

Chapter 1: Introduction

Most people and, in fact, many librarians consider "public libraries" as organizations which are tax supported, open to all, and administered by local governments. In reality, though, an evaluation of the history of American public libraries reveals something else. Today's public libraries actually developed naturally from their earlier predecessors, the social libraries.

In order to provide access to materials in the 18th century, groups of like-minded people pooled their financial resources and shared their book collections to establish local lending libraries. These first libraries were usually considered to be elitist because they required members to join and pay annual fees. Beginning with the establishment of the Library Company of Philadelphia in 1731, a successful precedent was set. Libraries were growing organisms and they required reliable sources of funding. In these earliest examples though, the funding came directly from the beneficiaries and users of the collections. Groups of educated people with specialized interests and concerns were able to pool their resources together and share access to books and information. As their interests became more specialized and more diverse, new types of libraries were established in order to address their particular concerns. But whether it was a social, proprietary, mercantile or specialized library, the funds for its upkeep came directly from its users.

This changed in the early part of the 19th century when municipal taxes were first used to finance public libraries. Even in these instances, though, the greatest libraries discovered that they were best served by relying on funding from a variety of sources.

At the Boston Public Library, for example, public money was paired with the generosity of a few philanthropists who contributed books and money to build their great library. Ultimately, social libraries were replaced by tax-supported public libraries due to a number of causes including economic development, growth of scholarship and a local sense of community and community pride.

Later libraries began relying on public funding because of the generous donations of a few great philanthropists including Enoch Pratt in Baltimore and Andrew Carnegie. Both of these rich men offered to build neighborhood libraries with the stipulation that the community had to subsidize their libraries with an annual amount-- a percentage of the cost of the library building-- for its maintenance and upkeep. This became known as the Carnegie Formula and it established an important precedent. Occasionally, as in the case of Pittsburgh, Pennsylvania, the Carnegie Formula forced states to change their laws in order to provide continued financial support for their libraries.

When Carnegie began his retail and wholesale periods of library philanthropy, he ensured that public libraries would survive long after he had provided the money to construct the buildings. This paper looks at library philanthropy by focusing on the legacy of the Carnegie libraries because, at a very critical time, Carnegie helped to provide access to information, books and journals by providing construction funds for more than 1,650 libraries throughout the country.

Nearly one hundred years later, America was facing a new dilemma. In the mid-1990s, politicians, journalists, pundits and educators began to speak of the "Digital Divide" which threatened to increase the gap between rich and poor. Because computers were expensive and required to access the information superhighway, private-sector market forces were focusing their research and development efforts to find solutions for the rich, not the poor. Politicians began to look at public libraries as

vital tools for bridging the digital divide and making a difference in ensuring equal access for all users regardless of their economic standing.

At around this same time, Bill Gates, the co-founder of Microsoft, created the U.S. Library Foundation and the Gates Library Initiative, two charitable foundations dedicated to providing public libraries with the tools needed to provide users with easy access to the Internet. According to the *Library Journal*, the Gates Foundation gave the largest gift to U.S. public libraries since that of Andrew Carnegie and the results have been remarkable. Since 1997, the U.S. Library Program of the Bill & Melinda Gates Foundation has committed \$250 million to increase access to technology by funding 47,000 computers in almost 11,000 public libraries in all 50 states, the District of Columbia and territories. While only 28% of libraries provided public access to the Internet in 1996, today the figure is closer to 99%, largely due to the generosity of the Foundation. More significantly, according to the Gates Foundation, patron numbers increased by nearly 25 percent in 2000 and 2002, with many new users of library services depending on libraries for fast and reliable access to the Internet. (Gordon, Gordon, Moore, & Heuertz, 2003).

The Gates Foundation's "public access computer packages" offer public libraries computer hardware and software combined with staff training, technical support and technical documentation. Specifically, though, the "packages" bundle personal computer (PCs) running Windows and various Microsoft software applications and programs including Office and, most importantly, Internet Explorer.

As a direct consequence, the public now strongly believes that libraries and their public access computers are important community resources. What many people do not understand though, is that Microsoft is simply licensing the use of their programs to the libraries. In fact, according to their restrictive End-User License Agreements, the libraries' public access computers are running Microsoft's proprietary software only after they agree that they do not own the programs and that Microsoft is not responsible for any malfunctions. As Microsoft phases out and stops supporting older versions of its software, public libraries will continue to run the outdated programs-- without the possibility of affording the newer software. By "giving away" the software, the Gates Foundation is creating a new customer base and, through vendor lock-in, they are securing their monopoly of PCs in public libraries. Further, by not providing libraries with solutions or a vision for the long-term accessibility of records and documents created on their software, they are putting our history at risk.

This paper is an analysis that compares Carnegie's scientific philanthropy and the long-term effects of his efforts with a new type of modern philanthropy that looks like a duplicitous marketing strategy in which Microsoft and Bill Gates, through his charitable foundation, provide libraries with PCs running Windows and other Microsoft compatible programs. Ultimately, his philanthropy is a marketing technique and a public relations tool that extends Microsoft's monopoly in public libraries while claiming to bridge the digital divide. In point of fact though, Microsoft is creating a new digital divide in which they will own today's records and those records and documents will most likely be inaccessible on tomorrow's open-source or future proprietary software applications.

Chapter 2 – Andrew Carnegie and “The Gospel of Wealth”

Most Americans in the eighteenth century had limited access to books. Books were rare and expensive and there were no public libraries. Only the wealthy elite and religious clergy had access to large quantities of books. Even men of moderate means could not easily afford many books.

On July 1, 1731, Benjamin Franklin and a group of members from a philosophical association called the Junto, drew up the "Articles of Agreement" to form the Library Company of Philadelphia. The Junto was interested in a wide range of ideas, from economics to social woes, politics, philosophy, and science but they owned too few books between them. They understood that working together and collectively combining their purchasing power, many books could be made available for all members to share.

Initially, fifty subscribers invested forty shillings each to start a circulating library and promised to invest 10 shillings more every year to sustain the library and to buy additional books to help maintain it. (Franklin, 82) They chose as their motto a Latin phrase, "*Communiter bona profunderere deum est*" which roughly translates as "To support the common good is divine." Although the collection consisted mainly of educational and religious books, Franklin and other investors donated a number of significant works including John Locke's *A Collection of Several Pieces, Logic: or, the Art of Thinking* by the Port Royalists Arnauld and Nicole and *Plutarch's Morals*. The books were housed in the librarian's lodgings. In 1776, nine members of the Library Company including Franklin as well as Benjamin Rush, George Clymer, Francis Hopkinson, Robert Morris, John Morton, James Wilson, Thomas McKean, and George Ross were signers of the Declaration of Independence.

In the absence of municipal and state funding, America's public libraries can trace their beginnings to the early part of the 18th century and the establishment of similar social libraries. Like the Library Company of Philadelphia, these voluntary associations consisted of individuals who contributed money to a common fund to purchase books for sharing. Depending on the community and its needs, book acquisition would proceed rapidly with large one-time purchases or slowly through the gradual accumulation of private investments and moderate annual members fees used to finance new purchases and to develop collections.

In his seminal book, *The Foundations of the Public Library*, Jesse Shera points out that there were two principal types of **social libraries: Proprietary and Subscription**. **Proprietary** libraries were established as corporations in order to assemble books for use by the proprietors. Based on joint-stock principles, these common law partnerships involved ownership of shares in the group's property and allowed non-proprietors to use the library by paying an annual fee. This system attracted wealthy patrons but, because voting power was directly related to the number of shares that a person owned, it was less democratic than today's free public libraries. These proprietary corporations allowed groups of private individuals to determine and execute the various duties of the library and assist with developing appropriate collections. As Shera points out "The social library was a corporation, not because of any inherent value in the corporate form as an instrument of book distribution, but because the other social agencies coexistent with the social library were organized in a similar manner." (60).

Due to the growing concern of workers with educating themselves on certain vocational subjects, libraries began to develop more specialized collections. This led to the establishment of special **subscription** libraries that were established as common-law limited-liability corporations. (71). Although annual fees were used to pay for library

services they did not pay for ownership of its property. **Subscription** libraries revealed the great diversity of the communities. They also contributed to the fundamental concepts of today's public libraries and led to the end of the members-only social library movement. When libraries found financial support from municipalities and states, the need for subscription and proprietary libraries dried up. According to Shera, there were two distinct types of subscription libraries: **mercantile and apprentices'** libraries. (59). These were established so that book collections could be developed based upon the specific interests and needs of the users. This empowered members to work together as individuals without surrendering their personal liberties and better defining their collective needs.

In New England every town had a **social** library with small book quantities, widely available collections, and minimal membership fees. Consequently, membership grew. As Shera points out, wealth made the social library possible while the intellectual interests of its members gave the library its fundamental drive and ensured its longevity. (86) As money became more abundant and enterprise prospered, local libraries flourished. Unfortunately though, the voluntary and shifting support of patrons was not a solid foundation upon which to build a national public library service. (78).

Libraries like other traditional municipal functions-- such as road repair, pier and bridge construction, and water supply maintenance-- were initially managed by private individuals and organizations that operated under special charters until local governments offered support. This occurred for the first time in New Hampshire when the state recognized Dublin's Juvenile Library, the nation's first free public library, in 1822. However, it was not until March 1848 that the City of Boston established the first municipally funded public library in America. Even with this influx of money, though, the Boston Public Library still depended heavily on the kindness of its well-educated patrons

and private contributors such as Josiah Quincy and Joshua Bates. As Shera points out:

The historical importance of the Boston Public Library transcends its existence as the first public library in one of the largest American cities. The founders of the library had indeed to venture into untried paths of municipal administration - trails which would soon be beaten by the feet of many followers. (Shera, 1953).

Arguably the most significant legacy of Boston is the fact that it established the precedent of using private and public funds together in order to build and support the library. As Dr. Thomas Jeavons points out: "Many people do not realize that public libraries were born of private philanthropic initiative not public governmental action." (Nix, 2006). With limited municipal and public support, libraries continued to survive only through the generosity and patronage of its wealthy users. This changed dramatically through the large-scale efforts and initiative of one man: steel magnate and Gilded Age industrialist Andrew Carnegie.

Andrew Carnegie Background

Andrew Carnegie was born on November 25, 1835 in Dunfermline, Scotland. He and his family emigrated to Allegheny, Pennsylvania in 1848. Carnegie's rags-to-riches story began in a cotton mill working for \$1.20 a week. In 1851 he became a telegraph messenger boy in the Pittsburgh Office of the Ohio Telegraph Company. A self-motivated and precocious young adult, Carnegie's education was helped by Colonel James Anderson who allowed him and other working boys access to his personal library every Saturday night.

Working for the Telegraph Company, Carnegie was one of the few people in the country who had learned how to distinguish the differing sounds of incoming signals in order to transcribe messages quickly and efficiently. This valuable skill was recognized by Thomas A. Scott, the superintendent of the western division of the Pennsylvania

Railroad Company and Carnegie was hired as his secretary. A few years later Carnegie was promoted to the Superintendent of the Pittsburgh Division of the PRC.

