010.
- Dahl, Richard. "Green Washing: Do you know what you're buying?" *Environmental Health Perspectives* June 2010: 247-252.
- DeLong, Marilyn, Martinson, Barbara. *Color and Design*. London, New York: Berg, 2012.
- E-Center. *About Us*. February 2014. <<http://www.colorado.edu/ecenter/about>>.
- Environmental Center. "A Piece of History." 1970s-2000s.
- . "Scrap Books." 1970-2010.
- Environmental, Committee on Incorporating Sustainability in the U.S. *Sustainability and the U.S. EPA* . Washington DC: The National Academies Press, 2011.
- Exhibits. *Timeline of Computer History*. n.d.
<http://www.computerhistory.org/timeline/?category=cmptr>. 2014.
- FFI. *About*. 2014. <<http://www.fauna-flora.org/about/>>.
- Floch, Jean-Marie. *Semiotics, Marketing, and Communication: Beneath the Signs, the Strategies*. Houndsmill: Palgrave, 2001.
- FOE. *What We Stand FOr*. 2014. <<http://www.foe.org/about-us/what-we-stand-for>>.
- FSC. *Mission and Vision: Protecting forests for future generations*. n.d.
<https://us.fsc.org/mission-and-vision.187.htm>. 2014.
- Holt, Diane. *Media Coverage of Sustainable Development Issues*. Belfast, UK, 24 March 2010.

- Kalish, Jennifer. "Chasing the Symbol of a Movement." *Waste & Recycling News*. (2013): Volume 19:15.
- Karmann, Marion. 20 February 2014.
- Kemp, Martin. "Inventing an icon." *Nature* 437 (2005): 1238.
- Khanna, Sanjay. "Conveying the campaign message." *Nature* (2009): 1058-1059.
- King, Leslie, McCarthy, Deborah. *Environmental Sociology From Analysis to Action*. Lanham, Boulder, New York, Toronto, Oxford: Rowman & Littlefield Publishers, INC., 2005.
- Kline, Benjamin. *First Along the River: A Brief History of the U.S. Environmental Movement Fourth Edition*. Lanham: Rowman & Littlefield Publishers, INC., 2011.
- Leopold, Aldo. *A Sand County Almanac and Sketches Here and There*. New York: Oxford University Press, 1949.
- Lorbiecki, Marybeth. *Aldo Leopold: A Fierce Green Fire*. Billings: Falcon Publishing Co., Inc., 1996.
- Lunenfeld, Peter. *The Digital Dialectic : New Essays on New Media*. Cambridge, London: The MIT Press, 1999.
- Mitchell, Robert. "Twenty Years of Environmental Mobilization: Trends Among National Environmental Organizations." *Society and Natural Resources: An International Journal* (1991): 219-234.
- Muir, John. *The Yosemite*. New York: Century, 1912.
- Nash, Roderick. *The American Environment: Readings in the History of Conservation*. London: Addison-Wesley, 1968.
- Nicholls, Henry. "The art of conservation." *Nature* 21 April 2011: 287-289.
- PC Timeline. http://gabrieledg.co.uk/gdgblog/?page_id=337.
- Pinchot, Gifford. *The Fight for Conservation*. New York: Harcourt, Brace, 1910.
- Print Country. "Printing History Timeline." n.d. <http://www.printcountry.com/infographics/printing-history-timeline.html>. 2014.
- Rand, Paul. "Logos, Flags, and Escutcheons." 1991. *Paul-Rand*. <http://www.paul-rand.com/foundation/thoughts_logosflags/#.Uve-R_ldWkF>.
- Recycle Logo. 2014. <<http://www.famouslogos.net/recycle-logo/>>.

- Redding, Dan. "The Evolution of the Logo." 6 July 2010. *Smashing Magazine*.
<<http://www.smashingmagazine.com/2010/07/06/the-evolution-of-the-logo/>>.
- Rome, Adam. *The Genius of Earth Day: How a 1970 Teach-In Unexpectedly Made the First Green Generation*. New York: Hill and Wang, 2013.
- Shabecoff, Philip. *A Firece Green Fire: The American Environmental Movement*. Washington D.C.: Island Press, 2003.
- Sierra Club. *History: The Sierra Club Seal*. n.d. February 2014.
<<http://www.sierraclub.org/history/logo.aspx>>.
- Sterner, Thomas. *The Market and the Environment*. Cheltenham: Edward Elgar Publishign Limited, 1999.
- TNC. *About Us*. 2013. <<http://www.nature.org/about-us/>>.
- Universty of Colorado Boulder. "CU-Boulder to Honor 40th Anniversary of CU Environmental Center." 09 April 2010. *New Releases*.
<<http://www.colorado.edu/news/releases/2010/04/09/cu-boulder-honor-40th-anniversary-cu-environmental-center>>.
- WWF. *About Us*. 2014. <<http://worldwildlife.org/about>>.