Ripped from the Headlines: What Can Popular Press Teach us about Software Piracy?

Abstract

Technological advances have outpaced the development of laws and norms to govern their acquisition and use. Software piracy is an instance of unauthorized duplication where laws and norms are not agreed upon. Although many articles have been written around the issue of software piracy, few have taken into consideration social and psychological aspects of the process. One barometer of the social environment is media coverage. This paper presents a content analysis (including actual quotes) of the five highest circulating U.S. newspapers 1989-2004 as evidence of the prevailing social environment surrounding software piracy. We classified the rationales for and against piracy using Fiske’s (1991) structures for social interaction and found that those who condone piracy mostly evoke authority ranking and market pricing models, whereas those who condemn piracy mostly evoke market pricing models. Furthermore, not all the rationales given for/against software piracy fit neatly into Sykes and Matza (1957) neutralization framework.
1.0 Introduction

The development of technologies has outpaced the development of laws and norms that regulate their acquisition and use. The unauthorized duplication of digital products is an instance of this problem. Digital products are information that “can be digitized—encoded as a stream of bits” (Shapiro and Varian 1999, p.3). Digital products are compact, portable, and can be used virtually anywhere. However, the unauthorized duplication of digital products has created a gray area in the ethical landscape, where some condone the practice as legitimate while others condemn the practice as outright theft. Software, as an instance of a digital product exemplifies this situation well.

Software piracy is defined as any reproduction of software that is in violation of its licensing agreement. The very term expresses a moral position, that espoused by the software industry. According to this view, piracy is stealing, it is a crime, and it is unethical. This is also the position expressed by the movie industry in ads against downloading films, another digital product. As ads on some currently sold DVDs state in subsequent frames and graphically: “You wouldn’t steal a car/ handbag/ television/ DVD.” The ads follow sequentially with “Downloading pirated films is stealing…Stealing is against the law…Piracy is a crime.” In opposition are those who question the immorality of software piracy, as well as its illegality. The question even arises as to whether software piracy is rightfully considered a moral issue at all.

The research reflects this moral ambiguity as well. Advocates of digital property rights like the Business Software Alliance (BSA) claim that “under the U.S. Copyright Law, anyone who reproduces a software program in violation of a license agreement is guilty of committing infringement [a.k.a. piracy]” (Majors 2005). Advocates of digital property rights maintain that digital piracy costs billions of dollars in revenues, wages, jobs, and taxes for the U.S.A. alone (Serafini 2001; AutoDesk 2002; Plagiarism.org; Business Software Alliance 2004). Evidence like this has led some researchers to construe piracy as a problem (Vitell and Davis 1990) and has led to proposed technical solutions to remedy its occurrences (Herzberg and Pinter 1987; Potlapally 2002; Naumovich and Memon 2003). This normative approach is also grounded in the legal argument that it is
unacceptable to copy software without authorization because it violates the rights of the software creator who does not sell ownership of the software but merely licenses its use.

On the other side of the issue, some literature has questioned the economic impacts of software piracy by arguing it can be beneficial for a producer to allow piracy for users who have a low willingness to pay (Takeyama 1994; Slive and Bernhardt 1998; Harbaugh and Khemka 2001; Jiang and Sarkar 2003). People who do not pay (in monetary terms) for software benefit the software producer by increasing the total number of users, thereby encouraging potential users (because of compatibility issues) to legally purchase the software product. Copying materials may also be acceptable because the consequences of the action have benefits in terms of knowledge sharing and societal advancement (Swinyard, Rinne and Kau 1990; Thong and Yap 1998). Unlike stealing of material goods, private individuals and law enforcement show a relatively high tolerance for software piracy\(^1\). The practice is also prevalent among certain subgroups. For example, according to Solomon and O'Brien (1991), piracy is blessed with high acceptance among at least some students and, e.g. : “nearly half of the students had never heard a faculty member speak against illegal copying…a quarter of the sampled students had heard a faculty member condone the copying of protected software” (p. 174). The moral ambiguity of software piracy is further highlighted by the research of Strikwerda and Ross (1992), Logsdon, Thompson and Reid (1994), and Glass and Wood (1996) who have shown that piracy is not viewed as an ethical issue by some. Individuals may approach duplication as a preference choice, with no principles, norms, or values being brought to bear on the decision (Glass and Wood 1996).

Because there are no agreed upon standards or norms to govern the acquisition and use of software, individuals are left to their own decision-making processes which vary significantly. To decide the issue of software duplication, an individual might consult the legal system (Laczniak 1983), review academic findings, or look for input from public opinion on the subject (Blasi 1980).

---

The first potential guide for ethical behavior is the legal perspective. However, the legal perspective is ambiguous in this area: “While the law in most countries is confusing and out of date…the legal position in the United States, for example, has been confused further by the widely varying judgments handed down by U.S. courts” (Forester and Morrison 1994, p. 7). The following excerpt of a law review details a few of the legal ambiguities.

*The peculiar nature of computer software is such that it eludes legal classification as a good or an intangible… the peculiar technology of the software industry is that many arrangements for the transfer of software resemble service contracts or are not structured as traditional sales… Software is unique because it has both tangible and intangible elements (Some aspects of computer software—such as written or printed program copies are printed forms of object and source code—clearly appear to be tangible. Other aspects of software—programmer’s function, internal design, and machine readable binary form stored in computer memory in the form of electrical signals or magnetization—seem to be intangible)…The current legal status of computer software is confusing and ambiguous and threatens to become even more so as new technology develops and computer use becomes more widespread. (Horovitz 1985, p. 130-144).*

In the absence of a clear, unified legal guideline (Burk 2004), an individual might look to academic findings on the subject. One approach taken in academic studies of piracy has been to implicitly adopt the corporate view: focusing on modeling the piracy behavior (Takeyama 1994; Slive and Bernhardt 1998), exploring individual differences (Doesn’t Everybody do it? 2001), and proposing technical solutions to reduce the behavior (Herzberg and Pinter 1987; Potlapally 2002; Naumovich and Memon 2003) including the development of pricing strategies that minimize piracy’s effect (Sundararajan 2003). Other research has been open to other perspectives, e.g., studying the disparity in copyright enforcement between groups and individuals (Harbaugh and Khemka 2001), and the possibility that piracy may be beneficial to software manufacturers (Conner and Rumelt 1991; Jiang and Sarkar 2003). Thus, the moral ambiguity of software manifests itself in both the legal arena and the academic literature.