In this capacity, Carnegie formed a partnership with Theodore Tuttle Woodruff, the man who patented the railroad sleeping car. This new and important invention sped up travel and helped Americans settle the west by providing comfortable sleeping accommodations for travelers. With an initial investment of \$217.50 in the Woodruff Sleeping Car Company, Carnegie began receiving a return of \$5,000 annually. (Carnegie Corporation, [n.d.]). Using money from these dividends, Carnegie invested \$11,000 in an oil company in Titusville, Pennsylvania and received more than \$17,000 after only one year. Through these shrewd investments, Carnegie became a very rich man.

When the Civil War began in 1861, Carnegie accompanied Thomas A. Scott, then the Assistant Secretary of War in charge of military transportation, to the front lines and assisted in supervising railroad repairs. While doing this, he noticed that telegraph lines had also been cut, so Carnegie stopped to repair them as well. This ultimately led him to Washington, D.C. where he was briefly appointed Superintendent of the Military Railways and the Union Government's telegraph lines in the East. In 1861, Carnegie formed the Freedom Iron Company that made steel using a process patented by Great Britain's Sir Henry Bessemer.

By 1863, Carnegie's annual income was \$42,000 although only about \$2,400 was from his salary at the railroad, his day job. Using this money, he invested more money in various companies yielding an additional \$13,000 in income annually.

In 1865, Carnegie retired from the railroad business and helped to reorganize the Piper and Schiffler Company into the Keystone Bridge Works and the Union Ironworks in Pittsburgh. With these financial transaction, it seems likely that Carnegie was betting his fortune that wood bridges would soon be replaced by more durable iron bridges.

In 1867, Carnegie also founded the Keystone Telegraph Company that received permission from the Pennsylvania Railroad to string telegraph wire across the railroad's poles stretching across the entire state. With this valuable asset, Keystone was able to merge with the Pacific and Atlantic Telegraph Company allowing Keystone's investors—including Carnegie himself—to triple their returns. Carnegie had figured out a cost-effective way to “connect” America.

According to *Wikipedia*, the following year, Carnegie wrote himself a letter in which he outlined his plans for a philanthropic future. Already a rich man, he vowed to resign from business at age 35 and to live on an annual stipend stating, “I propose to take an income of no greater than \$50,000 per annum! Beyond this I need ever earn, make no effort to increase my fortune, but spend the surplus each year for benevolent purposes. Let us cast aside business forever, except for other.” More significantly, though, he wrote of his plans to devote the remainder of his fortune to philanthropic causes stating that “Man must have an idol and the amassing of wealth is one of the worst species of idolatry! No idol is more debasing than the worship of money! Whatever I engage in I must push inordinately; therefore should I be careful to choose that life which will be the most elevating in its character.” (Wikipedia, 2006)

In 1872 Carnegie visited England and obtained a working knowledge of Sir Bessemer's patented process of steel making. He also became friends with its inventor, Sir Henry Bessemer and realized the durability and commercial potential of steel. In 1873 he staked all his wealth on steel making and, in a few years, Carnegie became principal owner of the Homestead & Edgar Thomson Steel Works in Braddock, Pennsylvania.

Through Keystone, Carnegie supplied the steel for the landmark Eads Bridge project in St. Louis, Missouri that was completed in 1874. This bridge was the largest that had ever been constructed and designed to allow trains cross the Mississippi River.

It was also the first bridge to be built of cast steel and cantilevered construction.

Ultimately, this project opened a new and profitable market for Carnegie and, in fact, the rest of his career was focused on the production of steel which was even stronger and more durable than iron.

In 1879, Carnegie became a library philanthropist for the first time donating money to build a free public library to the people of his hometown of Dunfermline. In 1881 he and his mother visited for the groundbreaking ceremony and his mother laid the foundation stone of the first "Carnegie Library". In addition to a contribution of 5,000 pounds for construction of the building, Carnegie also contributed \$4 million to establish Carnegie Dunfermline Trust with the purpose of managing the library and adding value to the lives of the citizens in 1903.

Upon his return to the United States in 1881, Carnegie made his vast fortune in the steel industry by controlling the most extensive integrated iron and steel operations ever owned by one individual. His great innovation was in the cheap and efficient mass production of steel rails for railroad lines. As more and more railroad tracks and bridges were constructed and as U.S. output of steel increased, Carnegie became one of the richest men in the world.

By 1889, the U.S. output of steel exceeded that of Great Britain and Andrew Carnegie owned a large part of the profits. He rose to the heights of wealth and power by being a supreme organizer and a talented visionary, and he maintained control by incorporating his enterprises as limited partnerships with Carnegie as majority and controlling partner. Not one cent of his stock was publicly sold. His businesses also incorporated his own version of profit sharing in which his employees had a stake in the business. In 1892, he formed the Carnegie Steel Company to centralize management of many of his steel assets.

Among Carnegie's many significant innovations in the world of business was his concept of counter-cyclical investment. Because business alternated between "boom" and "bust" cycles, he realized that if he capitalized during a slump, his costs would be low and his profits would be much higher. Between 1893 and 1897, he took advantage of a prolonged economic slump and was able to upgrade his entire operation with the latest and most cost-effective steel mills—at very low prices. When demand picked up again, prosperity followed for many of his corporations and, by 1900, the profits for Carnegie Steel stood at \$40 million with \$25 million being Carnegie's share.

By 1901, Carnegie was 65 years old and ready for retirement. He reconfigured his enterprises into a conventional joint stock corporation and sold the Carnegie Steel Corporation to banker J. P. Morgan for \$480 million. This purchase allowed Morgan to create United States Steel Company that was the first corporation with a market capitalization in excess of \$1 billion in the world. Carnegie's share of the buyout amounted to more than \$225 million and made him the richest man in the world. It also allowed him to retire from business and focus on his philanthropic activities.

Carnegie's Philanthropy and Early Carnegie Libraries

From 1901 until his death in 1919, Carnegie was first and foremost a philanthropist. Although he had written about his theories of philanthropy in "The Gospel of Wealth" in 1889, his first forays in philanthropic giving extended back to 1881 when he provided a library grant to Dunfermline, Scotland. After witnessing its popular success, Carnegie returned to the United States and, in 1885, he donated \$500,000 to Pittsburgh for building a public library. The following year he gave \$250,000 to Allegheny City for a music hall and library.

In 1889, the second Carnegie Library opened in Braddock, Pennsylvania, home to the Edgar Thomson Works, one of Carnegie's major steel mills. Since this library

primarily served employees and their families, it was fully funded by the Company. It is important to point out that America's first Carnegie Library was actually governed by Company officials and consequently it was not a public library.

Carnegie's third library opened in Allegheny, across the river from downtown Pittsburgh. President Benjamin Harrison attended the dedication ceremony on February 20, 1890. Unlike his first two library gifts, the City of Allegheny was required to subsidize this library, making it the first publicly funded Carnegie Library in the world and following on the public-private partnership precedent established by the municipally-funded Boston Public Library and the example set by Enoch Pratt in Baltimore.

Across the river at around the same time though, the City of Pittsburgh rejected Carnegie's offer of a \$250,000 library grant because its legal department had determined that Pennsylvania State law had to be amended in order for the City to accept the gift under the terms of "The Carnegie Formula." Once state law was changed to permit Pittsburgh to accept the gift, Carnegie decided his original offer was too small and pledged more than one million dollars for Pittsburgh to build a library, music hall, natural history museum, and art gallery. The original Carnegie Institute/ Carnegie Library of Pittsburgh building opened in 1895 and Carnegie himself attended the opening and gave the keynote address. In 1907 he provided a supplemental grant to build a large addition to this structure.

In 1898, Carnegie provided funding and extra money to establish an endowment for two more Pennsylvania libraries: one in Homestead (now Munhall) and one in Carnegie. It should be noted that most cities that received Carnegie Libraries did not receive money for books or an endowment. However, in these instances, the Carnegie Libraries included an endowment to assist in the financial maintenance of the facility as well as money to purchase books. (Walsh, 2002). In 1904, the Carnegie Steel Company

provided funding for the City of Duquesne to build a library. Although this library was built primarily for the employees and their families and it came with an endowment, it is also considered an early Carnegie Library.

Apart from these four exceptions, all other cities accepting Carnegie libraries were required to agree to "The Carnegie Formula." According to this strict Carnegie formula, a community had three responsibilities: it had to write a letter requesting funding and demonstrating the need for a public library; it had to provide a building site, and it had to promise to support library services and maintenance with tax funds equal to ten percent of the grant amount annually. If these stipulations were met, Carnegie's private secretary James Bertram would send out a questionnaire requesting specific information about the town's population and its book collection and the grant was usually funded. (Jones, 26) Since most libraries cost about \$15,000 to build, this annual expense would be used to build book collections, pay for library staff, utilities and supplies. By requiring that communities provide their own sites and tax support, Carnegie was ensuring that each community would have responsibility for the survival of its library. He was particularly pleased with the idea that his one-time grant had to be matched by each community every ten years as "a clever stroke of business." (Jones, 26). For libraries, this marked an important understanding of the effective way that private philanthropy and public money could be used for the common good.

Carnegie invested more than \$41 million (about \$800 million in 1996 dollars) and built more than 1,650 libraries in this country between 1886 and 1929. (Jones, p. 3). He also built more than 800 libraries in other English-speaking countries including Great Britain, Ireland, Canada, Australia, New Zealand, the Caribbean and Fiji. By the time the last grant was made in 1919, there were 3,500 libraries in the United States and Carnegie had built nearly half.

Carnegie's donations to libraries were divided into two periods: "retail" and "wholesale." During the retail period from 1886 to 1896, Carnegie gave \$1.8 million for buildings in six communities in the United States. These were actually more than libraries and are considered community centers, as they contained recreational facilities such as swimming pools, lecture halls, art galleries and music auditoriums. The wholesale period included the years after 1896 and marked the time period in which Carnegie stopped supporting multipurpose buildings and focused his philanthropy on smaller communities that had limited access to cultural institutions. His gifts provided 1,406 towns with buildings devoted exclusively to libraries and more than half his grants were for less than \$10,000. Although most of the towns receiving gifts were in the Midwest, 46 states ultimately benefited from Carnegie's plan.

The largest grant was to New York City. The day after selling the Carnegie Steel Company in 1901, Carnegie wrote a letter to John Shaw Billings, the Director of New York Public Library and offered a \$5.2 million grant to build 65 branches for Greater New York. In his letter Carnegie wrote:

Sixty-five branches strike one at first as a large order, but as other cities have found one necessary for every sixty or seventy thousand of population the number is not excessive. You estimate the average cost of these libraries at, say, \$80,000 each, being \$5,200,000 for all. If New York will furnish sites for these Branches for the special benefit of the masses of the people, as it has done for the Central Library, and also agree in satisfactory form to provide for their maintenance as built, I should esteem it a rare privilege to be permitted to furnish the money as needed for the buildings... (Dierickx, p. 20)

As a direct result of this, Carnegie effectively built the New York Public Library's comprehensive branch network in all five boroughs. In return, New York City promised to provide the sites, maintain and repair buildings and to spend at least ten percent of the grant every year to make them freely accessible from 9 AM to 9 PM every day of the

week except Sunday—including holidays. This was a major increase in open hours for the libraries. Although the initial agreement was ambiguous, it was decided that New York Public would pay for books, so legislation was quickly passed in order for bonds to be issued for these purchases. (Dierickx, 25) In total, sixty-seven Carnegie branches were constructed between 1901 and 1929. Fifty-seven are still standing and fifty-four still operate as branches for New York Public, Brooklyn Public, and Queens Borough Public libraries!

