

Software on the Island of Misfit Toys

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## Executive Summary

## Deck Nine

This is a featureless corridor similar to every other corridor on the ship. It curves away to starboard, and a gangway leads up. To port is the entrance to one of the ship's primary escape pods. The pod bulkhead is closed.

>LOOK

Note: Screenshot from the beginning of the game "Planetfall" by Steve Meretzky, ©1983 Infocom, Inc.

The above caption is from a text adventure computer game published in 1983. This game leads the player on an adventure using descriptive text and the player's responses to computer prompts. This game is no longer sold or supported by the publisher. In fact, it has been unavailable since December 31, 1996 (Scheyen, 1996 para. 1). The publisher has "abandoned" it.

Restrictive US copyright laws ensure that this game will not be released into the public domain for decades. Because of these laws, by the time this software can be legally copied, it will be long forgotten. Those of us who played it as teenagers will be babysitting our great grandchildren. We might describe Planetfall to them, but we won't be able to play it with them. However, if I decide to break the law and copy this game, I can acquaint my children with it. Later I can play it with my grandchildren, and perhaps they will expose my great-grandchildren to the joys of text adventures. These wonderful games will not be lost to the ravages of time, faulty memory, and degrading disks.

This paper will illustrate what happens to software when it is no longer supported by its copyright holders and why new guidelines and laws must be created to regulate its distribution.

## Topic Definitions

### Abandonware Definitions

Abandonware: Software that is no longer being sold or supported by its publisher,

Copying and distributing abandonware without the permission of the copyright owner is illegal but still very common.

Activision – A large software and game company. Activision is licensed to make Star Trek and X-Men games.

Archiving – Placing or storing records of other documents of historical interest in a safe place.

Degrading media – Media are materials or techniques used to convey artistic thought.

Degrading Media are materials or techniques that are deteriorating over time.

E.g. – nitrate film or magnetic floppies.

Downloading – transferring data from a server to a personal computer.

End User – The person who is playing with this computer.

Generation Xer – a person born between 1963 and 1978.

Infocom – A software company that developed intricate text adventure games. Infocom was bought by Activision in 1986.

LC – Library of Congress

Obsolete program – a program that is no longer in general use

Out of Print – no longer available for sale by a publisher

Patches – Are computer programs written to allow old software to run on newer systems.

Software support – The software publisher’s help to run software.

Software distribution – Selling or downloading software so more and more people get it.

Text Adventure – A computer game where a player is presented with an elaborate simulated reality using only text. The player manipulates the game by responding to prompts from the computer.

### Legal Definitions

Sonny Bono Copyright Term Extension Act, or CTEA – An act of congress that extended the US copyright term by at 20 years.

Eldred v. Ashcroft – A case held before the US Supreme Court in 2003 challenging the Sonny Bono Copyright Term Extension Act (CTEA). The Supreme Court upheld the constitutionality of the CTEA.

Copyright – the exclusive right to copy granted by law.

Public Domain – works that anyone can be freely distributed because no one holds copyright.

### Ethics on the Island of Misfit Toys

In the 1964 classic Christmas television special *Rudolph the Red-Nosed Reindeer* (Nagashima & Roemer), there is an Island of Misfit Toys. This island is where all the toys that no one wants are brought to live. These toys are old, or broken, or don't work the way a child might expect. For instance there is a Charlie-in-the-box who isn't wanted because his name is Charlie and not Jack. There is a train with square wheels, and a doll who hasn't "any dreams left to dream." The island is ruled by King Moonracer who flies around the world every night looking for unwanted toys. He brings these unwanted toys to his island, and the toys remain there, longing for Santa to deliver them to children who will love them on Christmas Eve. The ethics question, of course, concerns Moonracer's theft of these toys from the children who rightfully own them.

The situation facing obsolete software is very similar to the situation of the toys on The Island of Misfit toys. This software is old, or incompatible with newer systems, or doesn't work the way paying consumers expect anymore. If no one copies and uses this software or writes patches to make it run on newer systems, the software will be lost forever. The ethics question, of course, concerns the software user's theft of these programs in violation of copyright laws.