Before discussing the third prospective guide to ethical behavior, we also note that academic literature uncovers a need for a general understanding of the social and
psychological drivers to piracy. Why do people copy software products? How do people defend their decision to or not to duplicate software? The current research addresses these questions while approaching the moral outlook of software piracy from the third perspective: public opinion on the subject.

Thus, the overarching purpose of the paper is to analyze reports of piracy in the press as a reflection of public opinion. We employ content analysis to press reports of software piracy, analyzing the text of articles to reveal rationales cited for and against unauthorized software duplication. This method is grounded in the theory of the social construction of reality (Burger and Luckmann 1967). Newspapers, as a societal communication outlet, reflect software piracy’s social construction, how it is created and agreed upon in the public’s mind.

Being a decision with social underpinnings, we use two social theories in the analysis of these rationales. First, social relations theory (Fiske 1991) provides a basis for describing different perspectives underlying the rationales. Second, since there exists a clearly predominant corporate position that unauthorized duplication of software is not acceptable, the rationales could be organized relative to this position. Consequently, we investigate the application of Sykes and Matza’s (1957) theory of neutralization, which was developed to explain rationalizations to socially unacceptable behaviors, in this more ethically ambiguous situation of software piracy. In the theory, techniques of neutralization are argument(s) or rationalizations used to explain circumstances for the temporary removal or suspension of an otherwise accepted norm (or, in this case hypothetically the corporate position), to legitimize one’s actions in order to rebut accusations of wrongdoing.

The methodology used, content analysis of newspaper articles detailing piracy occurrences, is an application of an existing investigation method in a new technology-enabled area. The specific objectives of applying this methodology are: 1) to describe instances of software piracy and analyze the rationales for and against; 2) to apply Fiske’s (1991) social relation theory to understand the differences for and against software
piracy; and 3) to examine the application of Sykes and Matza’s (1957) neutralization framework in a more morally ambiguous situation, one in which there is a clear corporate position but no generally agreed societal norm. In doing so, our research will contribute to a better understanding of the reasoning and justifications surrounding piracy acts. The paper is organized as follows: Section 2 highlights relevant literature in developing the research questions; Section 3 explains the content analysis methodology; an analysis of findings is presented in Section 4; and Section 5 contains conclusions and directions for future research.

2.0 Literature and Research Questions
The theoretical background in this section draws on literature from ethical decision-making, social construction, and neutralization. Zamoon and Curley (2005) provide a more complete descriptive theory of the ethical decision-making processes involving technology. This section highlights the key points of that account as it relates to the current study.

Software piracy involves individuals making ethical decisions. Ethical decision-making “involves moral justification of the decision” (Miner and Petocz 2003, p. 12). Research focused on ethical decision-making has highlighted three key points. First, ethical decision-making relies on applying principled reasoning to the question situation. Second, ethical decision-making carries consequences for others than the decision maker (i.e. there is a social aspect). Third, ethical decision-making will not be activated unless an individual recognizes the moral component of the situation. The theoretical bases in this section are organized around these three features of ethical decision-making.

2 In this paper the words ethical and moral are used interchangeably.
2.1 Applying Principled Reasoning
The first distinguishing feature of ethical decision-making is the use of principled reasoning. In an ethical decision-making process, an individual brings forth norms and principles to assess the degree of right or wrong as a guide to action. “Right” and “wrong” are social constructs that are heavily bound to locale and time (Berger and Luckmann 1967). In the case of software duplication these social constructions are ill-defined in the present time. It is not clear how individuals are making decisions, or what principles are being brought to bear on the situation. This leads to our general research question.

General Research Question: What are the rationales cited for and against software piracy?

This research question motivates the methodology applied in the study. We perform a content analysis of newspaper articles that argue for and/ or against unauthorized duplication of software. The newspaper rationales are understood to mirror the prevailing views on software piracy (their use is further explicated in Section 3). As such, the reported reasons stated for and against software piracy provide a useful aid for understanding social attitudes surrounding this issue of ambiguous moral standing. To provide a more precise and theoretically grounded analysis of these rationales, two theories are applied. These arise from the two other features of ethical decision-making and are introduced in the next two sections.

2.2 Realizing Social Component(s)
The second distinguishing feature of ethical decision-making is its social component. Ethical decision-making carries consequences for other than the decision maker (Rest, Bebeau, and Volker 1986). Since key points of ethical decision-making have ties to a social component, an approach grounded in social construction is suggested. The social construction of reality as articulated by Berger and Luckmann means that reality is what a group of people agree that it is and is real in its consequences (Berger and Luckmann
1967; Kunz and Jaehne 1983). Indeed, ethics (or morality) itself is a social construction, because “morality is not constructed in the mind of any one individual—as individual cognitive operation—but negotiated among individuals, deliberated, and arrived at through agreement” (Rest, Narvaez, Bebeau and Thoma 1999, p. 301).

Social problems are “what people think they are” (Fuller and Myers 1941, p. 321). They are socially constructed (Schneider 1985), and they emerge as a collective definition of the problem is built and legitimized through social influence (Schoenfeld, Meier, and Griffin 1979; Schneider 1985). As the product of a social construction, rationales for and against software piracy arise from the social worldview that is applied to their construction. This observation motivates the application of Fiske’s (1991) social relation theory to these rationales. Fiske’s theory posits that there are four basic social models by which people understand and respond to each other’s actions. Those models are: communal sharing (CS), authority ranking (AR), equity matching (EM), and market pricing (MP).