Carnegie's "Gospel of Wealth"

The fundamental concepts of Carnegie's philosophy of scientific philanthropy were first stated in his 1889 "Gospel of Wealth" essay. This seminal article originally appeared as "Wealth" in the *North American Review* and was reprinted in England as "The Gospel of Wealth" in the *Pall Mall Gazette*. Among other arguments to be discussed in greater detail below, the author wrote that the life of a wealthy industrialist should comprise two parts: the gathering and the accumulation of wealth; and the subsequent distribution of the wealth to benevolent causes. He also argued that the wealthy have a moral obligation to serve as stewards for society and stated the importance of using philanthropy to further the goals of humanity. Carnegie also reminded the reader that the State exists to maintain order and to protect property and emphasized that stewardship would tie together a society that was dividing into classes. Most memorably, he explained his philosophy as "**The man who dies thus rich dies disgraced**" and wrote of the three modes in which surplus wealth can best be disposed:

1. It can be left to heirs;
2. It can be bequeathed for public purposes; and
3. It can be administered by possessors during their lifetimes.

According to Carnegie, the first mode is injudicious and monarchical. He stated that "Wise men will soon conclude that, for the best interests of the members of their families, and of the State, such bequests are an improper use of their means." (Carnegie, 1933, p. 8). He continued by pointing out that the second mode is suspect because "Men who leave vast sums in this way may fairly be thought men who would not have left it at all had they been able to take it with them.... there is no grace in their gifts." (Carnegie, 1933, p. 9). In fact, he goes so far as to condemn the "selfish millionaire's unworthy life."

Carnegie then writes passionately about the third mode stating that it is the "true antidote for the temporary unequal distribution of wealth, the reconciliation of the rich and the poor-- a reign of harmony, another ideal, differing, indeed, from that of the Communist in requiring only the further evolution of existing conditions, not the total overthrow of our civilization." (Carnegie, 1933, p. 11). He continues by pointing out that

Under its sway we shall have an ideal State, in which the surplus wealth of the few will become, in the best sense, the property of the many, because administered for the common good, and this wealth, passing through the hands of the few, can be made a much more potent force for the elevation of our race than if distributed in small sums to the people themselves. Even the poorest can be made to see this, and to agree that great sums gathered by some of their fellow citizens and spent for public purposes, from which the masses reap the principal benefit, are more valuable to them than if scattered among themselves in trifling amounts through the course of many years. (Carnegie, 1933, p. 11).

Without explicitly referring to public libraries, Carnegie is pointing out that surplus wealth of the few can be used for the benefit of the masses. Carnegie continues by speaking about the main considerations for bestowing charity, specifically

to help those who will help themselves; to provide part of the means by which those who desire to improve may do so; to give those who desire to rise the aids by which they may rise; to assist, but rarely or never to do all. Neither the individual nor the race is improved by almsgiving. Those worthy of assistance, except in rare cases, seldom require assistance. (Carnegie, 1933, p. 11).

Finally Carnegie writes emphatically that

the best means of benefiting the community is to place within its reach the ladders upon which the aspiring can rise-- free libraries, parks, and means of recreation, by which men are helped in body and mind; works of art, certain to give pleasure and improve the public taste; and public institutions of various kinds, which will improve the general condition of the people; in this manner returning their surplus wealth to the mass of their fellows in the forms best calculated to do them lasting good. (Carnegie, 1933, p. 16).

Addressing the founding of a university as one of the best uses to which a millionaire can devote his surplus, Carnegie states, "Second, what is the best gift which can be given to a community? Is that a free library occupies the first place, provided the community will accept and maintain it as a public institution, as much a part of the city property as its public schools, and, indeed, an adjunct to these." (24). He continues by addressing his own love of libraries stating that "... my own personal experience may have led me to value a free library beyond all other forms of beneficence" (24). Then he points to Great Britain's remarkable example in appreciating and funding free libraries for its people informing the reader that:

Parliament passed an act permitting towns and cities to establish and maintain these as municipal institutions; whenever the people of any town or city voted to accept the provisions of the act, the authorities were authorized to tax the community to the extent of one penny in the pound valuation. Most of the towns already have free libraries under this act. Many of these are the gifts of rich men, whose funds have been used for the building, and in some cases for the books also, the communities being required to maintain and to develop the libraries. And to this feature I attribute most of their usefulness. An endowed institution is liable to become the prey of a clique. The public ceases to take interest in it, or, rather, never acquires interest in it. The rule has been violated which requires the recipients to help themselves. Everything has been done for the community instead of its being only helped to help itself, and good results rarely ensue. (Carnegie, 1933, p. 25).

Later he recalls the words of a famed supporter of free libraries:

No millionaire will go far wrong in his search for one of the best

forms for the use of his surplus who chooses to establish a free library in any community that is willing to maintain and develop it. John Bright's words should ring in his ear: "It is impossible for any man to bestow a greater benefit upon a young man than to give him access to books in a free library. (Carnegie, 1933, p. 27).

Carnegie literally wrote the book on philanthropy and he spent many years of his life following the dictates he had put down on paper. His legacy as the "Patron Saint of Libraries" is obvious and evidence of his belief in the great value of public libraries are seen throughout the New York City area, the United States and in other countries. Through his library philanthropy, Carnegie ensured that public library buildings would survive and that the libraries would be supported by public dollars. By doing this, he ensured their long-term survival. Since the 19th century, the survival of public libraries has been inextricably linked between private philanthropists and public dollars.

Despite his great wealth and enormous generosity, Carnegie was a humble man. In his essay he writes respectfully of another generous philanthropist's example stating:

Many free libraries have been established in our country, but none that I know of with such wisdom as the Pratt Library in Baltimore. Mr. Pratt built and presented the library to the city of Baltimore, with the balance of cash handed over; the total cost was one million dollars, upon which he required the city to pay five per cent, per annum, fifty thousand dollars per year, to trustees for the maintenance and development of the library and its branches... it may further be safely said that, by placing books within the reach of 37,000 aspiring people which they were anxious to obtain, Mr. Pratt has done more for the genuine progress of the people than has been done by all the contributions of all the millionaires and rich people to help those who cannot or will not help themselves. The one wise administrator of his surplus has poured a fertilizing stream upon soil that was ready to receive it and return a hundredfold. The many squanderers have not only poured their streams into sieves which can never be filled—they have done worse: they have poured them into stagnant sewers that breed the diseases which most afflict the body politic. (Carnegie, 1933, p. 25-26).

Carnegie took Pratt's example to a national and international level and, through his generosity, he ensured that public libraries would remain free and accessible to

everyone. When Andrew Carnegie died in 1919, his gifts to various charities including free public libraries totaled nearly \$350 million, almost 90 percent of his entire fortune. Because he regarded public libraries as tools for social improvement and self-education, his generosity is legendary. Almost single-handedly, he ensured that libraries would be one of the important tools allowing Americans to build a brighter and more intellectually rewarding future.

Ch. 3 Bill Gates and Microsoft

Almost one hundred years later, Microsoft CEO/Chief software architect Bill Gates was the richest man in the world. By focusing on developing, manufacturing, licensing, and supporting a wide range of software products for computers and various computing devices, Microsoft has global annual sales of more than \$41 billion and a market cap of almost \$240 billion. Founded as a software company in 1975, Microsoft has helped to change the world of computers by providing software for many different types of computer systems. Combining shrewd licensing deals with an ability to seize on new opportunities, create new technologies and take advantage of a changing marketplace, Gates and Microsoft have seen the value of their software and stock valuation increase exponentially at the same time that a number of new markets have opened.

In the beginning, Gates and Microsoft co-founder Paul Allen wrote a BASIC (Beginner's All-purpose Symbolic Instruction Code) interpreter program for **Micro Instrumentation and Telemetry Systems (MITS)**'s Altair 8800, the world's first microcomputer which used an Intel 8080 microprocessor chip. With this innovation and a successful demonstration, Gates and Allen were hired to work for MITS where they produced several versions of this program including the original 4K BASIC, the 8K BASIC, Extended Basic, Extended ROM BASIC, and Disk BASIC. Gates and Allen continued working with this program and developed versions for other microcomputer systems.

On February 3, 1976, Gates wrote "An Open Letter to Hobbyists" in which he expressed his distaste for software piracy by arguing that

- 1) Most of these "users" never bought BASIC (less than 10% of

- all Altair owners have bought BASIC), and
- 2) The amount of royalties we have received from sales to hobbyists makes the time spent on Altair BASIC worth less than \$2 an hour.

In other words, even as early as 1976, Gates was declaring that most computer hobbyists were pirates and that they were stealing software and cutting into his profits and royalties. This argument would set the agenda for Microsoft's future dominance and its adherence to a hard-line approach to its "Intellectual Property" for the next 30 years. In fact, he concludes his letter by stating that "Nothing would please me more than being able to hire ten programmers and deluge the hobby market with good software."

After a dispute with MITS over licensing BASIC to other companies, Gates and Allen started Microsoft. After arbitration was settled in their favor, they began licensing BASIC for the Commodore PET, Tandy's TRS-80, Atari, Cromemco, Texas Instruments and Applesoft. Because most machines had unique designs with proprietary operating systems, Microsoft's development team had to create specialized versions of each language for each specific computer.

In December 1980, Microsoft purchased a license for Seattle Computer Products' QDOS system for \$25,000 and provided it to IBM for their first personal computer (PC) operating system, PC-DOS. Meanwhile as other computer companies began releasing PC clones they negotiated with Microsoft for the rights to distribute its own operating system, Microsoft Disk Operating System (MS-DOS). In its first 16 months on the market, MS-DOS was licensed to 50 hardware manufacturers, and PC-DOS was distributed on IBM's personal computers as well. Microsoft was beginning to corner the marketplace by focusing on the software and operating systems needs of the many different computer hardware manufacturers and in 1983, Microsoft decided to make MS-DOS an open system, designed to run on multiple computers. This decision was very

important because the proliferation of systems running MS-DOS helped simplify software development and to spark the growth of the entire software industry. Microsoft seized upon this opportunity to release Microsoft Word for MS-DOS 1.00 and began aggressively developing and purchasing word processor, spreadsheet, database, communications and presentation programs that are still vitally important and valued assets in its portfolio.

In 1990, Microsoft released Windows 3.0 and sold more than four million copies. This sparked the release of more than 1,200 Windows-based applications from other developers, and Microsoft itself made a major commitment to updating its Windows-based applications, including Microsoft Excel, Word, and PowerPoint. Six million more copies were sold the following year bringing the installed base to more than ten million users while total commercial applications reached 5,000. It was a phenomenon unlike anything the computer industry had ever seen. This also made Microsoft the first software company to exceed one billion dollars in sales.