## Abandonware's Relationship to Information Systems

There is no standard definition for abandonware, but it is normally considered to be older software that runs on older computers and is no longer offered for sale by its copyright holder. It is part of the large system of software in the computer industry, but it stands alone because it is no longer supported or sold. According to US copyright laws, this kind of software is illegal to download. When a company no longer sells or supports a piece of software, the company obviously does not intend to make money from it anymore, but the company still owns the software and downloading or distributing it is illegal.



Leather Goddesses of Phobos by Steve Meretzky,  
©1986 Infocom, Inc

For example, Adobe no longer sells the graphics program Streamline. So would it be wrong, for instance, to take a copy of Adobe Streamline and share it freely on the Internet? In another example, Activision no longer sells the Zork text adventure series. Would it be wrong to copy or download the entire Zork series? Zork started in the Mainframe days,<sup>1</sup> when no one owned a “Personal Computer.” I believe the answer is different for these two situations.

Adobe invested a great deal of money into Adobe Streamline and has incorporated many of the features of Adobe Streamline into their current product, Illustrator CS. According to the Adobe web-site: “Adobe has discontinued the sale and

<sup>1</sup> Dungeon was created at the Programming Technology Division of the MIT Laboratory for Computer Science by Tim Anderson, Marc Blank, Bruce Daniels, and Dave Lebling. It was inspired by the Adventure game of Crowther and Woods, and the Dungeons and Dragons game of Gygax and Arneson. The original version was written in MDL (alias MUDDLE). The current version was translated from MDL into FORTRAN IV by a somewhat paranoid DEC engineer who prefers to remain anonymous (a C translation of this now exists as well) (Scheyen, 1996).

development of Adobe® Streamline™ software. New, more powerful tracing capabilities have been integrated into Adobe Illustrator® CS2 software” (2007). Adobe expects modern computer users will appreciate the enhanced features available in Illustrator CS. It is a new and improved program with the features of Streamline integrated into it. If people exchange their older Streamline products freely, that diminishes the market of those who might want to buy Adobe’s newer product. Adobe still integrates Streamline into the programs it sells and supports. Streamline is not abandoned. It is illegal and ethically wrong to copy and distribute Adobe Streamline.

On the other hand, Activision, who purchased Infocom, last released old Infocom titles like Zork and Planetfall in 1996. That was over ten years ago when Windows 95 was running on x86 PCs and System 7.5.5 was running on Macintosh Computers. Only names and characters from these games have been integrated into newer software, the most recent being Zork: Grand Inquisitor released in 1997 (also now abandoned). These programs relied on a DOS OS file, ANSI.SYS, and need patches to run on newer systems. Activision is not writing these patches. These programs have been abandoned. It is illegal to copy these programs, but is it wrong?

#### Historical Abandonment

”The world is changed. I feel it in the water. I feel it in the Earth. I smell it in the air. Much that once was is lost for none now live who remember it. . . . And some things that should not have been forgotten were lost. History became legend. Legend became myth” The Lady Galadriel (Jackson, Peter. 2001).

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The above quote begins the *Fellowship of the Ring* a movie directed by Peter Jackson. The quote is lamenting about how “things” get lost with the passing of time. Middle Earth is mythological, and hasn’t really lost much, if anything, from the time Tolkien conceived it and Peter Jackson filmed it. In contrast, our Earth is real, and things that are important or worthwhile have really been lost over the course of time. Three examples of this kind of loss are languages and with them cultures, musical recording, and old movies. All three of these examples illustrate what happens when “things that should not have been forgotten” are lost.

### Lost Forever: Languages

A language is considered dead when there are no native speakers (Halpern, 2001, p. 13). Most Native American languages are dead, and historians lament the fact that these tribes had no written language. We don’t know who they were or what they thought. We will never recite the poetry that stirred their hearts. And since there are no records, these Native American languages are lost forever. They are either dead or dying. However this fate can be avoided. As long as there are some records of the language, there is a possibility of rebirth or at least of remembrance.