Communal Sharing is a model in which no one participant is distinguished from another in the group. Membership is duty-based having a sense of altruism, consensus, and kinship. Benefits are distributed among members based upon need. A member who sets out to distinguish him/herself from others in the group is considered wrong. The punishment for such an act is (for example) excommunication to signal the member’s defilement. Authority Ranking is a hierarchical model of interaction that values the charismatic leader and obedience to him/her. Privilege is used to distribute benefits according to a chain of command. In AR, it is wrong to defy the hierarchy. Privileges are further reduced and distance between subordinate and leader are increased as punishment. Equity Matching is characterized by distinct peer members that contribute and take turns in interactions. Reciprocity is valued and it is wrong to unequally distribute benefits or harms. Market Pricing is characterized by a rational system of exchange to coordinate interactions. In this market, values are determined by (for example) price and utility. Agreement is considered important. Taking advantage through violating proportional equality is wrong.
In explaining models of interaction Fiske stated that “Language is an important medium for the conduct of relationships” (cited in Haslam 2004, p. 12). Fiske’s assertion lends further credence to the content analysis investigative method. In Fiske’s theory, culture can influence which model of social interaction is prevalent in a particular domain and how that model is manifested in daily life. In the U.S. (for example) labor interactions are usually dominated by MP models, in which negotiation and mutual agreement are reached. Whereas EM is the model of choice for sporting events, because both teams have an equal number of players and who goes first is determined by drawing straws or a coin toss.

Fiske also maintains that models of social interaction are arranged along a continuum. Bases for the order along the continuum are the tradeoffs between the degree of flexibility (precision of coordination) versus “the differential costs of collecting and storing information necessary to use each model, the differential costs of making the calculations necessary to use each model” (Haslam 2004, p. 23). The model with the most flexibility and least tracking of information/calculations is CS followed by AR and EM each having increasingly less flexibility and requiring more mental involvement. The model of least flexibility (i.e. having most precision) and requiring most information and mental accounting is MP.

As this paper strives to describe the complete phenomenon of software piracy (as presented by American popular press), it is necessary to compare rationales from both positions on the issue to answer the following research question.

**Research Question (1): Are proponents on both sides of the piracy issue arguing their position using similar types of arguments with respect to Fiske’s (1991) models?**

The answer to this question can reveal if people are arguing the same point. For example if the focus of the difference is from a single market pricing position, then solutions
focusing on the economic factor can be pursued. If, however, there is a disconnect where one side is arguing from (say) a market pricing standpoint and the other position deals with communal sharing perspective, then more research may be required in order to bring all interested parties into the same area for collaboration.

Relying on Fiske’s interpretation of interaction models, we make the following predictions. On the one hand, we expect those who condone piracy to have mostly communal sharing rationales in an effort to achieve the most flexibility. On the other hand, we expect those who condemn piracy to strive for more control and hence have more market pricing rationales. We expect those who condone piracy to rely on CS because community members may feel a duty to help other members of their group due to feelings of cooperation and generosity. Reasons for condoning piracy should decrease along Fiske’s continuum as individuals who condone piracy are more likely to value flexibility most and be least concerned with keeping track of usage. Those who condemn piracy are expected to view unauthorized duplication as an unfair system of exchange which violated proportional equality (i.e. they are not being paid fairly for their work). The trend along Fiske’s continuum is expected to be increasing as those who condemn piracy are interested in retaining control over their products and preserving their rights (i.e. knowing who has or has not paid for using the product).

2.3 Recognizing a Moral Issue

The third feature of ethical decision-making is recognition of a moral issue. For an individual to apply principled reasoning to a decision situation, an individual must activate ethical decision-making processes. Moral intensity of an issue, which is “the extent of issue-related moral imperative” (Jones 1991, p. 372), is one way of classifying situational features that impact whether the individual invokes ethical principles in the decision-making process. Even though the moral intensity of a situation may push an individual to activate ethical decision-making schema, neutralization techniques may counter that force. Neutralization techniques are arguments or rationalizations used to explain circumstances for the temporary removal of an otherwise accepted norm, and/ or
qualify its suspension to legitimize one’s actions in order to rebut accusations of wrongdoing (Sykes and Matza 1957).

Whether considered as part of the decision process or as a post-rationalization, neutralization techniques serve to reduce the moral intensity of the situation. This theory thus provides a tool for analyzing both pro and con rationales as reflecting the accepted moral intensity. Sykes and Matza organized neutralization techniques into a framework of 5 types: denial of responsibility, denial of injury, denial of victim, condemnation of the condemners, and appeal to higher loyalty. In denial of responsibility the perpetrator exploits society’s distinction between intentional and unintentional outcomes, where being forced to do something by other people or circumstances can reduce culpability. Example statements may include “I didn’t mean it.” In denial of injury the perpetrator proclaims that no harm is done, so no consequences should be exacted. Example statements may include “I didn’t really hurt anybody.” In denial of victim the perpetrator describes the negative action as a due punishment. Example statements may include “They had it coming to them.” In condemnation of condemners the perpetrator shifts focus from the negative act to the behaviors and motives of those who disapprove. Example statements may include “Everybody is picking on me.” In appeal to higher loyalty the perpetrator maintains the negative action was in compliance with another norm that outweighs the violated one. Example statements may include “I didn’t do it for myself.”

In 2005 Zamoon and Curley theoretically expanded Sykes and Matza’s (1957) work by showing that for each neutralization technique there exists a counter neutralization technique that could amplify the moral intensity of a situation. Counter neutralization techniques include: accepted accountability, expectation of injury, fairness of system, equality of condemnation, and reduction to self interest. In accepted accountability the perpetrator is challenged on the basis of his/ her choice and the existence of alternatives. Example statements may include “You are responsible, you did mean it. There were alternatives you chose not to pursue.” In expectation of injury the perpetrator is challenged on the logical expectation of injury. Example statements may include “You
did hurt somebody.” In fairness of system the perpetrator is challenged on the basis of the appropriateness of the existing system. Example statements may include “Law, not vigilantism, is fair.” In equality of condemnation the perpetrator is challenged based upon equal application of the system. Example statements may include “Everybody is equally picked on.” Finally, in reduction to self interest the perpetrator is challenged based on the higher loyalty claimed to be served. Example statements may include “You did this for yourself, the higher loyalty is not justified as people are worse off because of your action.” This paper is the first where neutralization and counter neutralization have been applied to technology enabled actions.