In 1992 President George Bush awarded Gates the National Medal of Technology for Technological Achievement and praised him "for his early vision of universal computing at home and in the office; for his technical and business management skills in creating a worldwide technology company; and for his contribution to the development of the personal computing industry." (The History of Computing Project, 2006). By the end of the year, Microsoft had almost \$2.8 million in revenues, but the best was still to come.

On August 24, 1995, Jay Leno of NBC's *Tonight Show* hosted Microsoft's launch party for Windows 95. This highly touted version of Windows featured a new user interface and a "plug and play" design that made hardware setup automatic. By the end of the week, more than one million copies were purchased and by October, Microsoft

was estimating that more than seven million copies of Windows were sold. In November, Gates published *The Road Ahead* that investigated how new technologies would guide the way people work, play, and live in the future. Two days later, on November 27, Microsoft released the final version of Internet Explorer 2.0 for Windows 95. In direct competition with other browsers (namely Netscape), Internet Explorer was available for free downloading via the Internet to licensed users of Windows 95.

After spending so much time and attention on releasing Windows 95, Microsoft was suddenly facing a serious problem: they had ignored the Internet. While AOL and Netscape were fighting it out for the dominant market share of people accessing the information superhighway, Microsoft was, for the most part, AWOL. However, in 1995 Gates wrote a memo entitled “The Internet Tidal Wave” in which he described how the Internet was going to change the landscape of computing forever. In August of that year, Netscape had its spectacularly profitable IPO and single-handedly launched the Internet boom. The following year Gates and his collaborators completely revised his best-selling book, *The Road Ahead*, and placed much greater emphasis on the Internet. At the same time, Gates and Microsoft began focusing their money and their attention on creating a viable alternative to the Netscape Navigator browser.

In 1997 Microsoft's Internet Explorer 4.0 was released to critical acclaim and great demand. The browser was very popular because it was free—unlike Netscape's browser. The Justice Department however, filed a motion in Federal District Court, alleging that Microsoft had violated a 1994 consent decree preventing it from tying the use of its Windows 95 operating system to the use of its Internet browser. The following year, Microsoft released Windows 98 and Internet Explorer 5.0 and Gates published his book, *Business @ the Speed of Thought*, in which he argued that businesses must move quickly to enable the flow of digital information in the fast-paced digital economy.

Since then, Microsoft has continued to upgrade various versions of its software and operating systems and its market share continues to increase while revenues continue growing. In the lawsuit USA V. Microsoft, Judge Thomas Penfield Jackson found that Microsoft's software business model was effectively a monopoly for three main reasons. He stated:

Viewed together, three main facts indicate that Microsoft enjoys monopoly power. First, Microsoft's share of the market for Intel-compatible PC operating systems is extremely large" – about 95 percent worldwide, and still "well above 80 percent" if Apple's Macintosh was included—"and stable. Second, Microsoft's dominant market share is protected by a high [applications] barrier to entry. Third, and largely as a result of that barrier, Microsoft's customers lack a commercially viable alternative to Windows. (Auletta, 2001, p. 293)

Because the Windows operating system is so ubiquitous in the market, fast PCs with large amounts of RAM memory are required, and programmers are forced to write Windows-compatible software. Although the verdict was subsequently overturned and Microsoft continued developing its software without any oversight, Judge Jackson's arguments merit some consideration. With this in mind, it is important to examine the philanthropic endeavors of the Gates Foundation since Microsoft's software is bundled with the Internet Explorer browser that has flooded the public library marketplace. With conservative estimates that Windows controls about 90-95 percent of the PC desktops and Microsoft controls various versions of popular proprietary software applications including Word, Excel, Powerpoint and Access in similar percentages, there is cause for serious concern. As Microsoft continues to develop and sell its new software applications, consumers and organizations are at the mercy of their software and operating systems. Because Gates's wealth and power are so closely tied to Microsoft's fortunes, it is important that we examine how libraries are being used to bridge the so-called "digital divide."

The Gates Foundation, the Digital Divide and Public Libraries

In the mid-1990s, Americans were experiencing unprecedented changes related to new information technologies and telecommunications that threatened to leave many poor and uneducated people behind. In 1995 the National Telecommunications and Information Administration (NTIA) of the Department of Commerce issued its first comprehensive report, "Falling Through the Net: A Survey of the 'Haves' and 'Have Nots' in Rural and Urban America," on Americans' limited access to advanced telecommunications services. This report documented a disturbing trend based on people's socioeconomic circumstances and announced that "there is a pivotal role to be assumed in the new electronic age by the traditional providers of information access for the general public -- the public schools and libraries. These and other "community access centers" can provide, at least during an interim period, a means for electronic access to all those who might not otherwise have such access." (NTIA, 1995). In spite of this finding though, libraries remained under-funded and did not have the money to purchase new computers, software and equipment. A new philanthropist was desperately needed to help libraries provide the public with computers to access the information super highway. As in the time of Andrew Carnegie, this man turned out to be the richest man in the world. This time though, it was Microsoft cofounder Bill Gates.

Politicians seized upon the NTIA report and began searching for effective ways to bridge the so-called "Digital Divide." In 1995, Microsoft partnered with the American Library Association (ALA) and public libraries across the country to establish the Microsoft Libraries Online program to provide low-income communities with access to computers, the Internet and digital information. In 18 months, the Libraries Online pilot program reached more than 200 libraries in more than forty North American library systems with \$17 million in cash and software donations. (Bill & Melinda Gates

Foundation, 1995). In 1996, Microsoft donated \$10.5 million in computers and software for rural and inner-city libraries inspiring Elizabeth Martinez, former Executive Director of the American Library Association to point out: "This is Bill Gates becoming the 21st century's Andrew Carnegie. His foundation's impact on the library world will be enormous." That same year, the head of the Brooklyn Public Library was moved to proclaim from her podium, "In the same way that [Andrew] Carnegie built the buildings, Gates is providing the second wave that will continue the opportunities." (McNichol, 1997) The following year, the program was supplanted by the Gates Library Foundation—a nonprofit organization dedicated to partnering with U.S. and Canadian public libraries. Bill and Melinda Gates committed \$250 million in a cash contribution to this philanthropic foundation.

By 1998, President Bill Clinton announced at an MIT Commencement Speech that the "digital divide has begun to narrow, but it will not disappear of its own accord. History teaches us that even as new technologies create growth and new opportunity, they can heighten economic inequalities and sharpen social divisions." (Clinton, 1998). By focusing his philanthropic contributions on under-funded public libraries serving poor people, Gates was ensuring not only that libraries would play an important role in bridging the digital divide, but more significantly, that Microsoft's software—specifically its Windows Operating system with its bundled Internet Explorer browser—would become the de facto standard in the nation's public libraries.

Since 1997 the Gates Library Initiative, the Libraries Online and the U.S. Library Program, under the auspices of the Bill & Melinda Gates Foundation has contributed more than \$250 million dollars in software, computers and technical support and helped libraries bridge the digital divide. By late 2003 the Foundation had completed installations of more than 47,000 computers and computing packages in about 11,000 public libraries across the 50 states. Today, largely because of the efforts of the Bill &

Melinda Gates Foundation, more than 95 percent of libraries offer Internet access to patrons and more than 14 million Americans access the Internet through libraries' public access computers. More significantly, between 1996 and 2001, library visits were also increasing.

In many ways, libraries are the bridge crossing the digital divide and they have become synonymous with public access computers. As Bill Gates, Sr., co-chair of the Bill & Melinda Gates Foundation points out in the Foundation's educational literature, "Today, if you can reach a public library, you can reach the Internet. The challenge now is to continue providing this access that millions of our neighbors depend upon. Cuts in library budgets won't turn off the Internet for wealthy or middle-class families. It will turn off the Internet for people who have nowhere else to turn."

However, questions still remain as to the specific criteria for receiving grants. According to its website, the Enoch Pratt Free Library in Baltimore met the five criteria for receiving a \$240,000 Gates Library Foundation Urban Library Leadership Grant to expand public access to computers and the Internet because:

- The Library system serves a population of more than 100,000;
- It has at least two library buildings serving areas of "extreme poverty;"
- It has the "greatest institutional readiness " to handle Microsoft's latest software applications;
- It has developed the "soundest plans for leveraging Foundation funding for additional outside resources"; and also
- It has the "most commitment to serving the technology needs of its staff and the staff of surrounding library systems." (Enoch Pratt Free Library, 1998)

The significant point seems to be the third requirement that the library must have the ability to handle Microsoft's "latest software applications." This is an explicit example in which the Gates Foundation makes a prerequisite between its philanthropy and usage of Microsoft's proprietary software running specifically on a Windows-based network.

Further research reveals that Gates Foundation library grants include money for "public access computer packages" that include hardware, software, networking funds, training,

installation and technical support and documentation. (Bill and Melinda Gates Foundation, 2006). It is important to note that the term “packages” as opposed to “computers” is a significant distinction because, as the Gates Foundation points out, it refers to “facets other than computers themselves, including detailed preparatory activity before the equipment arrives, an array of software, in-person visits by the Gates staff, training, and ongoing technical support.” In other words, these packages may include many popular and specific Microsoft programs including Office, Word, Excel, Access, Outlook, and Powerpoint bundled with Windows and the Internet Explorer browser and donated in “fair-market” packages tailored specifically for libraries’ needs, but the greatest value—according to the Gates Foundations’ own calculations-- is in the technical support. By creating packages, the Gates Foundation is able to price them according to their own assessed values, not at the retail, wholesale or even “fair-market” value that other companies use. In the case of the Gates Foundation’s contribution of \$250 million to 11,000 public libraries for 47,000 public access computing packages, it works out to more than \$5,300 per package! This value seems extraordinarily inflated as most computers retail for less than \$1,000 each today.

United States V. Microsoft

In 1998, the Justice Department and twenty states filed a court case against Microsoft alleging that it had abused monopolistic power in its handling of operating system and web browser sales. The central issue was whether Microsoft was allowed to bundle its web browser software with Windows. The case alleged that Microsoft had violated an earlier consent decree by unfairly bundling the free Internet Explorer browser to the sale of Windows. Ultimately, this bundling (or “integrating” as Microsoft called it) had set the stage for Microsoft’s late entry, but ultimate victory in the browser wars as every Windows user had a pre-installed copy of Internet Explorer included with the

computer and therefore did not have to purchase or download Netscape Navigator. The suit also brought up disputes as to whether Microsoft had altered or manipulated its application programming interfaces (APIs) to favor Internet Explorer and Microsoft's proprietary software over third party web browsers, other equipment manufacturers, and outside software developers.

Dr. Franklin M. Fisher, an economics professor at MIT, testified in Federal Court that Microsoft counter-attacked by inducing AOL and other Internet Service Providers (ISPs) to enter into exclusionary agreements and by imposing restrictive contracts on PC makers. He said Microsoft had effectively blocked Netscape's channels of distribution by bundling and giving away its Internet Explorer browser for free. Consequently, he argued, Microsoft was guilty of classic "predatory" behavior. As Justice Department Attorney David Boies argued in court, "The real reason Microsoft eventually tied its browser to Windows was to attack Netscape, not to improve Windows." (Auletta, 2001, p. 287). Ultimately, Internet Explorer became the de facto standard for Internet browsers at around the same time that Microsoft and the Gates Library Initiative began aggressively assisting public libraries with bridging the "digital divide" by donating public access computer packages combining software, hardware and technical assistance.

