

**Problem 1.4.6 Digital Property and Forensics**

Introduction

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| In Geroge Orwell’s book *1984*, brutal thought police control all of the citizens in a dystopian “future” through unconscionable breaches of privacy made possible by technology.  Today we witness unprecedented freedom and ability to design, create, and modify. We enjoy countless creature comforts and quality of life improvements thanks to technology. The same technology has increased the ability of government and industry to track the ideas exchanged by people, as well as to enforce intellectual property laws. Do we need property rights for ideas? | <http://office.microsoft.com/en-us/images/results.aspx?qu=court&ex=2#ai:MP900385346|> |

Materials

* *Blown to Bits* by Hal Abelson, Ken Ledeed, and Harry Lewis, available at <http://www.bitsbook.com/excerpts/>
* Computer with Internet access

Procedure

1. Skim the questions in this activity, especially the debate resolution at the end. Read “Chapter 6: Balance Toppled: Who Owns the Bits?” in *Blown to Bits*. Respond to the following questions indvidually, supporting your answers with information from the text.
2. Consider the text beginning with the second to last paragraph on page 210 of *Blown to Bits* and extending though page 215. Journal about whether you believe U.S. citizens have appropriate rights where the use of digital data is concerned.

Digital Rights Management(DRM) is used to restrict the digital rights of people, hence the name. Because of this, the question becomes do DRMs reduce the rights of people too much? The answer to this question is yes. One restriction that has come up in recent years is the use of TPMs that restrict altercations of operating systems. If one wants to change an OS, it is their right to do so. They bought the OS, they get to do with it what they please. It’s just like if you buy a couch or a door or a lightbulb. You can take that apart and change it to your liking. Another fact is that by using DRMs, unilaterally, the control of content has gone as B2B says “far beyond the bounds of copyright law.” By doing this, corporations are monopolizing by restricting the applications available (by using certificates, encryption, etc) and creating a “technology lock-in” that creates an anticompetitive atmosphere that perpetuates the OS owner’s company. This not allowing for competitiveness and creation stifles economic growth; which in turn causes the hegemony of the united states to decline. By decreasing united states hegemony, the world goes into a nuclear power war, producing the hegemony of the cockroach. If you buy the program, you should have the rights to copy it to your device and other devices – that you own – as you please. This is the way that a stamp works. You buy the stamp and ink (program and memory) and you can use it on your own paper (devices) as long as you don’t stamp it onto someone else’s paper.

1. Consider the information about how U.S. laws may be promoting unsavory business practice in“Copyright Protection or Competition Avoidance?” beginning on page 215 of *Blown to Bits*. Journal about your beliefs regarding balancing the protection of digital work property rights versus safeguarding against anti-competitive practice.

The ability to use the DMCA to regulate certain technologies (like garages) is ludicrous, however it shows a side of the DMCA that needs to be evaluated. We find it ludicrous to say that a garage door opener is evading the control of a garage door. But the real issue is not controlling an object but rather controlling the property. Patents work similarly. When you have a patent, you can control it fully as you wish. You created it, you control it. The same thing applies here. DMCA is literally a digital patent law. It allows you to control your work and regulate it. It will create some anti-competitive practices; however, patents do the same thing. No one else can create a Dyson vacuum, because Dyson owns the patents to the Dyson vacuum, but that doesn't mean people can't make other vacuums that work just as well. That doesn't mean that people can't use a Dyson vacuum, it just means they have to PAY for a vacuum. And remember, "you wouldn't download a car."

1. After reading pages 219 through 222 of *Blown to Bits*, summarize what you believe about whether creativity is supported and safeguarded in U.S. laws.

No. Creativity is not supported and safeguarded. Only corporations are supported, because as we all know, Corporations are the only ones that really matter. They were first therefore they get what they want. Too bad they forgot that we are having a redo of what happened when the English settled in North America. That's right, we're the English, they're the native americans. Anyways, creativity is not supported but creators are. If you DO create something before anyone else, you get sole rights to that (if you're a corporation). So yes and no. Like the copyright law, the answer is a little murky.