Hebrew is an example of the phenomenon of rebirth. The Hebrew language was dead, but after centuries, it was revived and given new life by Eliezer Ben-Yehuda who brought up his son, Ben-Zion Ben-Yehuda, as its first native speaker in modern times. Now more than five million people speak Hebrew as their mother tongue (Gordon, 2006).

Latin and Old English are examples of remembrance. Copying and recopying old words have kept the thoughts and deeds of earlier times alive. With Vergil, we can

say: “Arma virumque cano, Trajae qui primus ab oris” (Virgil, The Aeneid). “I chant of deeds of arms and men, of Troy who first from sea. . .” In the same way we can speak with Virgil, we can imagine with Chaucer, “With him ther was his sone, a yong Squyer, A lovyere, and a lusty bacheler, (Robert Shafer’s (1924) From Beowulf to Thomas Hardy. P. 73). The beauty and the fun of these stories would be lost if our forefathers and foremothers had not taken pains to copy them from deteriorating media before the pages of the antique scrolls and books fell apart.

#### Lost Forever: Music

Generation Xer’s grandparents were dancing to Louis Armstrong in 1933. Now, thanks to the same kinds of restrictive copyright laws that are affecting old software, recordings of Armstrong’s music could be lost forever. According to Joel Rose of “All things Considered” on NPR news, “The Library of Congress commissioned a team to find out just how many [older music recordings] are out of print. The report -- released in August -- suggests that over 70 percent of American music recorded before 1965 is not legally available in the United States” (Rose, January 9, 2006). Tragically, this music is stored on degrading media and if there is no intervention that preserves it, these recordings will be lost forever. My great-grandchildren will be fortunate if this generation takes the needed steps to allow them the joy of hearing Louis Armstrong and Maggie Jones sing “Hear the thunder rolling, See the lightening flash.”

#### Lost Forever: Movies

Movies are in the same situation. In fact according to Garrett Levin and Megan Ristau, Duke University, 2005:

Indeed, the Library of Congress declared that it is in the task of restoring these orphan films that “the urgency may be the greatest” They include a vast treasure trove of newsreels, documentaries, anthropological films, portraits of minority life in the U.S., instructional films, and even some Hollywood studio productions. While it is both a tragic shame and an unnecessary loss to our culture that scholars and citizens are hampered in making use, for example, of orphan books and musical scores, the difficulty of access to orphan files is a matter of crisis because these works are literally disintegrating.

Old movies were recorded on nitrate film, and the film is literally turning to dust. If the copyright laws are not changed so that these films can be restored, they will disappear forever.

#### Lost Forever: Software

There is still some hope for abandoned software. Keeping copies of old software, and using, and enjoying it is the only way to keep that software alive. However, If the programs go unused and are not copied to new media they, like most languages of Native Americans, will be lost forever. However if they are copied from deteriorating media to newer media time after time as the years pass, they will be available to our great-grandchildren as Virgil and Chaucer are available to us.

## Organizational Impacts and Issues

### Distributors Responsibility to Support and Maintain

There is no law saying that a copyright holder must support, maintain, or archive old software. Obviously companies should not be required to support and maintain all the software they ever developed. However, there is a cultural and historical responsibility to ensure that any software not released for sale or public use is archived and the archival media periodically renewed.

If there was a law requiring companies to archive old software or release it, a company, such as Adobe, would spend the necessary money to archive products like Streamline to protect their current software. However companies that are allowing old software to degenerate on media with a shorter shelf life than nitrate based films, would rather release the products to the public than incur the expenses of archiving. Once in the public domain, this software will be archived by any number of organizations. This solution could save products that are useful for historical research.

## Rights and responsibilities

### Archivists

Rights and responsibilities are different for the many different types of consumers. Libraries and Archives do have rights to copy some media. According to June Beserk for the Council on Library and Information resources, December 2005:

As discussed in section 2.4.2, a qualifying library or archives may make up to three copies of an unpublished work in its collection for preservation and security or for deposit and research use at another library. A library

may also make up to three copies of a published work to replace one that is damaged, deteriorating, lost, or stolen, or whose format has become obsolete, if the library determines, after “reasonable effort,” that an unused original cannot be obtained at a fair price. The copies may be in digital form, but a digital copy made pursuant to these provisions may not be made available outside the library premises. (Besek, section 4).