Compared to other applications of neutralization theory, software piracy is a problem with three unique characteristics that provide additional interest to their potential application in this context. First, norms surrounding software acquirement and use are not obvious/ strong/ rigid, and full monitoring of software duplication is not possible at this time. These circumstances, according to Robinson and Kraatz (1998), contribute to the ability to neutralize. Second, software duplication usually occurs at a distance from the owner’s site. According to Sama and Shoaf (2002), when decision-makers are removed “psychically and physically from the very stakeholders their decisions impact,” the perceived harm can be minimized (p. 94).

The third feature is particularly important for the application of neutralization theory in our methodology: Software piracy does not carry a stigmatizing criminal concept. Established social problems whose values have been codified into law carry consequences not only in the possible fines and incarcerations they exact, but in creating a stigmatizing criminal concept (Minor 1981). Software piracy differs from other types of value violations where neutralization theory has been applied because of its moral ambiguity. The original framework was developed around delinquent acts in the physical world at a time when technology was not as pervasive in daily interactions, and for situations where clear norms existed to judge the appropriateness of an action. As such, the second research question investigates the application of Sykes and Matza’s neutralization framework to this new area.
Research Question (2a): Do piracy rationales fit into Sykes and Matza’s (1957) framework?

Here we specifically expect to find techniques of denial of injury and condemnation of the condemners heavily used by those who condone piracy. Since software can exist in two (or more) places at once, there is no obvious depravation when an unauthorized copy is made. The fact that there is no apparent loss in value (as opposed to taking a physical object that cannot exist in two places at once) explains the denial of injury expectation. Condemnation of the condemner is expected because of the prevailing culture of the Internet, where everyone is perceived as engaging in the culture of “sharing” via making unauthorized copies of digital materials.

For those who condemn piracy we expect a counter neutralization of expectation of injury to emerge. We believe that those who condemn piracy will argue that pirates commit unauthorized duplication knowing that producers will lose money. We also expect representation in the reduction to self interest counter neutralization, because those who condemn piracy will not be convinced by the appeal to higher loyalty arguments. It is not only important to recount instances of neutralization and counter neutralization, but to compare the discourse using that framework. This leads to our final research question for this paper.

Research Question (2b): Are proponents on both sides of the piracy issue arguing their position from similar neutralization techniques?

We expect neutralization and counter neutralization techniques to be slightly mismatched around the public discourse surrounding piracy. We believe that those who condone piracy will favor denial of injury and condemnation of the condemners, whereas those who condemn piracy will favor expectation of injury and reduction to self interest.
3.0 Methodology

Ethical decision-making relies on applying norms that are socially constructed and agreed upon. As such, the very social nature of ethical decision-making points to the viability of using media coverage as a data source, where problems garner for attention and legitimization. Printed media are selected for their prevalence, their availability, and their previous use in such analysis. As Adelman and Verbrugge (2000) explain “Newspapers are an accessible, non-transient form of media. They are inexpensive, have broad public use and can be read and reread” (347). News media not only construct the problem and build the needed support (Blumer 1971; Schoenfeld, Meier, and Griffin 1979; Schneider 1985, Yankelovich 1991/1992), but also politicians and social advocates “use their news-making power to channel the coverage to social problems into a definite direction” (from Molotch and Lester 1974 cited in Fishman 1978, p. 541). Because the purpose of this paper is to describe the social construction of piracy emphasizing its underpinnings at the societal level, it is natural to analyze how newspapers present such a topic.

Precedence for this type of newspaper analysis is found in many fields, including management, political science, healthcare, and criminology. In a study of organizational failure, an analysis of newspaper and scholastic articles was used to support interviews (Northrup 1990). Another study used newspaper articles to research the friction between U.S. and Japan (Budner and Krauss 1995). Adelman and Verbrugge (2000) analyzed newspaper articles to show a lifecycle of disease coverage that matched trends in the diseases’ mortality, pervasiveness, and frequency. Newspaper analysis has long been employed to uncover trends in and perception on crime and social unrest (e.g. Inverarity 1976; Sheley and Ashkins 1981; Pritchard 1986; Olzak 1989; Stallings 1990; Kruger and Pischke 1997), as well as define new problems (e.g. Schoenfeld, Meier, and Griffin 1979). In this vein, such analysis is particularly relevant in the present context. How does a society construct a problem and decide its (ethical) solution?

---

3 In this analysis we do not delve into processes of news creation, selection, or how owners of media outlets can influence what is published (Schudson 1989; Gamson, Croteau, Hoynes, and Sasson 1992; Lau 2004).
3.1 Data Sources and Collection Procedures
The “newspaper that is not read ceases to be an influence in the community. The power of the press may be roughly measured by the number of people who read it” (Park 1923, p. 274). Hence, to begin the analysis we used the *World Almanac and Book of Facts* for the years 1991-2003 to find the top U.S. daily newspapers by circulation. Except for 1989, the top five newspapers were consistently: USA Today, the Wall Street Journal, the New York Times, the Los Angeles Times, and the Washington Post. For most years, the Wall Street Journal had the largest circulation (until 2001) followed by USA Today, the New York Times, the Los Angeles Times, and finally the Washington Post.

The next step was to decide on a search engine and identify the search term. The five newspapers were not listed with a single academic search engine; so, the search for articles was split into two sub-searches. Articles from USA Today, the New York Times, and the Washington Post were identified and retrieved using the Lexis Nexis Academic Search Engine. The Wall Street Journal and the Los Angeles Times articles were identified and retrieved using the ProQuest Online Information Service. Upon reviewing the publication coverage period for each newspaper, it was clear the researchable timeframe could begin no earlier than January 3, 1989. We also elected to limit our search by an upper bound of December 31, 2004.