The case was an enlightening example of a modern-day antitrust lawsuit and the evidence revealed that Microsoft was one of the most powerful and manipulative corporations in the world. Before issuing a verdict, Judge Thomas Penfield Jackson issued his Findings of Fact that found that Microsoft's "determination to preserve the applications barrier to entry... was the main force driving its decision to price the product at zero." (Auletta, 2001, p. 287). Its intent was to gain share of browser usage, so it coerced Other Equipment Manufacturers (OEMs), ISPs, Internet Content Providers (ICPs), and companies (including Apple) to abandon the Netscape browser and to promote Internet Explorer on the desktop. He also noted that although Microsoft had

waived contract restrictions on PC manufacturers in the spring of 1998, it was unclear what the long-term effects of those contracts would be. Judge Jackson concluded that in its attempts to protect its core product profits, Microsoft had hindered technological innovations that could benefit consumers. He also found that 34 ICPs were prevented from distributing and promoting Netscape's browser and that more than one hundred ICPs were required to promote Microsoft's Internet Explorer browser for about a year and a half. (Postrel, 1999).

Judge Jackson acknowledged that Microsoft's PC monopoly was still evident because customers would buy Windows and its associated applications and, more significantly, that this "self-reinforcing cycle" would compel software developers to flock to Windows and to ignore its rivals. In Judge Jackson's opinion, Microsoft's Windows operating system dominance over the PC was not about to end, no matter how much success the open source GNU/Linux was currently enjoying. (293). Judge Jackson rejected Microsoft's claim that the Internet Explorer browser and Windows were seamlessly integrated and ruled that Microsoft had violated the 1994 consent decree which banned the company from using its operating system dominance to restrict competition.

In June 2000, Judge Jackson issued his ruling in which he found Microsoft guilty of abusing monopoly powers and ordered that the company be split in two. A year later though, the decision was overturned unanimously by a federal appeals court which stated: "Although we find no evidence of actual bias [in the earlier ruling], we hold that the actions of the trial judge seriously tainted the proceedings before the District Court and called into question the integrity of the judicial process." While the appeals court ruled that Microsoft had improperly monopolized the computer operating system market, the appeals court reversed the decision that packaging Internet Explorer with Windows had violated the earlier consent decree.

Throughout the case and even before the favorable reversal, the Gates Foundation continued its aggressive philanthropy ensuring that Windows and Internet Explorer were part and parcel of the public access computing packages found in many public libraries. Through the Gates Foundation, Microsoft had discovered an efficient and cost-effective way of ensuring that their software would be the bridge crossing the digital divide. Their marketing strategy generally relied on forced obsolescence.

By 2002, Microsoft also discovered an easier way of maximizing their profits up front. By calculating the profits based on the shipment of their license agreements to the hardware manufacturers as opposed to customer sale of software, Microsoft had created a cunning new strategy. As their 2002 annual tax statement clearly points out:

Revenue from products licensed to original equipment manufacturers (OEMs) is based on the licensing agreement with an OEM and has historically been recognized when OEMs ship licensed products to their customers. Licensing provisions were modified with the introduction of Windows XP in 2002 and revenue for certain products is recorded upon shipment of the product to OEMs.

In other words, large portions of Microsoft's revenue are calculated based on their End User License Agreements (EULAs) shipped to the manufacturers as opposed to the software purchased by the OEM customers. This stroke of ingenuity allows Microsoft to minimize production costs even more by assessing value to the EULAs themselves.

All of this information is important to understanding how Microsoft's market dominance has reshaped the computer software marketplace. Further analysis is required to better understand how Microsoft's proprietary software, questionable accounting practices, and carefully worded end-user license agreements (EULAs) threaten our cultural heritage and the long-term accessibility of our vital and important records. It is important to realize that libraries throughout the world are facing a new kind of "digital divide" in which we are at the mercy of the pre-packaged licensing

agreements and regular software upgrade which allow software manufacturers to control access to all our records. More significantly, patent and intellectual property laws are now vigorously protected by the Digital Millennium Copyright Act (DMCA) of 1998 which further secures Microsoft's firm grip on our methods of using computer technology.

An unintended consequence of the DMCA's "anti-circumvention" provisions allowed Microsoft to threaten the Internet publication forum *Slashdot* for posting factual information relating to Microsoft's proprietary implementation of an open security standard known as Kerberos which many speculated was intended to force users to purchase Microsoft server software. With the DMCA as its weapon, Microsoft is able to protect market share by limiting criticism and forbidding the free exchange of information related to its proprietary software. This is, according to the Electronic Frontier Foundation (EFF), one of the most serious unintended consequences of the DMCA.

Chapter 4: Carnegie's Gospel of Wealth vs. Microsoft's Monoculture Monopoly

The fundamental question that this paper must address is how Gates, through his charitable Gates Foundation—compares with Carnegie—the man of steel with the heart of gold. Both men have contributed millions of dollars to public libraries, but their motivations appear quite different. There are certain similarities though. Both Gates and Carnegie were self-made men who never graduated from college. With this in mind, they both gravitated to libraries as institutions that helped with their self-education by providing resources to books, knowledge and information.

Another similarity is the fact that both Gaseses (father and son) and Carnegie all strongly supported the estate tax which allowed money to be heavily taxed when passed down. In “The Gospel of Wealth,” Carnegie states that:

Of all forms of taxation this [estate tax] seems the wisest. Men who continue hoarding great sums all their lives, the proper use of which for public ends would work good to the community from which it chiefly came, should be made to feel that the community, in the form of the State, cannot thus be deprived of its proper share. By taxing estates heavily at death the State marks its condemnation of the selfish millionaire's unworthy life. (Carnegie, 1933, p. 10)

In an opinion piece written in January 2003, Bill Gates, Sr. points out that “cutting \$850 billion in revenue in the decade after the tax is phased out--money that would have been collected from the heirs of multimillionaires--will prolong the current fiscal crisis. Many states will feel the pain of revenue loss first because their inheritance and estate taxes are linked to the federal levy.” Gates continues by stating that “... underlying the movement for an estate tax was a recognition that too much concentrated wealth and power was putting our democracy at risk. We had fought a revolution to reject hereditary

political and economic power--and the dizzying inequalities of the Gilded Age violated a fundamental American ideal of equality of opportunity."

When the Gates Family was awarded a Carnegie Medal for Philanthropy in 2001, Bill Gates, Sr. was praised for his faith in Andrew Carnegie's "Gospel of Wealth," and for celebrating the gospel as a true clarion call urging those who have great resources, to use their wealth in the service of humanity. Later in the citation, the Carnegie Foundation states that

the extraordinary and innovative Library Program, which is committed to bringing computers with Internet access to every public library serving a low-income community in the United States and Canada. States, cities and provinces that stretch from the Yukon Territory to Texas and from New York to California have received computers and thus free access to information for more than 140 million people—almost half the population of North America. The International Library Program has similar goals, striving to close the digital divide for all the people of the world. Surely, if Andrew Carnegie were with us today, he would be the first to applaud this new chapter in the cause that was perhaps dearest to his heart: the development and proliferation of libraries as the true schoolroom of the world, open to everyone. (Carnegie Foundation, 2001).

Thus, if the motivation for Gates Foundation philanthropy is to bridge the digital divide, there is little doubt that their "public access computer packages" have done that.

However, the fact is that computer software is only good for a limited amount of time.

Then it becomes obsolete, unsupported or a user needs to upgrade. In fact, more than a decade ago Bill Gates himself pointed out that "there's not a single line of code here today that will have value, say, in four or five years time." That rapid obsolescence meant that Microsoft's new employees would need to possess technical expertise as well as the capacity to quickly acquire whatever new skills would be needed in the future. (Stross, 1996, 36)

But the differences between Carnegie and Gates seem striking. In "The Gospel of Wealth," Carnegie lists the duties of the man of wealth as:

To set an example of modest, unostentatious living, shunning display or extravagance; to provide moderately for the legitimate wants of those dependent upon him; 2nd, after doing so, to consider all surplus revenues which come to him simply as trust funds, which he is called upon to administer, and strictly bound as a matter of duty to administer in the manner which, in his judgment, is best calculated to produce the most beneficial results for the community-- the man of wealth thus becoming the mere trustee and agent for his poorer brethren, bringing to their service his superior wisdom, experience, and ability to administer, doing for them better than they would or could do for themselves. (Carnegie, p. 13)

Meanwhile even before the Gates Foundation began giving away hundreds of millions of dollars to public libraries, Bill Gates began construction on a massive home on the shore of Lake Washington in 1990. This home is an example of unmitigated extravagance although Gates, in *The Road Ahead*, tried to show that the house would incorporate experimental aspects of technology that would be all that it had in common with William Randolph Hearst's San Simeon mansion. One writer points out that the underground garage which cost an estimated \$1.1 million, takes up almost 6000 square feet and can accommodate 26 cars, meaning that "Bill's cars will live in a larger, more expensive home than 99.9 percent of the earth's population." (Stross, p. 236)

Carnegie goes on to speak about the importance of wise and strategic philanthropy. He states:

The best uses to which surplus wealth can be put have already been indicated. Those who would administer wisely must, indeed, be wise; for one of the serious obstacles to the improvement of our race is indiscriminate charity. It were better for mankind that the millions of the rich were thrown into the sea than so spent as to encourage the slothful, the drunken, the unworthy. Of every thousand dollars spent in so-called charity to-day, it is probable that nine hundred and fifty dollars is unwisely spent-- so spent, indeed, as to produce the very evils which it hopes to mitigate or cure. (Carnegie, 1933, p. 14)

In fact, this provided Gates an easy answer for becoming a philanthropist later in life.

Additionally, market turbulence also may have led him to seek out philanthropic endeavors. In July 1995, for instance, Gates suffered a two-day \$2 billion drop in the value of his Microsoft holdings. When reporters pressed him for a comment, he answered with a shrug stating "Investing in tech stocks is a high risk." As the richest man in the world though, it was not until 1997 that he began to aggressively give away his fortune. Since then, he has embraced his philanthropic role stating to *Wealth* magazine:

I am the steward of a share of society's resources. Eventually, I'll return most of it as contributions to causes I believe in, such as education and population stability.... Giving away money effectively is almost as hard as earning it in the first place. I'm many years away from wanting to divert a lot of my attention in that direction—and I don't want to presuppose today what my thinking will be then.... One thing is for sure. I won't leave a lot of money to my heirs, because I don't think it would be good for them. So my children...can dream of being rich. But if their dreams come true, it won't be because dad gave them a lot of money. (Anderson & Kostigen, 2003).

There are similarities in their business strategies as well. Both Carnegie and Gates made their fortunes through strategic vertical integration. Whereas Carnegie's wealth was largely derived from the fact that his company controlled the mills where the steel was manufactured, as well as the mines where the iron ore was extracted, the coal mines that supplied the coal, the ships that transported the iron ore and the railroads that transported the coal to the factory, and the coke ovens where the coal was coked, Gates and Microsoft have created a new kind of vertical integration in which new software programs and applications are integrated (or bundled) with the Windows operating system which already holds a large share of the market.