However this right is severely limited by requirements in the law. According to the same report, section 6:

Preservation efforts with respect to pre-1972 sound recordings are hampered by legal restrictions. For example, a work is considered to be in an “obsolete” format, eligible for preservation copying, only if the device necessary to play it is no longer “commercially available.” Under this formulation, even LP and 78-rpm records are not eligible for copying as “obsolete,” since turntables can still be purchased, even though they are no longer commonly used (Besek, section 6).

### End User

End users have the responsibility to respect copyright laws. This isn't always easy. My husband, for example, recently bought a computer he could only dream of ten years ago. He was doing some serious text document searches and could not find a modern program that outperformed BBEdit Lite. For what he needed, an old Mac running an old system would outperform his new Dell laptop. We browsed eBay and found the computer and most of the software he needed. However some of the software was not available used. In these cases, he found copies of the software on-line and as

often as possible tried to purchase and register. Even finding the people who would accept registration money and send unlock codes was almost impossible. In one case, the developer sent a nice email explaining that he was no longer accepting registration and to enjoy the product (see Appendix C). Thankfully, finding old software (with original packaging) on eBay for most of programs he needed was possible with this 10-year-old computer. But what will happen in twenty years if he gets a Lisa? It is possible that the only way to get an old computer running will be to break copyright laws.



Note: In this screenshot of my husband's Macintosh Classic, every visible program can be considered abandoned.

A similar situation exists for our Infocom games. Several years ago, once again on eBay, we spent over seventy-five dollars on Activision's re-release of Infocom's text adventures. The set, "Masterpieces of Infocom," included both Zork and Planetfall. This game set was in an upopened box. It was new in the box. However certain documentation required for the games was missing in Activision's re-release of the

Infocom products. My husband downloaded these missing pieces from an abandonware site. Was he wrong to do this? Legally, he was. But ethically, I'm not sure if he did anything wrong. I felt Activision had a responsibility to release a usable product with the re-release of the Infocom games, and that downloading the additional information he needed to play was not wrong.

Our responsibility as end users is to respect copyright laws. Sometimes trying to do this is very frustrating. When faced with the choice of not having the software at all or breaking the law, we sometimes choose to break the law. The laws need to be changed so that people are able to legally use the programs that are so readily available on-line, and so that old programs will not be lost to the ravages of time and faulty memory.

#### Future of Software Copyright Laws

The problem is well documented. Fabulous things that are part of American culture are disappearing because the owners of their copyrights don't see any financial incentive to restore, release, or archive them. Abandonware is one example. Only changing the laws will keep worthwhile programs from being lost forever. If current copyright laws stay in place the only way to save abandoned software is to break the law and copy it. See appendix B for an example of one petition to change the laws and reclaim the public domain.

#### Conclusion

Old software is out there, unwanted and unused by the copyright owners. Changing the copyright laws so they more reasonably reflect the reality of the software industry will allow us to preserve this software for future generations.

Archives and Libraries, businesses, and private individuals all have a responsibility to ensure that the cultural heritage of our nation is not lost. This cultural heritage includes old computer games and software. Samuel Brylawski, Library of Congress and Abby Smith, Council on Library and Information Resources condensed the issue into a few sentences in the forward they wrote to the report *Survey of Reissues of US Recordings*:

The responsibility for ensuring long-term access to the sound heritage of this nation rests with many communities and organizations, public and private, technical and legal, scholarly and popular – indeed, with all who care about recorded sound. LC and NRPB hope that this report, and those that follow, will enable those involved to work from a common pool of knowledge and expertise toward solutions that will benefit all. (2005, P. 6)

Only if more people begin to feel this way will our great-grandchildren be able to “Dream the dream” written in Magnetic Windows.