Having decided the publications to include and the timeframe of study, we identified the search term of “software piracy” to be entered as an autonomous search item into both Lexis Nexis and ProQuest. We were careful to select only articles with full text within our timeframe. According to the automated search of publications, the first appearance of the term “software piracy” in the popular press was in the Washington Post on May 16, 1983. We have considered this article the public’s first exposure to the piracy issue. As the Washington Post had 3 software piracy articles or less per year between 1983 and 1989, we consider this a validation of our research timeframe. Automated search engines

4 Previous research has shown that piracy has ties to cultural context (e.g. Swinyard, Rinne and Kau 1990; Whitman, Townsend, Hendrickson, and Rensvold 1998; Kwong, Yau, Lee, Sin, and Tse 2003). Consequently, we have limited the context of this research to the culture of the U.S.A.
6 Available at [http://www.il.proquest.com/proquest/](http://www.il.proquest.com/proquest/)
identified a total of 432 articles from the five newspapers. Of those articles 37 were discarded due their “Information Bank Abstracts” source, which was not one of the five newspapers being analyzed. A further 3 articles were discarded because each was a duplicate (appearing in the same publication on the same date and page) of an article already included in the analysis. Figure 1 shows a cumulative graph of frequencies of software piracy articles by year.

Figure 1: Frequencies of Software Piracy Articles by Year.

Adelman and Verbrugge (2000) contended that media reports (concerning disease) followed an emergence, maturation, decline, and death lifecycle. Emergence represented when a disease is first defined; maturation represented when a disease was taken for granted; and death / decline represented when the epidemiological rates (as well as newspaper coverage) fell unless there was resurgence. Looking at the aggregated figures of piracy coverage in our selected coverage window (Figure 1), it appears that the late

---

7 Lexis Nexis was unable to identify the source of the error.
8 Articles that were a full or partial reproduction of an existing article appearing on a different day or page were analyzed as a new exposure to the software piracy topic.
1980s and early 1990s were the emergence period for piracy coverage in newspapers. In 1990s the topic of piracy matures with the number of overall citations peaking in 1995.

Review of the analysis pool of articles revealed: 86 instances where piracy was not a focus of the article (irrelevant mention), 93 articles that gave no rationales, and 20 retrievals that were not articles but summary or index pages. The rightmost column of Table 1 shows the number of articles included in content analysis by publication. The final dataset consisted of 193 articles for coding.

Table 1: Articles Analyzed for Piracy Rationales by Publication

<table>
<thead>
<tr>
<th>Publication</th>
<th>Articles identified by Search Engine</th>
<th>Incorrect Source or Duplicate</th>
<th>Summary Page</th>
<th>Irrelevant Mention</th>
<th>No Rationale</th>
<th>Net Coded Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wall Street Journal</td>
<td>44</td>
<td>-</td>
<td>-</td>
<td>10</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>USA Today</td>
<td>51</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>New York Times</td>
<td>197</td>
<td>39</td>
<td>19</td>
<td>32</td>
<td>34</td>
<td>73</td>
</tr>
<tr>
<td>Los Angeles Times</td>
<td>39</td>
<td>1</td>
<td>-</td>
<td>4</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>Washington Post</td>
<td>101</td>
<td>-</td>
<td>1</td>
<td>25</td>
<td>26</td>
<td>49</td>
</tr>
</tbody>
</table>

3.2 Data Coding

We coded both rationales for piracy and rationales against piracy. Categorizing procedures included parsing the text and assigning it to categories of meaning, which were then tied to theoretical underpinnings and emergent themes. As such, before constructing categories we read approximately 25% of the newspaper articles (with representation from each publication) to get a sense of relevant themes. This provided a stability check for saturation of the categories. We constructed parsimonious categories that reflected the research purpose/questions, were based on the data, were independent, mutually exclusive and exhaustive, and that connected to theoretical underpinnings (see
Appendix A for ties of the constructed categories to existing literature). We also incorporated a catch-all category at the end of both sets of rationales in case there were elements of the articles that related to social perceptions of piracy that were deemed significant though not within the constructed categories.

The coding goals and approach was based upon several methodological approaches to content analysis (Cohen 1960; Holsti 1969; Hill, Thompson and Williams 1997; Marshall and Rossman 1999), from which we developed the following four step categorizing procedure:

1) We separated utterance or sentence segments in the newspaper article for coding.
2) We identified rationales for and against piracy using cue words to parse newspaper sentences. In parsing the text, we looked for reasons the author, interviewee, or any entity gave for justifying decisions to or not to duplicate software (either explicit mention of key words, or implicitly inferred from surrounding subject).
3) We used three levels of analysis in applying the coding (Appendix A). For each level counts of articles were calculated. At the top level was the overall number of articles that cited one or more rationales for piracy, and the number of articles that cited rationales against piracy. At the intermediate level were frequencies of rationales that fit into the two digit categories. At the lowest level, we used the three digit subcategories to count frequencies of occurrences. For example, an article may cite making $20 from each copy of software, that it is “cool” to be able to crack piracy prevention mechanisms, that pirates compete to see who has the best cracking skills, and that a pirate becomes “king” among peers after cracking a difficult protection mechanism. The following explains how such a passage was coded for its pro-piracy rationales. The first level of analysis is a count of the number of articles in the pool that cited justifications for piracy, regardless of the type of or number of justifications. For this passage, that would be a count of one. The second level of analysis groups rationales for piracy into

---

9 Cue words include: because, when, although + but, which is why, reason, claim…etc. Excluded were words that indicated general possibility like: could, might, and possible.
the major headings. Here, the passage indicates one set of economic (1.3 category) reasons (making the $20) and one set of group dynamics (1.4 category) reasons (piracy is “cool”, competition, and the pirate becomes “king”). The third level of analysis utilizes the within-category classifications. For the passage this means a count of one to be added to monetary gains (1.3.1 subcategory) rationales under the economic heading, and a count of one to be added to the self efficacy (1.4.2 subcategory) rationales under group dynamics, and a count of one to be added to the feelings gained with respect to others (1.4.3 subcategory) rationales under group dynamics heading.

4) We redistributed subcategories of the coding scheme (i.e. the 3-digit subcategories from Appendix A) into the appropriate social interaction mode and neutralization techniques. See Appendix B for grouping of subcategories according to Fiske’s (1991) structures, and Appendix C for grouping of subcategories according to neutralization and counter neutralization techniques.