Though the digital explosion has made it easy for distribution of materials across the world, it is still technically illegal to do so under US laws; therefore the strong answer here is no, but naturally the enforcement of such laws is a trivial matter and thus it is often not done. The quote "my first-grade teacher told me I should share, and now they're telling me it's illegal" is quite great.

1. **Metadata** is information contained within a digital file, such as

* Date file was created
* Location of file creation (e.g., some cameras tag photos with location)
* Type of file
* Serial number of the device used License number of the software used

Medadata is available to the computer, the software it runs, and people who know how to read it.

1. Use the Internet to find five other examples of what metadata might reveal and record them here.

Reason for creation

Creator/author

Standards used in creation

Language of content

Description of the content

1. Describe how metadata can be used in the investigation of crimes, including theft.

Metadata can be used to trace the users that have downloaded and uploaded pirated files. It could also be used to trace the creator of the file as well to find the real criminal.

1. Respond to one of the following two writing prompts.
   * 1. Describe what should be done, if anything, to further protect the identities and privacy of people using digital technologies. Provide support for your answer. In addition, acknowledge potential pitfalls (e.g., conveniences we might lose).
     2. Describe a real or imagined society where digital technology rights and laws are abused and/or enforced for human benefit. Comment on both the negative and positive aspects of this society as you describe it.

By abusing the laws that say that we cannot share media, information flourishes and there is a Renaissance. There are no downsides. Marxism, bruh. Negatives of this are the non-ownership of intellectual property. Instead, the material belongs to society. I suppose there is one downside in that it might stifle creativity as it does not produce a competitive environment, but regardless, people will create whether there is or is not a reward, i.e. copyright. Everyone’s rights would be to access, duplicate, create, and change digital property and technology.

1. Form debate teams as instructed by your teacher. Your teacher will assign you to the affirmative or negative sides of the debate. These sides, respectively, will support or oppose the following resolution:

*Resolved: That the United States federal government should significantly increase the protection afforded to property rights for those who create and distribute digital products.*

With your partner, prepare a 4-minute speech for your position. Also prepare an outline for additional arguments that could be used for follow up.

Prepare to debate the issue against another team as directed by your teacher. One possible structure is as follows:

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| Affirmative | 3-minute speech supporting the resolution |
| Negative | 3-minute speech opposing the resolution |
| Preparation | 2 minutes for teams to prepare follow-up speeches |
| Affirmative | 2-minute speech supporting their case and responding to the Negative team’s arguments |
| Negative | 2-minute speech opposing the Affirmative team’s case and responding to Affirmative arguments |

Conclusion

1. How did you feel about digital privacy before this activity? How has your understanding of digital privacy changed?

Before the activity, I didn’t really think much about digital privacy. I thought “eh, that’s fine.” I thought my digital privacy was alright. After this activity, I have learned that that simply may not be the case. Just the other day, I read an article that Android apps have bugs that cause them to be surveiling while the user thinks the phone is off. Digital privacy is under attack and it is not for the better. Privacy is all we have.

1. How did you feel about copyright law before this activity? How has your understanding of copyright law changed?

Before the activity, I was already pretty angry about copyright law. The copyright law is a jumbled mess as I learned, much more a mess than I thought it was. That agricultural aspect. The ability to own the right to POSESS but not EXAMINE the bits of a program was eyeopening.

1. In one or two paragraphs, summarize who gets to own what sort of bits in the United States.

In the united states ownership of bits is held by the creator. The right to use the bits is owned by anyone; however, the bits themselves are the ownership of the creator. By copying the bits, one is infringing their copyright. By looking at the bits, one is infringing their copyright. Without any doubt, all bits are owned by the creators, regardless of whether or not we think it to be that way.