***Dream the dream...***

**EVERYONE HAS READ WONDERLAND...BUT ONLY ONE HAS DREAMED IT... UNTIL NOW!**

**The newest and largest-ever adventure from Magnetic Scrolls draws you into the bizarre logic of Lewis Carroll's spellbinding imagination. Here you will meet all the main characters from the book - the Mad Hatter, the giant caterpillar, the Queen of Hearts, the Duchess and her cook...**

**Here, too, you will be confronted by puzzles, puns, and conundrums, potions and mushrooms, a giant puppy and a miniature tunnel, and challenges enough to keep you within Wonderland's perplexing and magical domains for hundreds of hours.**

**Wonderland - written in Magnetic Windows, the radical new adventuring environment from Magnetic Scrolls - gives you over 100 stunning graphics, many of them animated... but that's not all. A mouse click on an illustration reveals information about the objects shown. Pop-up menus of appropriate commands let you play with a minimum of typing. On-screen maps and help, multiple windows, and icons for every object and room in the adventure combine to make the most sophisticated environment ever created.**

Note: from <http://www.if-legends.org/~msmemorial/games.htm/wonder.htm>



## Bibliography/References

- Adobe. (2007). *Products: Adobe Streamline*. [Adobe cooperate web-site]  
<http://www.adobe.com/products/streamline/>
- Gelman, Lauren. (2003). Reclaim the Public Domain. *Petitions On-Line*. Retrieved  
 January 26, 2007 from <http://www.petitiononline.com/eldred/>
- Gordon, Raymond G., Jr. (ed.), 2005. *Ethnologue: Languages of the World*, Fifteenth  
 edition. Dallas, Tex.: SIL International. Online version:  
<http://www.ethnologue.com/>.
- Halpern, Mark. (Winter 2001). The End of Linguistics. *American Scholar*, v 70il p13.  
 Retrieved December 17, 2006, from Expanded Academic ASAP  
 database(A70872527).
- Jackson, Peter. (Director). (2001). *The Two Towers* [Motion picture]. United States:  
 New Line Cinema.
- Lessig, Lawrence. (2004, April). How I Lost the Big One. *Legal Affairs*. Retrieved  
 January 15, 2007 from [http://www.legalaffairs.org/issues/March-April-  
 2004/story\\_lessig\\_marapr04.msp](http://www.legalaffairs.org/issues/March-April-2004/story_lessig_marapr04.msp)
- Levin, Garrett and Ristau, Megan. (2005, March). Access to Orphan Films *Duke Center  
 for the Study of the Public Domain*. Retrieved January 26, 2007 from  
<http://www.law.duke.edu/cspd/pdf/cspdorphanfilm.pdf> March 2005
- Meretzky, Steve. (1983). *Planetfall* [Computer Software]. Cambridge: Infocom.
- Nagashima, Kizo & Roemer, Larry. (Directors). (1964). *Rudolph, the Red-Nosed  
 Reindeer* [Television Broadcast]. United States: General Electric Fantasy Hour.

Rose, Joel. (January 9, 2006). Copyright Laws Severely Limit the Availability of Music.

*All Things Considered*. Retrieved January 19, 2007 from

<http://www.npr.org/templates/story/story.php?storyId=5139522>

Scheyen Peter. (1996, January). *Dungeon (Zork)*. Retrieved January 26, 2007 from

<http://www.csd.uwo.ca/Infocom/dungeon.html>

Scheyen, Peter. (1997, February). *Masterpieces of Infocom*. Retrieved January 26,

2007 from <http://www.csd.uwo.ca/Infocom/masterpieces.html>

US Copyright Office. (1998). Copyright Law of the United States of America and

Related Laws Contained in Title 17 of the *United States Code* Circular 92.

Retrieved January 19, 2007 from

<http://www.copyright.gov/title17/92chap3.html#3-6>

Virgil. (19 BC). *Virgil's Aeneid*, 1930. (Clyde Pharr, Ed.). Boston: D. C. Heath and Company

## Appendix A: Reclaim the Public Domain

**Reclaim the Public Domain**

[View Current Signatures](#) - [Sign the Petition](#)

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To: Members of the United States Congress

We, the undersigned, while believing in the importance of copyright, also believe in the importance of the public domain. We believe the public domain is crucial to the spread of knowledge and culture, and crucial in assuring access to our past. We therefore write to petition you to reconsider major changes that you have made to the copyright system. These changes unnecessarily threaten the public domain without any corresponding benefit to copyright holders.