Specific evidence of this can be seen in the so-called browser wars in which Microsoft ultimately vanquished Netscape's Navigator by integrating and bundling Internet Explorer—and giving it away for free- with various Windows operating systems.

In other words, as Netscape lawyer Gary Reback and a team of attorneys at Wilson, Sonsini, Goodrich & Rosati point out in a legal memorandum, “Microsoft pursues a strategy of leverage from product markets in which it is dominant, to markets in which its competitive position is weak. It targets particular markets, establishes marketing and, in particular, technological links to those markets from established monopolies, and then leverages its power to monopolize the target markets.” (Reback et al., 1995).

An examination of Microsoft’s centralized productions would suggest that prices would come down. As Carnegie wrote in his essay on “Popular Illusions About Trusts,”

If there be in human history one truth clearer and more indisputable than another, it is that the cheapening of articles, whether of luxury or of necessity or of those classed as artistic, insures their more general distribution, and is one of the most potent factors in refining and lifting a people, and in adding to its happiness. In no period of human activity has this great agency been so potent or so wide-spread as in our own. Now, the cheapening of all these good things, whether it be in the metals, in textiles, or in food, or especially in books and prints, is rendered possible only through the operation of the law, which may be stated thus: cheapness is in proportion to the scale of production.... Thus, the larger the scale of operation the cheaper the product. (Carnegie, 1933, p. 81)

Yet Microsoft continues to use inflated values of their software in spite of its market dominance and widespread piracy. By doing this, they are using elements of their vertically integrated system to ensure that other parts will remain important assets. The fact that the software is licensed and not sold, as stated in their End-User License Agreements, suggests that Microsoft has reduced the cost of the software to nothing. Basically, when an end-user or a library agrees to use the donated Microsoft software, they are giving away their rights to Microsoft. This makes their philanthropy suspect. As Carnegie points out:

The first requisite for a really good use of wealth by the millionaire who has accepted the gospel which proclaims him only a trustee of the surplus that comes to him, is to take care that the purposes for which he spends it shall not have a degrading, pauperizing tendency upon its recipients, but that his trust shall be so administered as to stimulate the best and most aspiring poor of the community to further efforts for their own improvement. (Carnegie, 1933, p. 19)

The Gates Foundation is applauded for their willingness to give away their public access computer packages to libraries and other needy institutions. However, they understand that the software will soon need to be upgraded and, as if that were not enough, Microsoft knows that soon they will inevitably stop providing support for older versions of their applications. While this may be a natural tendency in the computers and software markets, it seems suspicious that this information is not easily available.

In 1981, Gates pointed out that "in some ways [the way the software business works] leads, in an individual product category, to a natural monopoly." A dozen years later, Dr. Nathan Myhrvold observed in Microsoft's "Telling It Like It Is" memo that in the history of computers, the market share leader in operating systems gets about 90 percent of the market, the runner-up has about 90 percent of the remainder, and so on. In applications software that runs on top of the operating system, the positive feedback phenomenon is at work, too, but it does not bring customers as many benefits, so the distribution is not quite as dramatically skewed. Nevertheless, a pattern is found in application software categories too: the leader gets 60 to 70 percent of the market and the runner-up gets 60 to 70 percent of the remainder. Two years after Myhrvold made these observations, another software category-- the suite of productivity applications-- had become important and Microsoft Office had a 90 percent share of the productivity suite segment of the market, exactly what Myhrvold's earlier remarks had predicted.

With such impressive market dominance in the (Windows) operating systems as

well as various software applications—including Office, Word, Outlook, Access, Excel, WindowsMedia, Powerpoint, etc.— and programs—namely, Encarta-- Microsoft rules the marketplace. Using this leverage, Microsoft is able to under-price the competition primarily because copying and installing the software is so cheap. More importantly though, Microsoft was able to use their near-monopoly in the operating system market to gain a competitive advantage in various other markets, such as the market for web browsers, productivity suites, word processing, media players and more through strategic marketing and savvy pricing policies.

In his “Gospel of Wealth” essay, Carnegie points out that a philanthropist has the responsibility to administer his surplus wealth for the common good. He states:

Under its sway we shall have an ideal State, in which the surplus wealth of the few will become, in the best sense, the property of the many, because administered for the common good; and this wealth, passing through the hands of the few, can be made a much more potent force for the elevation of our race than if distributed in small sums to the people themselves. Even the poorest can be made to see this, and to agree that great sums gathered by some of their fellow-citizens and spent for public purposes, from which the masses reap the principal benefit, are more valuable to them than if scattered among themselves in trifling amounts through the course of many years. (Carnegie, p. 11)

With the Gates Foundation, though, it seems likely that this wealth will continue to pass through the hands of the few, if only because Microsoft still owns the software. The Gates Foundation is lending libraries access to their software and applications. As Carnegie points out “one of the chief obstacles which the philanthropist meets in his efforts to do real and permanent good in this world, is the practice of indiscriminate giving; and the duty of the millionaire is to resolve to cease giving to objects that are not clearly proved to his satisfaction to be deserving.” (p. 20). This highlights one of the most significant differences between the philanthropic efforts of these two men.

Whereas Carnegie waited until retirement to give the bulk of his wealth away, Gates is still working for Microsoft and, obviously, has a large vested interest in ensuring its success. Because so much of his wealth and philanthropy is tied to Microsoft's stock and software, the Gates Foundation's philanthropy must be looked at in a different light from Carnegie's philanthropy. In many ways, Carnegie's scientific philanthropy is diametrically opposed to Gates's strategic philanthropy.

Carnegie points out in "The Gospel of Wealth" that

The only point required by the gospel of wealth is that the surplus which accrues from time to time in the hands of a man should be administered by him in his own lifetime for that purpose which is seen by him, as trustee, to be best for the good of the people. To leave at death what he cannot take away, and place upon others the burden of the work which it was his own duty to perform, is to do nothing worthy. This requires no sacrifice, nor any sense of duty to his fellows. (Carnegie, 1933 p. 37)

With Gates's wealth so closely tied to the success of Microsoft, one must question if his philanthropy is "best for the good of the people." In other words, it is likely that there is another motivation for the Gates Foundation's extreme generosity. By increasing the market share of their proprietary software and operating systems in public spaces, they are ensuring that dividends will continue to pay off well into the future. More importantly, this is a great strategy for creating positive news stories and great public relations.

In attempting to frame their philanthropic legacy, Microsoft's Annual Report of Giving states that "Everyone at Microsoft celebrates our connections with the people and organizations who make the world a better place." Bill Gates, the man who would be Carnegie, closes the brochure with this stirring note: "As a young growing company, Microsoft and its employees are not often recognized as having any traditions. But we do have one that reaches back well over a decade. We give."

While Carnegie made his fortune through shrewd dealings and by cutting costs through vertical integration, he was not oblivious to people's hatred for trusts. He stated:

The people are aroused against trusts because they are said to aim at securing monopolies in the manufacture and distribution of their products; but the whole question is, Have they succeeded, or can they succeed, in monopolizing products? Let us consider. That the manufacturer of a patented article can maintain a monopoly goes without saying. Our laws expressly give him a monopoly. That it has been wise for the State to give an inventor this for a time will not be seriously questioned. So beneficial has it proved that the nations of the world are one after the other following our patent laws. (Carnegie, 1933, p. 87)

In the case of Microsoft though, they are using their operating system monopoly to extend the market reach of other software applications, that is to increase the effectiveness of their vertical integration. By doing this they are also increasing their market share and their stock value. The danger for libraries, archivists and records managers lies in the fact that Microsoft's monoculture of proprietary software (e.g. Word documents, Access databases, or Excel spreadsheets), are setting libraries and archives up for a disaster. The software has been licensed to them for use. Ultimately, the true benefactor of Gates Foundation philanthropy is the owner of the software. Microsoft, not libraries, gains from improvements to their applications and through forced obsolescence.

Although the marketing propaganda is clear in stating that the Gates Foundation has given \$250 million for 47,000 public access computer packages in 11,000 public libraries, the truth is somewhat different. In actuality, the values are inflated and the philanthropy has increased Gates's net worth. As Carnegie pointed out:

It is none the less evident that we are fast recurring to that position to-day; and there will be nothing to

surprise the student of sociological development if society should soon approve the text which has caused so much anxiety: "It is easier for a camel to enter the eye of a needle than for a rich man to enter the kingdom of heaven." Even if the needle were the small casement at the gates, the words betoken serious difficulty for the rich. It will be but a step for the theologian from the doctrine that he who dies rich dies disgraced, to that which brings upon the man punishment or deprivation hereafter. (Carnegie, 1933, p. 38)

Carnegie, through his scientific philanthropy, left a lasting legacy by building hundreds of public libraries throughout the country and the world. Gates, who is widely regarded as a Carnegie-styled philanthropist, has provided thousands of libraries with licensed software that will soon be obsolete and worthless. By doing this, the Gates Foundation is helping to set libraries up for a severe problem. Because of the changing nature of Microsoft's proprietary software, there is no guarantee that documents created in today's libraries will be accessible on tomorrow's operating systems and proprietary applications. For this reason, libraries, archivists and records managers must cast a skeptical eye when accepting large amounts of money from corporations or corporate CEOs who might have a vested interest in ensuring that future versions of their software will be sold.

Although this philanthropic strategy has obviously helped libraries to bridge the digital divide of the 1990s, librarians must understand that it is potentially creating a new digital divide separating today's proprietary versions of Word from tomorrow's word processing programs. Until these issues are addressed in a meaningful way, though, our vital records are at risk. By continuing to rely on the kindness of the Gates Foundation, libraries are missing the larger issues of creating open source, freely accessible formats. Ultimately, libraries are regressing to the days of proprietary and subscription libraries in which end users must agree to the stipulations and rules set by corporations who have their own selfish vested interests.

But this is precisely the current state of affairs in the computer and software industry: what should be regarded as Microsoft's methods are now widely accepted as industry standards. Not only are the methods fully proprietary in nature, but they are inefficient, unsecure and they are used to restrict competition to the greatest extent possible. In fact, a consumer or employee does not actually purchase Microsoft Word, s/he buys a license agreement to use it as an End User. So instead of standards that encourage competition and innovation within commonly held product definitions and ideals, we have standards wielded as bludgeons. What results is a tyranny of standards. According to Microsoft Office Word 2003's End-User License Agreement (EULA):

... [it] is a legal agreement between an individual or single entity and Microsoft Corporation for the Microsoft Word software that accompanies this EULA, which includes associated media and Microsoft Internet-based services ("Software"). An amendment or addendum to this EULA may accompany the Software. YOU AGREE TO BE BOUND BY THE TERMS OF THIS EULA BY INSTALLING, COPYING, OR USING THE SOFTWARE. IF YOU DO NOT AGREE, DO NOT INSTALL, COPY, OR USE THE SOFTWARE; YOU MAY RETURN IT TO YOUR PLACE OF PURCHASE FOR A FULL REFUND, IF APPLICABLE. ... Microsoft reserves all rights not expressly granted to you in this EULA. The Software is protected by copyright and other intellectual property laws and treaties. Microsoft or its suppliers own the title, copyright, and other intellectual property rights in the Software. The Software is licensed, not sold.