3.3 Reliability Analysis Procedures
Reliability is confirmed through the use of external judges who categorize the data. It is a function of the clarity of categories and categorization instructions, as well as the degree of ambiguity in the wording of the article itself. The extent of agreement between coders was computed by Cohen’s (1960) Kappa coefficient representing the proportion of agreement after chance is removed from consideration. Generally a Cohen’s Kappa of 70% is considered satisfactory. Alternatively, Holsti (1969) used a coefficient of reliability, reflecting the average number of codes in agreement, for which a value of 75-80% is considered satisfactory.

To check the reliability of the categories, another set of articles was obtained so as not to contaminate the original data set. The articles came from the Chicago Tribune, Houston Chronicle, and New York Daily. In instruction sessions, each coder received a copy of the coding scheme and sample articles. Coders used the categories and discussed results

---

10 Both LexisNexis and ProQuest search engines were used.
with the researcher, where disagreements were resolved by negotiation. The initial reliability ratings were less than optimal (having a coefficient of reliability at 17.04%). The reformulation of categorization instructions and selection of a new judge (Judge B) led to a coefficient of reliability of 67.5% and Cohen’s Kappa of 33.23% in the first round. After meeting with Judge B and discussing cases of categorization disagreement, the coefficient of reliability increased to 89.52% and Cohen’s Kappa to 78.63%, both well within acceptable range.

Intra-rater reliability coefficient is the code-recode agreement of the researcher over a random sample of articles (Miles and Huber 1984). The researcher recoded 20 articles (over 10% of the analysis pool, having representation from all publications) 6 weeks after initial coding. Intra-coder reliability was approximately 91% using Cohen’s Kappa, and over 95% using Holsti’s coefficient of reliability.

4.0 Results
Of the 193 articles coded, 122 gave rationales for piracy. These rationales were an accumulation of statements from pirates, prosecutors, and even commentaries on piracy issues. The single leading reason for condoning piracy was reducing monetary expenditures, which accounted for over 17% of the cited rationales. Of the 193 articles coded 156 gave rationales against piracy. The leading reason given, capturing over 53% of the citations was the economic hardships that piracy leaves on software producers. In the remainder of this section we present our findings ordered by research question.

Research Question (1): Are proponents on both sides of the piracy issue arguing their position using similar types of arguments with respect to Fiske’s (1991) social interaction models?

In order to assess how different groups condone or condemn piracy, we compare their arguments using Fiske’s relational models. Generally, rationales against piracy better fir
into Fiske’s relational models that rationales for piracy. Figure 2 shows how the two groups compare.

**Figure 2:**

Comparing Rationales For and Against Piracy Using Fiske’s (1991) Social Structures

<table>
<thead>
<tr>
<th>Social Structures</th>
<th>Rationales For</th>
<th>Rationales Against</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communal Sharing</td>
<td>10.32</td>
<td>0.40</td>
</tr>
<tr>
<td>Authority Ranking</td>
<td>17.06</td>
<td>0.40</td>
</tr>
<tr>
<td>Equity Matching</td>
<td>8.73</td>
<td>11.29</td>
</tr>
<tr>
<td>Market Pricing</td>
<td>53.23</td>
<td>46.83</td>
</tr>
<tr>
<td>Other</td>
<td>10.06</td>
<td></td>
</tr>
</tbody>
</table>

In Communal Sharing those who argued for the unauthorized duplication of software supported their claims using a plethora of reasons, whereas those who argued against the unauthorized duplication heavily relied on one type of rationale to support their argument. Authority Ranking and Equity Matching models were more evenly represented on both sides of the issue. Market Pricing, however, was more often used by those who condemn unauthorized duplication.

Although we expected those who condone piracy to have mostly Communal Sharing rationales, Authority Ranking and Market Pricing rationales were more prevalent. Our
expectation that those who condemn piracy would favor Market Pricing rationales is confirmed. Surprisingly, there are neither descending trends along Fiske’s continuum for those who condone piracy nor ascending trends on the continuum for those who condemn piracy.

Now that we have reviewed our general findings on the types of rationales used to defend decisions not to duplicate software without authorization, we investigate how these rationales match up on both sides of the issue.

**Communal Sharing**

People who argue for the unauthorized duplication of software may invoke Communal Sharing. According to Fiske’s (1991) interpretation the claim here is: since there is a need and we are a community, the need must be filled. There is a strong sense of a compassionate caring morality and wanting to belong.

People operating using this model of social interaction can claim they are sharing software in order to benefit one or more people who are currently underprivileged, but who the actor has no specific connection with. A type of Robin Hood rationale emerges where (for example):

“‘The argument we hear from the pirates is that they are helping the Polish population make contact with the cultures of the world,’ … an argument can be made that homegrown pirates of Western culture were key actors in the collapse of communism …” (Washington Post, Oct 21, 1991)

A different type of sharing attitude can occur when the duplicator has a connection with the recipient of the software, and values that relationship stating

“A person’s feelings of closeness to a friend take priority over some abstract ethical principle,” (New York Times, Jul 27, 1992)

Another example of sharing is where the actor claims that sharing actually helps the producer:

“Basically, if it wasn’t for us, you would never see this piece of software” (New York Times, Jul 11, 2002)
A final exemplar in this Communal Sharing type of social interaction is one that values community aspects of sharing higher than the ownership value of the copyright holder.

“to maintain their access [and to be promoted] they [pirates] were required to upload, or provide new copyrighted files, to the library. They could then download files provided by other users” (New York Times, May 5, 2000)

People who argue that unauthorized duplication is wrong employ CS by sharing items that were created with that philosophy in mind. For example:

“adoption of open-source software will significantly aid in reducing the amount of software piracy” (New York Times, Dec 31, 2001)

**Authority Ranking**

The driving force here (according to Fiske 1991) is the need to obey, where it is the responsibility of persons in authority to uphold order so as to protect others. Since there is no enforcement of rules, individuals who condone piracy feel justified in duplicating software without authorization.

“Because it lacks any central authority, the Internet is particularly difficult for law-enforcement agencies to monitor for piracy. Some software publishers have taking to calling it the ‘home shoplifting network’” (New York Times, Jan 8, 1996)

“ ‘Look, if we [IRC administrators] find one channel and close it, they move to another,’ he said. ‘It’s been like this for years. You really can’t stop it.’ ” (New York Times, May 6, 2004)

An extreme case of this type of reasoning involves challenging the legitimacy of the law (proposed hierarchy) itself.