In 1998, Congress passed the Sonny Bono Copyright Term Extension Act (CTEA). That Act extended the term of all existing copyrights by 20 years. But as Justice Breyer calculated, only 2% of the work copyrighted during the initial 20 years affected by this statute has any continuing commercial value at all. The balance has disappeared from the commercial marketplace, and, we fear, could disappear from our culture generally.

For example: The vast majority of film created during the 1920s and 1930s is not commercially available. Because of the CTEA, much of it remains under copyright. Yet because it is often impossible to track down the copyright owners for these films, commercial and noncommercial preservationist and distributors cannot safely restore and distribute these films. And because these films were made from nitrate-based stock, by the time the copyright to these films expire, most of them will have dissolved.

The same is true with many other copyrighted works that are no longer commercially available. Though the Internet could facilitate the distribution of this work if the copyright owners could be identified, the costs of locating these copyright owners is wildly prohibitive. Schools and libraries are thus denied access to works that otherwise could be made available at a very low cost.

Such burdens on access to work that has no continuing commercial value serves no legitimate copyright purpose. It certainly does not "promote the Progress of Science" as the Constitution requires. We therefore ask Congress to consider changes to the current regime that would free unused content from continued regulation, while respecting the rights of existing copyright owners.

One solution in particular that we ask Congress to consider is the Public Domain Enhancement Act. [See http://eldred.cc](http://eldred.cc) This statute would require American copyright owners to pay a very low fee (for example, \$1) fifty years after a copyrighted work was published. If the owner pays the fee, the copyright will continue for whatever duration Congress sets. But if the copyright is not worth even \$1 to the owner, then we believe the

work should pass into the public domain.

This legislation would strengthen the public domain without burdening copyright owners. It would also help clarify rights over copyrighted material, which in turn would enable reuse of that material. The law could thus help restore balance to the protection of copyright, and support the public domain.

We therefore call upon Congress to introduce this legislation, and to hold hearings on the benefits that it might have to reviving a vibrant public domain.

