

Cybercrime

UNDERSTANDING THE LIMITS OF LAW

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Plagiarism Declaration

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Signed: Jack Donoghue Date: 26/10/2016

Introduction

In this assignment I plan to cover the relevance and power of Irish criminal law, I will compare the severity and lenience of Irish law when contrasted against other jurisdictions such as The United States of America and the United Kingdom. The main focus of this assignment will be around topics such as software copyright and protection, as well as the topic of extradition and whether or not extradition is necessary in Ireland because of the lenience of Irish laws in relation to computer related crime. I will discuss these topics using case studies from both Ireland and foreign jurisdictions.

Interpretation

It is my view that the Irish criminal law is unreliable in its handling of cybercrime and computer related breaches of law, my areas of focus include software copyright and infringements and the associated crimes which include piracy, which in Ireland is insufficient in its punishment and handling of such crimes, in particular the crime of piracy in Ireland is relatively unenforced and struggles to have any impact on the problem, while this is the case in many other jurisdictions, it is particularly of note in Ireland as we seem to be consistently unable to enforce laws in this area making piracy related crime prevalent and almost unstoppable in the state. The area of extradition will be handled in this assignment also, It is a common theme in Ireland to see someone who has committed major cybercrime offences to be extradited to jurisdictions such as the United States of America as Ireland's relatively relaxed punishment of the area of cybercrime is damaging to countries who might be affected by the people committing the crimes upon foreign countries in Irish jurisdiction, as the Criminal Damage Act of 1991¹ states very broadly that to do any act within the State that damages property outside the State would be a breach of the act, however the act's broadness is also its downfall, as it covers many serious crimes with one broad statement, leaving it to be heavily interpreted which can lead to doubt in cases where the prosecuted is almost certainly guilty, it is this doubt that prompts the USA to request an extradition so that they can ensure that the person is given a trial in a jurisdiction that can hand out both the right decision and the proper punishment.

¹ <http://www.irishstatutebook.ie/eli/1991/act/31/section/1/enacted/en/html#sec1>

Extradition

Ireland and the United States of America currently exercise an extradition treaty which allows both countries to request that a person who is currently living or otherwise contained be brought to the respective country to be trialed for crimes committed in or against that country. While the treaty is usually only exercised by the USA it is arguably because it is more likely for the USA to not only prosecute a person, but the amount of time that will come with the prosecution is also likely to be much more severe than with Irish laws, this disparity in law severity can be seen in the way both countries deal with the definition 'life sentence', while in Ireland someone who is given a life sentence can expect a maximum sentence of around 22 years, while depending on the state in America life sentences can be handed out with a minimum time to serve and an indefinite sentence for example you could receive a sentence of '25 years to life' which means that you must serve 25 years but could be held for the rest of your life, depending on context and the offence. In the case of *Attorney General v. Gary Davis* [2016]² Gary Davis had a warrant for his arrest issued by the United States Magistrate in 2014, the crimes of which he was accused were

- i. Count 1: Conspiracy to distribute narcotics in violation of 21 U.S.C. 841(h), 812, 841(a)(1), 841(b)(1)(A) and 846, which carries a maximum penalty of life imprisonment;
- ii. Count 2: Conspiracy to commit computer hacking in violation of 18 U.S.C. 1030(a)(2) and 1030(b), which carries a maximum penalty of five years imprisonment; and
- iii. Count 3: Conspiracy to commit money laundering in violation of 18 U.S.C. 1956(a)(1)(A)(i), 1956(a)(1)(B)(i) and 1956(h), which carries a maximum penalty of twenty years imprisonment.

This case is infamous as it was part of a string of arrests relating to the infamous Silk Road 'dark web' website which sold and distributed drugs, guns, ammunition and even hitmen for hire. Gary Davis was also accused of a string of hacking offences, in this particular case study, I would like to compare how Irish law compares with the American law to show the potential holes in cybercrime related law in Ireland.

² <http://courts.ie/Judgments.nsf/0/463B48AC97055F7C80258018003DBCE8>

Irish law tends to broadly overlap when it comes to how it defines damage to a computer, it clearly states the potential punishment of physically damaging a computer, however it does not take into account how a computer and its parts can be physically damaged by the use of viruses sent from other computers or stored in misleading adware³, this allows hackers and script writers to evade the much harsher punishments⁴ that would be faced by a person who were to physically damage a person's property or commit arson⁵, however in many cases the damage done by hackers and viruses to computers is often irreversible and much more dangerous than physically damaging a computer, they can obtain sensitive personal information from your computer and often times you would be unaware of the viruses presence. America outlines their laws on the use and abuses on computers and how they should be punished or treated in this section of the Computer Fraud and Abuse Act 18 U.S. Code § 1030⁶ - Fraud and related activity in connection with computers. This section covers a broad section of computerized offences however it also specifies particular offences which the Irish Criminal Damage Act doesn't deal with as thoroughly, for example the United States specify that certain laws relate to non-public computers -

“To intentionally, without authorization to access any non-public computer of a department or agency of the United States”

This distinction between non-public and public computers is missing from the Criminal Damage Act of 1991, this means that many people unknowingly may commit crimes involving the changing and accessing of data on public or company computers, things such as the installation and both addition and removal of data from public machines may be interpreted as illegal.