“publishers provide no legal way for gamers to get older games; the market is too small to justify the effort. So gamers feel justified in making vintage games available [through piracy], despite legal risks” (New York Times, May 18, 2000)

Those who condemn piracy feel a need/ responsibility to enforce the rules in two main ways. 1) By pursuing pirates:

“Beyond relying on an automated Web crawler that scours the Internet for unauthorized files, alliance investigators also try to snare pirates by gradually building relationships with them, using assumed identities” (New York Times, Jan 19, 2004);

2) By upholding the legitimacy of the rules:

“copyright infringement is illegal” (Los Angeles Times Jul 26, 1998)
It is interesting that those who condone piracy do not obey the copyright law hierarchy, but do obey so called pirate law. One reason to duplicate software without authorization is to maintain a type of raking, where the actor can be revered as the top perpetrator of illegal action.

"Many of the pirates say they were motivated less by money than by a sense of competition, prestige … form of bravado that could gain them acceptance in a hierarchical social sphere… ‘It’s all about stature’ … ‘They are just trying to make a name for themselves for no reason other than self-gratification’ … secure their reputations by releasing thousands of free movies, games, music and software programs on the Internet … Warez involve frenzied competition … Couriers are ranked in groups and as individuals with a scoring system" (New York Times, Jul 11, 2002)

**Equity Matching**
The overarching need here is for justice and balance to prevail in interactions (Fiske 1991). On the one hand, some see piracy as legitimate. Here, those who condone piracy maintain that:

1) Software is not a real item, hence taking it is not unjust.

"they [software] just don’t quite seem like real things. … belief that products consisting purely of information are somehow different from those you can hold in your hand … if it [piracy] is a crime at all – is one committed in an imaginary realm. The loot is no more real to the takers than the simulated treasure chest in a video game" (New York Times, Dec 16, 2001)

2) There is no loss in value (no harm done), so unauthorized duplication is permissible.

"There’s no way on earth I would shell out $60 for LucasArts’ ‘TIE FIGHTER’ game, but if I could get it for free, sure I’d try give it a try. Since I never would have bought it in the first place, my ‘pirated’ copy of ‘TIE FIGHTER’ would actually represent a net loss to LucasArts of $0" (Los Angeles Times, Nov 17, 1994)

3) There is no way to distinguish those who are unjust from those that are just, so unauthorized duplication is permissible.

"It’s very easy to be anonymous on the Internet because there are so many points of entry,’ Mr. Fancher said. Although each transaction into and out of a bulletin board is recorded by the system, he said: ‘even if you trace it back, it’s not like a phone number. You can’t determine the user’s identity because all you can know is the point of entry” " (New York Times, Apr 9, 1994)

4) Since everyone is participating in the injustice, it is permissible.

“everyone was doing it [pirating software]” (Washington Post, Dec 23, 1999)
On the other hand, some see piracy as an unequal treatment or distribution of benefits where some do not pay for products they use. By not paying, it is not a fair deal. It’s not fair to the software producer because non-paying consumers are denying payment in the present as well as detracting from future products. It is not fair to non-paying consumers because they are not getting a fully working product.

“copying software and selling it or giving it to somebody else amounts to stealing. … ‘It is outright theft’ ” (Washington Post, Aug 23, 1995)

“ ‘When software companies are hurt by pirates, they are less likely to innovate, depriving consumers of new innovations.’ … ‘Every dollar used to combat piracy is a dollar not spent on the development of new products’ ” (Washington Post, Dec 12, 2001)

“if professional people use unlicensed software, they are just silly. They need the manuals and technical support you get if you purchase the license” (Los Angeles Times, Jul 23, 1998)

“any second-hand or bootlegged software might well contain a virus or other contamination that can interfere with normal operation of the computer” (Washington Post, Mar 14, 1992)

“much of the fake software is bug-ridden” (USA Today, Aug 1, 2001)

“ ‘Software is not just the code that comes with it,’ said Ms. Slocum of Macromedia. ‘Software is also the technical support, the customer service, the upgrades’ – extras that are largely unavailable to users of illegal versions ” (New York Times, Jan 19, 2004)

**Market Pricing**

The focus of MP is agreement upon proportional contribution. Those who condone piracy claim that not having enough money to pay for the product, or the product’s unnecessarily high price excuses the action.

“problem stems from lack of government funds appropriated specifically to buy legal software … It is unrealistic for government agencies to invest large amounts to buy legal software” (Los Angeles Times, Jul 12, 1995)

To those who disagree with piracy, getting a pirated product is not a bargain, it is theft.

1) It costs money to produce software.

“cost U.S. hardware and software companies nearly $3 billion in lost wages, tax revenues and retail sales last year” (LA Times, Jul 24, 1999)

2) Piracy influences an entire industry.
“The widespread piracy doesn’t just hurt big companies such as Microsoft; China’s own fledgling software industry can’t grow if companies’ efforts are stolen and distributed by pirates … lost market share on the mainland ” (Wall Street Journal, Oct 27, 1995)

3) Piracy amounts to a loss of assets.

“There is a growing recognition {in the government} of the importance of intellectual property to our economy and general way of life” (LA Times, Jul 24, 1999)

Other
A group of rationales condoning piracy did not fit into Fiske’s social interaction models. Among other elements were deflecting responsibility, non-complicated nature of the process, and location where the act of duplication was committed. Another group of rationales cited against piracy did not fit into Fiske’s models of social interaction. This group included acknowledgment that unauthorized duplication is immoral, and that the action of piracy can have links to organized crime and even national security implications for sensitive application software.

Research Question (2a): Do piracy rationales fit into Sykes and Matza’s (1957) framework?

We expected to find techniques of denial of injury and condemnation of the condemners heavily used by those who condone piracy. While condemnation of the condemners is confirmed to have the most representation, denial of injury was surprisingly low (lower than both appeal to higher loyalty and denial of responsibility even!). For those who condemn piracy we expected counter neutralizations of expectation of injury and reduction to self interest to emerge. Expectation of injury and equality of condemnation had the most representation, while reduction to self interest had relatively low representation.