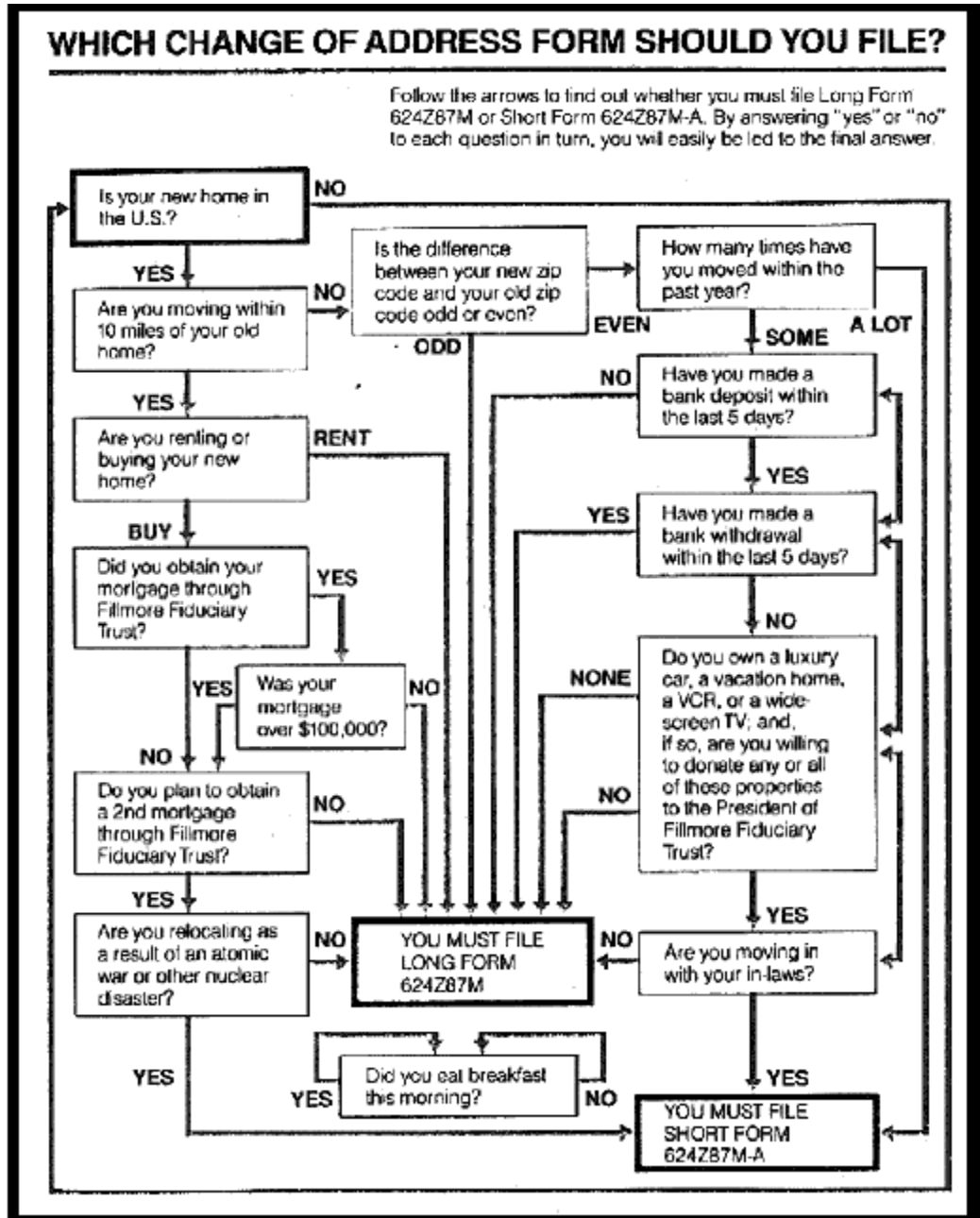
When technologists have given us a tool that could spread knowledge universally, we should not allow the law to get in the way. The law does so now. This Congress should change it.

Sincerely,

[The Undersigned](#)

[View Current Signatures](#)

Appendix B: Can Humanity Afford to Lose This?



Note: from Bureaucracy (1987) Infocom.

Appendix C: E-Mail from Script Software

From: julian miller <[info@scriptsoftware.com](mailto:info@scriptsoftware.com)>  
To: [speters33w@yahoo.co.uk](mailto:speters33w@yahoo.co.uk)  
Sent: Saturday, 6 January, 2007 4:23:41 PM  
Subject: isearch

hi stephan,

i am just traveling and found your email. sorry about the delay. no, we don't. i haven't even seen isearch in a long time since on os x there is spotlight. glad you enjoy it though. all the best.

julian

> ----- Forwarded Message

> From: "Stephan Peters" <[speters33w@yahoo.co.uk](mailto:speters33w@yahoo.co.uk)>

> Date: Mon, 25 Dec 2006 17:12:16 -0800

> To: "Julian Miller" <[info@scriptsoftware.com](mailto:info@scriptsoftware.com)>

> Subject: Inquiry from Script Software

>

> [Subject ]: Question

> [Product ]: iSearch

> [Version ]: 1.2.1b

> [OS ]: Mac OS 8.1

> [Hardware]: 68040 Color Classic

>

> [Comments]:

> Are you still accepting registrations for iSearch (was \$10.00)

>

> I am finding it MOST useful.

>

\* // \* iStar Composer, CopyPaste, iKey, iClock, Easy Card,

\* \\ \* iWatermark, iBeenFramed, Project Timer Pro, NetCheck,

\* // \* iSay, iStar Karaoke, KnowledgeMiner, ID Tunes, ChatFX

\* \\ \* <http://www.scriptsoftware.com>