With this EULA, Microsoft is unlikely to take responsibility for their flawed and buggy software or even to address issues of backwards compatibility and long-term access. So rather than fix the programs, patch the applications or even address the bugs, they force users to agree that Microsoft has limited liability. In Section 19 of the Microsoft Office Word 2003 EULA:

19. LIMITATION OF LIABILITY AND REMEDIES. Notwithstanding any damages that you might incur for any reason whatsoever (including,

without limitation, all damages referenced herein and all direct or general damages in contract or anything else), the entire liability of Microsoft and any of its suppliers under any provision of this EULA and your exclusive remedy hereunder (except for any remedy of repair or replacement elected by Microsoft with respect to any breach of the Limited Warranty) shall be limited to the greater of the actual damages you incur in reasonable reliance on the Software up to the amount actually paid by you for the Software or US\$5.00.

As GNU founder and Free Software Foundation President Richard Stallman points out:

Because Microsoft changes the Word file format with each release, its users are locked into a system that compels them to buy each upgrade whether they want a change or not. They may even find, several years from now, that the Word documents they are writing this year can no longer be read with the version of Word they use then. (Stallman, 2002)

As records managers, librarians and archivists, we must concern ourselves with better, more standardized and efficient ways of storing vital information for long-term access. Given Microsoft's past record, our records are in great peril unless we take decisive action or call for strict, open technical standards.

Codes and Standards

The fundamental need for codes and standards in design is based on two concepts: interchangeability and compatibility. When objects were manufactured by individual artisans, each item was unique and craftsmen made parts to fit each other. When a replacement part was required, it had to be made specially to fit. Until Microsoft opens its code, or until a viable alternative is produced, all software engineers as well as records creators and records managers are at their mercy. Open source free software and non-proprietary standards can fix that. As Eric Raymond, an open-source community leader and consultant to Sun Microsystems, argues that:

Nobody in the open-source world expects Microsoft to open-source their core products; given their business model that would be insane. But, realistically, they could do some important things. One, open up their file formats. That is, fully document programs like the Microsoft Word and Windows Media formats, and make a binding promise not to sue people who write software to interoperate with them. Two, put down the patent weapon. Do as IBM has, and offer their software patents under royalty-free, paperwork-free license to open-source projects. Three, support open technical standards, rather than sabotaging them. Microsoft has a history of destructive meddling at organizations like the IETF and W3C, and of attempting to hijack standards like Kerberos by making them dependent on proprietary 'extensions.' Simply not doing this would be a huge improvement. (Taft, 2005).

But instead of acknowledging these valid arguments, Microsoft continues moving forward and pushing their new Windows Vista release and forthcoming software applications. On its release, Windows Vista will render millions of lesser-equipped computers, systems and programs on older software obsolete. In time, Microsoft will stop supporting legacy versions of Windows (e.g. 98, 2000, Me, XP) and they will begin preparing for their next operating system and programs. With Microsoft acting as the industry's gatekeeper, Microsoft sets the standards. If, in the future, Microsoft stumbles or fails—following the precedents of other former high-tech stalwarts such as IBM, Kodak, Xerox, HP, Wang—then all the documents and records created in various versions of its proprietary software (e.g. Word, Excel, Outlook) will be victims of circumstance—and lost to time. This sounds like “A Parable of the Time Capsule.”

A Parable of the Time Capsule

Some time ago, an elementary school planned to bury a time capsule. Every student was invited to put one culturally relevant item in the capsule. An afternoon internment ceremony was scheduled for the day before Spring Break. That day, the students gathered around the shiny time capsule filled with artifacts from the 1970s

including metal lunch boxes, vinyl records, baseball cards, pet rocks, and concert t-shirts. They recited the Pledge of Allegiance and watched as the time capsule was buried 50 yards west of the swing set, next to the jungle gym.

Ten years later, the school was closed and the property was sold to a private corporation. Fifteen years later, the playground was torn down. Twenty years later the building burned down. There was no school, no playground, no swing set, no jungle gym—and no evidence of the time capsule or where it was buried. All evidence was lost. Although the time capsule was safely stored, accessing it was impossible because there were no recognizable landmarks. It was as good as gone forever.

What's the Proprietary Word?

Until we begin to address the larger issues of preserving today's work environment (operating systems) and software programs (time capsule) in an openly accessible format, then we are at risk of losing access to our data (artifacts/records) in their original formats. In other words, until we begin using Microsoft software as a tool and as a means to an open-source standard, our vital records and our long-term access are doomed.

Fortunately, by one simple step, we can practically guarantee that our vital word documents and records will be readable and accessible today, tomorrow and 20 years from now. The solution is to reformat and migrate proprietary .doc files and save them as .rtf (rich text format) or .txt (plain-vanilla) plain text files or pdf (Portable Document Format) or in xml (eXtensible Markup Language) or html language formats. In this way, we will be certain that these records will be readable even if Microsoft is bankrupt or simply unable (or unwilling) to provide backwards compatibility for its older programs on newer operating systems. Or even if another company or organization creates an alternative, efficient and more secure operating system or text-based word-processing

program, users' options must be open—and using one company's proprietary versions is unwise.

The Perniciousness of Word

The documents or records an employee creates or receives today are not isolated events. It is an instance of a pernicious systemic practice, which calls for a new approach to records retention. Reading the Word “.doc” (dot doc) file and archiving it is like treating a symptom of a chronic illness: unknowingly, a bloated, buggy, insecure document will be preserved containing unrelated and irrelevant information hidden in the metadata—if it is ever accessible. To cure this illness, librarians and records managers must strongly advocate an aggressive policy to migrate and reformat files at an early stage of the electronic records life cycle. We must ensure that our most vital records are stored in a non-proprietary format such as RTF, XML, TXT, PDF or HTML.

Individuals typically create and manage files on standalone computers and local area networks, using operating system tools such as Windows Explorer to establish a file structure to classify and organize information. Because these file structures are generally too personalized and free form to serve as an organized recordkeeping system, we need a better and more standardized and reliable alternative. This could be a new stage in the electronic life cycle, perhaps supplanting “control.” For all mainframe and client/server-based electronic records, the records manager must contact the appropriate managers in the IT department to describe data concerning the applications they manage—and continue fighting for standards.

The convergence of records management principles with computer language developments underscores the fact that an organization's institutional records must be private. At least one Microsoft critic agrees. Novell Asia Pacific solutions manager Paul Kangro quoted an unnamed Indian customer of Novell's as saying "why should I have

my documents from government in a proprietary format and have to ask a third party for permission to open them?" (LeMai, 2005). By accepting Microsoft's End User Legal Agreement to use Word on a PC, we allow one corporation to retain ownership of their programs and its secret code with little or no liability. If security is an issue, then by dint of this small-type EULA—which nobody ever reads—Microsoft is able to avoid any responsibility for insecure systems. The software is priceless, but the EULA is death and the Digital Millennium Copyright Act is a very dangerous weapon if anyone is interested in circumventing Microsoft's copyright protection for long-term access.

So where do we stand? The significance of records management in an organizational context of unified information will not receive much attention in the marketplace. Until international and federal standards are set with an eye towards neutrality, or until specific open-access and free software rules are put on to today's electronic records, then, as the writers of "Titanic 2020 – A Call to Action" state:

Titanic 2020 results from software business practices that make new products quickly obsolete, cause major hassles for users, and put critical assets at risk.... Like the passengers on the Titanic on her maiden voyage, many of our most valuable records stored by the ship of computers will perish.... Simply stated, Information Technology (IT) of the early 21st Century-- and the organizations that use IT—are generally ill prepared to prevent damage or loss of valuable electronic records or data. (**Lysakowski and Leibowitz, 2000**).

While Microsoft continues updating, upgrading and patching its proprietary software and redesigning its operating systems, our vital electronic and digital records will remain in severe danger. If we do nothing and continue to archive our vital records exclusively in Microsoft's original proprietary formats—that is, saving word documents as .docs (dot docs)—then it is highly likely that our records will be inaccessible to us and our future access will depend on Microsoft's cooperation.

Warning bells are beginning to sound due to recent demise of such previously

untouchable high-tech stalwarts as IBM, HP, Compaq, Kodak, Xerox, Wang, AOL, etc. While the historical view of electronic records retention is authenticated by simple metadata fields, without an integrated methodology for record selection, record review and approval, record disposition (archive or destroy), and process certification, the convergence of functions with record management principles underscore the fact that not all documents are vital records of the organization. All records are not created equal.

Today's records management solutions must address the full life-cycle management of electronic documents at different levels. From creation process under single-user control and on proprietary software running on a proprietary operating system, to the distribution and maintenance and protection (privacy) of records on an institutional network. We need long-term access to our electronic, so records managers and library administrators must advocate for a standard-format, a stripped-down open source language on the PC and the server mainframe as well as offline and on portable storage devices. With one small step of migrating or reformatting proprietary formats, we will guarantee long-term accessibility to our administrative records and to information created on software and operating systems which probably will be obsolete ten or twenty years from now.

In the meantime, though, it is important for libraries to understand that the philanthropic contribution offered by the Bill & Melinda Gates Foundation is suspect. With the Gates's vested interests in Microsoft's continued success, librarians must understand that the "public access computer packages" that are donated to their libraries are a means to an end; they are a means by which Microsoft can infiltrate public spaces. Sadly, the end result seems to be that libraries will continue to serve as a marketing and public relations tool for Microsoft's proprietary products and the Gates Foundation's inflated generosity and good will.

Sadly, but significantly, any criticism of Microsoft's library philanthropy is muted. Many of the studies undertaken by the American Library Association or various other governmental organizations have relied on funding from Microsoft and/or the Gates Foundation and have shown positive results. Consequently, most published studies investigate small parts of the program that reveal the vendor (Microsoft) in a favorable way. But these pressing issues of long-term access must be addressed soon—or it will be too late. Many of our vital and important records will be lost as Microsoft continues their policy of forcing software obsolescence and offering mandatory upgrades for their outdated software applications. In spite of their generosity, the Gates Foundation shows no recognition for the importance of backwards compatibility or long-term access.

Chapter 5: Conclusion

Throughout their histories, American libraries have relied on a variety of financial sources for their continued survival. While the earliest examples of social libraries required memberships and dues, Andrew Carnegie helped to establish the modern-day versions that combine private philanthropy and public funding. Through his strategic and scientific generosity, Carnegie used philanthropy to force governments to recognize and support the important role that public libraries play in the lives of the citizens. By requiring governments to provide sustaining funds for the maintenance and upkeep of the library, he ensured their long-term survival well after his death. Carnegie's legacy is secure and he is still widely regarded as the "Patron Saint of Libraries" for helping to establish more than 1,600 public libraries in this country alone and more than 2,500 throughout the world. Many of these libraries are still in use today.

A simple analysis shows that Carnegie's money came with strings attached. Communities had to agree to the "Carnegie Formula" and its three important principles namely that

1. the community had a need for a public library building;
2. that the community would provide a location for the building; and
3. that the community would provide annual financial support for the library.

If a community were able to meet these three requirements, Carnegie provided the money for construction of the library building. At an average cost of under \$20,000, the free library was built efficiently and soon was open to the public.