³ Adware also known as misleading ads with the intent of transferring viruses or potentially harmful malware

⁴ (a) on summary conviction, to a fine not exceeding £1,000 or imprisonment for a term not exceeding 12 months or both

⁵ (b) (1) in case the person is guilty of arson under *subsection (1)* or (3) or of an offence under *subsection (2)* (whether arson or not), to a fine or imprisonment for life or both, and

⁶ <https://www.law.cornell.edu/uscode/text/18/1030>

Software Copyright and Infringements

The increase in new software that simplifies and controls many of our everyday tasks has also seen an increase in the copying or replication of such programs, such programs can be worth hundreds of millions and take years to design and implement and while the people who work on these programs are paid adequately it is not uncommon to see replicas of copyrighted software available at discounted prices. A common practice for companies is to employ someone who has created the source code for a potential program, while this person does not have the resources or manpower to produce his program on his own he owns the source code that will be partially used in the program, the company will employ the person and give them all the resources and manpower required to produce the program, however the copyright of the product will belong to the company and the previous owner of the source code will receive some sort of compensation for his contribution. However as seen in the case of *Visusoft Ltd v Robert Harris*⁷ it was shown that companies who employ this practice may be left vulnerable to copyright infringement by the previous owner of the source code (in this case Robert Harris).

Robert Harris created software that could potentially be used in a large scale company environment, when he was then employed by Visusoft Ltd to fully produce a working version of his previous source code known as 'Risc 5' during his employment he successfully finished 'Datapos' and it was copyrighted by Visusoft as agreed previous to his employment, however in time after the termination of his employment it was revealed by Visusoft that Robert Harris was actively selling what he referred to as 'Risc 7' he claimed it was an updated version of his 'Risc 5' but Visusoft claimed that he had infringed on their copyrighted software. When copyright was first interpreted it was intended for things such as literary, musical and dramatic works which includes graphic and sculptural work and sound recordings⁸ however as computers and the use of computer programs became more prevalent and profitable computer programs and code could also be copyrighted, however the difficulty of proving copyright infringement in the case of computer code is compacted by the facts that computer code doesn't require the organization and order that something like a book needs to make sense, two computer programs can do the exact same thing one hundred different ways using the same code, making it very difficult to prove that certain software has been infringed upon. In this particular case both Robert Harris and Visusoft used expert witnesses to try and prove that the code was not similar and that it was almost identical respectively.

⁷ <http://courts.ie/Judgments.nsf/o/337Ao866783C1B68802576C0003B2D23>

⁸ <https://www.lib.purdue.edu/uco/CopyrightBasics/basics.html>

Copyright law

The Irish law deals with copyright under the Copyright and Related Rights Act, 2000 it is here that the term

“computer program” means a program which is original in that it is the author's own intellectual creation and includes any design materials used for the preparation of the program;⁹

This definition slightly damages Visusoft's claim that Mr. Harris's 'Risc 7' was copied from 'Datapos' as Mr. Harris was the person who conceived the creation of 'Datapos' by creating his own software 'Risc 5' from which it is agreed that 'Datapos' was created using the source code from 'Risc 5', while Visusoft have copyrighted 'Datapos' and contracts clearly state that the software was clearly only intended for strict private use by companies who purchased said software, Mr. Harris claimed that 'Risc 7' was his own personal project which was just the next iteration of 'Risc 5', the case was concluded that Robert Harris was not guilty of copyright infringement, however he was charged with breach of contract as he continued to hold source code relating to Visusoft's 'Datapos' after he was ordered to surrender all affiliations to the software. It is my belief that the copyright infringement on computer programs needs to be subjected to further scrutiny to ensure the rightful outcome of cases where computer programs have been subjected to infringement. I believe the United Kingdom's approach to what consists of copyright is necessary when computer programs are concerned

“Copying in relation to a literary, dramatic, musical or artistic work means reproducing the work in any material form. This includes storing the work in any medium by electronic means.”¹⁰

In this case I believe Robert Harris would have been guilty of storing 'Datapos' illegally on his computer when clearly instructed to remove such source code, as he did reproduce the work copyrighted by Visusoft for his personal use and scrutiny. It is clear that computer programs are vastly different than any other copyrightable source, yet the Irish law treats them as one, making it much more difficult to prove that someone who has refactored and added code to an existing piece of software is guilty of copyright infringement.

⁹ <http://www.irishstatutebook.ie/eli/2000/act/28/section/2/enacted/en/html#sec2>

¹⁰ <http://www.legislation.gov.uk/ukpga/1988/48/section/17>

Conclusion

I believe that Irish law while arguably fair and constitutional in most ways, fails to fully encapsulate the needs of the ever growing computer and cybercrime area, the definitions stated in the Criminal Damage Act 1991 are too broad to ensure the security of individual's devices and property, thus making extradition a necessary component in the process of justice in Ireland, to not only ensure that perpetrators are prosecuted but to also make sure that they are prosecuted to the maximum sentence deemed necessary by the extent of their offences. I am confident that in the coming years we will see changes and updates made to accommodate this growing area of cybercrime, but also to make safe the property of people who invest so much of their time into creating software that makes our lives simple and comfortable. I hope to see the necessary adjustments made to the Copyright and Related Acts, 2001 to guarantee that people's hard work and efforts are not squandered by people that take advantage of the flaws of copyright surrounding computer programming.

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