In the 1990s, though, Microsoft's co-founder Bill Gates was widely recognized as

a new incarnation of Andrew Carnegie. At the time, the digital divide was an important consideration and government officials, pundits and politicians understood that public libraries could be an important instrument for bridging it. But because they were unwilling to provide the financial support needed to purchase new computers, hardware and software, Gates, the richest man in the world, stepped forward and created charitable foundations-- ultimately including the Bill & Melinda Gates Foundation-- to help libraries bridge the digital divide. Like Carnegie, this Gates Foundation grant money also had strings attached, but the strings were more difficult to understand. There are eight specific stipulations attached to Gates Foundation grants:

1. The library must run Windows-based computers.
2. According to the EULA, the "software is licensed not sold."
3. Software generally has a life cycle of only three or four years.
4. Vendor lock-ins are caused by Microsoft products running on networks.
5. The secret and proprietary software is frequently patched and updated.
6. The "public access computer packages" have an inflated value of \$5,300 each.
7. Much of Microsoft's software is vulnerable to security risks in the form of viruses, Trojan horses, worms, spyware, and more.
8. The Foundation does not provide funds for continued Internet connectivity.

As a direct consequence of these attached strings, the Gates Foundation is ensuring Microsoft's continued dominance in the marketplace well into the future. In addition, they are able to create enormously positive public relations on behalf of their inflated generosity while avoiding discussions related to security blind spots and buggy software that force vendor lock-in that further extends their monopolies. In spite of everything, the small print (the EULA) proves that Microsoft is using legal language to

avoid liability.

In order to secure our vital electronic and digital records, it is imperative that the government force Microsoft to lay its proprietary cards on the table. Before allowing libraries and other charitable organizations to accept grants from the Gates Foundation, the government should mandate three things:

1. make sure that Microsoft publish interface specifications to major components of its code;
2. improve its support for interoperable components to allow others to compete with more secure technology; and
3. set specifications through industry standards bodies and consortia.

Whereas most of the Carnegie libraries were built after Carnegie retired in 1901 and had nothing to do with the Carnegie Steel business, Gates provided public libraries with “public access computer packages” which combine software, hardware, technical support and technical documentation. Of course these packages include Microsoft’s proprietary software in which Gates still has a vested interest to increasing the market for Microsoft users. In addition, because of the nature of the computer software business, forced obsolescence and vendor lock-ins create a captive and repeat user base in libraries, at work, and at home. Because Microsoft’s software has a limited lifespan and because the company has a vested interest in forcing its customers to purchase newer versions of its applications and its operating systems, libraries must realize they are in imminent dangers.

It is also important to point out that long-term access to documents is not necessarily an important consideration to librarians or to Microsoft engineers. But for archivists and records managers, we are risking our cultural heritage by putting all our eggs and documents and databases in one proprietary basket. By doing this, we are

setting ourselves up for a great danger. As software applications, operating systems and databases become obsolete and inaccessible, our culture is in great peril. Titanic 2020 will be imminent unless we wake up and realize the danger of using Microsoft's proprietary software for our vital records.

As they continue to improve and upgrade their programs, there is no guarantee that databases, spreadsheets and word documents created in today's programs will be accessible in tomorrow's programs. This is a tremendous risk and we must be skeptical of their philanthropy. Carnegie in his "Gospel of Wealth" essay writes persuasively comparing wise philanthropy with indiscriminate charity stating that:

Those who would administer wisely, must, indeed, be wise; for one of the serious obstacles to the improvement of our race is indiscriminate charity. It were better for mankind that the millions of the rich were thrown into the sea than so spent as to encourage the slothful, the drunken, the unworthy. Of every thousand dollars spent in so-called charity to-day, it is probable that nine hundred and fifty dollars is unwisely spent-- so spent, indeed, as to produce the very evils which it hopes to mitigate or cure. (Carnegie, 1933, p. 14)

Meanwhile, Microsoft through the Gates Foundation seems to be generously and selflessly donating its software to public libraries. On closer examination, though, we must be skeptical and understand that this is not philanthropy, and it is certainly not wise. In actuality, this is a marketing or public relations scheme that has a very limited lifespan and carries great risk.

Microsoft is using its software in an attempt to get libraries to continue using their patented technologies now—and well into the future. As public libraries become familiar with their patented methods used in Windows operating systems and various Microsoft applications, we are risking our cultural heritage. By agreeing to their policies (e.g. their End-User License Agreements) we are allowing Microsoft's problematic, buggy and proprietary software to control the libraries. Since libraries are not planning for the

future, the decisions they make today will allow Microsoft to continue using libraries as marketing tools for their newest software and operating systems.

Carnegie continues his “Gospel of Wealth” essay by stating that:

Those who have surplus wealth give millions every year which produce more evil than good, and really retard the progress of the people, because most of the forms in vogue to-day for benefiting mankind only tend to spread among the poor a spirit of dependence upon alms, when what is essential for progress is that they should be inspired to depend upon their own exertions. (Carnegie, 1933, p. 20).

Through the Gates Foundation, Microsoft is retarding the progress of people by encouraging them to use its limited-edition proprietary software. This is an extremely important point as the Gates Foundation is donating software which is in vogue today, but will be obsolete in three years or less.

Carnegie continues by writing of the noble pursuit of true philanthropists, stating:

The administrator of wealth makes a good use of a part of his surplus if he replaces that building with a permanent structure of brick, stone, or granite, up whose sides the honeysuckle and columbine may climb, and from whose tower the sweet-tolling bell may sound. The millionaire should not figure out how cheaply this structure can be built, but how perfect it can be made. If he has the money, it should be made a gem, for the educating influence of a pure and noble specimen of architecture, built, as the pyramids were built, to stand for ages, is not to be measured by dollars.
(Carnegie, 1933, p. 35-36).

While Carnegie, the man who made his fortune in steel, built his free libraries out of strong concrete that continue to stand more than a century after they opened, Gates knows that Microsoft’s software applications and operating systems have a limited lifespan and will need to be regularly updated and upgraded. While Gates was able to publish two versions of his autobiography, *The Road Ahead*, many librarians, archivists and records managers do not have the luxury or the ability to preserve and rewrite history when convenient. The decisions libraries and archives make today will have

long-lasting implications. When they lose access to their vital records, they have lost large and vitally important pieces of history.

Fortunately, some governments are beginning to wake up to the dangers of Microsoft's takeover of the public access computers. Peru and the Commonwealth of Massachusetts have both stated their inclination to focus on open source software solutions for long-term access. Open Source and Free Software Foundations can provide answers without forcing institutions to sign over the rights to their documents to a third-party who owns the software.

While other companies such as Adobe-- with their PDF format-- have stated that they will support their proprietary formats for up to 25 years, Microsoft makes no such assurances. In actuality, Microsoft's entire market strategy has always been based on the idea of forced obsolescence and vendor lock-in. By bundling new applications to their operating systems and forcing their customers to buy upgrades and newer versions of their applications, Microsoft is able to protect its monopolies over libraries' public access computers. However, libraries must wake up and recognize the grave and gathering danger. Whether it is called the "Digital Dark Ages" or "Titanic 2020" or something else, we are facing a very severe problem.

By creating and preserving all our documents in one company's proprietary software which is still owned by Microsoft, libraries are giving away their records to a third party. Without Microsoft's approval and assistance, documents created in one patched version of Word might well be inaccessible to future versions of Office Word. There is no guarantee that Microsoft will provide this assistance because, according to their end user licensing agreements, Microsoft owns the software and the users merely license it.

In this regard, Microsoft is providing libraries with access to their software, but first they are using an inflated value and then they are suggesting that by agreeing to the

very restrictive End-User License Agreements, libraries are willingly accepting the fact that many of their vital records will not be freely accessible in the future.

The point of this paper is simply that librarians and libraries must be careful in recognizing philanthropy. Even with the computer hardware and software and training and installation and documentation, the fact remains that libraries still have to come up with the funds to keep these computers connected to the Internet. Without sustaining grants from the Gates Foundation, the government or any other charitable organization, libraries are forced to transfer funds from one line item to another. In this way, the Gates Foundation grants might actually be having a detrimental effect on libraries.

Although Microsoft currently has a monopoly on computer operating systems and many Office programs, there is no guarantee that they will survive into the future. For this reason, it is imperative that libraries understand that they must be aggressive in fighting for and using non-proprietary formats and, perhaps more importantly, in arguing for the establishment of international standards for documents. Until this is done, it is almost ridiculous to claim that Bill Gates is a philanthropist. In actuality, he is using libraries to further Microsoft's monopoly and he is not even providing the funds necessary to help libraries stay connected.

Andrew Carnegie, on the other hand, helped establish public libraries by forcing local governments to take control and responsibility for their free libraries. Ultimately, time will show that our records are in great peril because of our dependence on Microsoft's proprietary software—even though it is given to libraries for free. Because of the strings attached, this must not be passively accepted as philanthropy. The Gates Foundation is helping to spread the Microsoft Windows addiction, and the cost of this is unknowable until it is too late—and large parts of our cultural heritage and vital documents are irretrievably lost forever.

In some ways, this sounds like the way that America arms the world until one

country crosses a line and then they become an enemy. The great Texas comedian Bill Hicks summed up this relationship of America's strategy to arming the world. He stated:

I'm so sick of arming the world and then sending troops over to destroy the f-cking arms, you know what I mean? We keep arming these little countries, then we go and blow the s-it out of them. We're like the bullies of the world. We're like Jack Palance in the movie Shane, throwing the pistol at the sheep herder's feet:
'Pick it up.'
'I don't wanna pick it up mister, you'll shoot me.'
'Pick up the gun.'
'Mister, I don't want no trouble, huh. I just came down here to get some candy for my kids.... I ain't looking for no trouble, mister.'
'Pick up the gun.'
The sheep herder picks up the gun and "Boom, boom, boom."
'You all saw him. He had a gun.' (Hicks, 1997).

The Gates Foundation is using this same strategy. They provide libraries with hardware and software at extremely inflated values and they are praised for their enormous generosity, but as soon as somebody questions the small print in their End-User License Agreement which state that the "software is licensed, not sold" and that Microsoft is only liable for damages of up to \$5, they can claim, "You all saw it, they [the libraries] agreed to the EULA."

This is the world we live in. The Bill & Melinda Gates Foundation and Microsoft have vested interests that are very different from those of public libraries, librarians, records managers and archivists. Although the Gates Foundation was instrumental in helping to bridge the 1990s digital divide, they are now setting us up for a new and potentially more dangerous crisis. The new digital divide caused by the so-called generosity of the Gates Foundation philanthropy threatens to destroy our history with no corporate liability and no governmental regulations. In the absence of any oversight, Microsoft is setting the standard and ultimately controlling the market.

Andrew Carnegie provided money to build libraries and required that communities contribute funds for their upkeep. His philanthropy has stood the test of

time. Gates, through his charitable foundation, though, has forced libraries to regress and return to their proprietary and subscription roots. As the Windows of opportunity are closing and the Gates are locking, libraries, librarians, archives, archivists and, above all, records managers must wake up and understand that there is a very fine line between philanthropy and addiction.