Denial of Responsibility Vs. Acceptance of Accountability
Neutralizations
Here, persons defended software piracy by blaming others for their actions. Rationales included: blaming software producers for not including anti-copy mechanisms, and
blaming organizations for either not having tracked illegal copies of software or not providing the means to purchase legitimate software. For example:

“We’re a rapidly growing company so the control is probably not what it should have been” (Los Angeles Times, Nov 15, 1996)

“their salespeople were tricked into giving away the unlicensed software” (Los Angeles Times, Oct 31, 1995)

“It was essentially an oversight by the data processing personnel who were not at all paying attention to the duplication of software” (New York Times, Jul 16, 1997)

**Counter Neutralizations**

Those who disagree with software piracy point out that there are alternatives to unauthorized duplication. For example:

“adoption of open-source software will significantly aid in reducing the amount of software piracy” (New York Times, Dec 31, 2001)

**Denial of Injury Vs. Expectation of Injury Neutralizations**

Because more blame is assigned to people whose action result in more severe outcomes than those with lower consequences (Daley and Zane 1982), some articles highlighted the fact that software piracy caused no real damage. That is, the individual wouldn’t have bought the program (regardless of the cost), and software producers make plenty of money. Some articles even acknowledged that piracy may be considered inappropriate, but contended there was no profit from the activity. Such articles seemed to suggest that since there was no monetary gain for them, the act was not/should not be considered offensive.

For example:

“Software liberationists contend that the crime is victimless” (New York Times, Dec 16, 2001)

“claimed [hacking] was an effort to point out security flaws” (Washington Post, Jul 31, 1995)

“defended ‘ware zing’ expensive software as a way to try it out before purchasing a legitimate copy” (New York Times, Dec 16, 2001)
Counter Neutralizations

Those who condemn acts of software piracy maintain that unauthorized duplication is harmful to manufacturers and copyright holders in two ways.

1) In terms of lost revenues. For example:

   “piracy costs the software industry $13 billion a year worldwide in lost revenue.” (Washington Post, Aug 29, 2003)

2) In terms of software industry growth (or lack thereof). For example:

   “digital pirates ‘put the livelihoods of millions of hardworking Americans at risk and damage our economy’ [said Attorney General John Ashcroft]” (USA Today, Aug 26, 2004)

Denial of Victim Vs. Fairness of System

This was the least frequent of the neutralization techniques. We might theorize that the reason denial of victim has such a low representation is the fact that people don’t perceive there to be anyone impacted by their unauthorized copying.

Neutralizations

Neutralization techniques for this type focused upon taking revenge against a villain. For example:

   “freeing software is a blow against an Evil Empire whose Darth Vader is Bill Gates” (New York Times, Dec 16, 2001)

Counter Neutralizations

Theoretically, this category should capture utterances that portrayed the current system of copyright and licensing of software as fair. However, no rationales were coded in this category (i.e. the issue of piracy is not argued from this position).

Condemnation of the Condemners Vs. Equality of Condemnation Neutralizations

The fact the software piracy is described as being common was evident in our content analysis. This could be construed in a manner similar to the condemnation of condemners’ neutralization technique. If everyone is acting in an offensive manner, why
are only certain individuals being questioned about/ punished for their actions. In that sense it is understood that the reasons for singling one person out are suspect.

Some blamed judicial processes for the proliferation of unauthorized duplication. For example:

“if downloading has become more popular … that’s because ‘the courts move slower than the criminals’” (USA Today, May 14, 2002)

“There is also the challenge for law-enforcement agencies of having to interpret copyright and counterfeiting laws written before the arrival of a high-speed communications network. ‘None of our laws were written with the Internet in mind’” (NYT, Jan 8, 1996)

“federal law is murky on how to treat people who copy and distribute software for free” (WP, Dec 30, 1994)

Others blamed inconsistencies of anti-piracy laws. For example:

“the company’s e-book decryption software was legal is Russia” (New York Times, Dec 18, 2002)

“Italian laws permits copying for personal use and says that applies to corporations.” (Wall Street Journal, Dec 13, 1990)

“China has no copyright law of its own and has refused to join the International Copyright Convention. Victims of Chinese piracy thus virtually powerless to stop attacks, and they find little solace in Chinese courts.” (Washington Post, Jan 14, 1989)

Still others portrayed unauthorized duplication as a standard behavior.

“Everybody else is doing it” (USA Today, Oct 15, 2002)

**Counter Neutralizations**

For those who disagree with piracy, condemnation of pirates is justified because piracy laws are equally applied to all, and not everybody pirates software. Examples of equal condemnation include:

“[Software Publisher’s Association] will pursue and audit companies that don’t pay for the software they use” (New York Times, Jul 6, 1998)

Furthermore, those who condemn piracy see the act as both illegal and immoral.

“Just as it’s wrong to walk into blockbuster video, take a movie off the shelf and stick it in your pocket, it is also a crime to download a pirated copy of a movie” (Washington Post, May 18, 2002)
"It's just as wrong [as stealing a car]" (USA Today, Aug 15, 1995)

**Appeal to Higher Loyalty Vs. Reduction to Self Interest**

*Neutralizations*

Here, some perpetrators seem to place a higher value on membership to a piracy ring than they do on rules that are supposed to govern the acquisition and use of software. This social membership rationale is akin to that discussed in Sykes and Matza where (most often) social membership comprises being part of a gang. The Robin Hood ideology seems to be another instance where perpetrators are driven to commit piracy (or at least allow it) based upon an ideal. In the same spirit, aiding a person in need takes precedence (according to some) over the rules governing software acquisition and use. Following are example excerpts:

"pirates accused of trafficking in 'warez' …Internet slang for software that has been 'liberated' from the protective encryption imposed by its makers and posted free for the taking. Seeing themselves as more Robin Hood than Capital Hook…motivated by ideology" (New York Times, Dec 16, 2001)

"A pirate program in China is often referred to as 'patriotic software,' out of a belief that it speeds the nation's modernization at little or no cost." (Aug 23, 1995)

"copied programs to share with friends" (Washington Post, Dec 30, 1994)

"elite file-sharing networks typically limit access to savvy hackers who must prove their stripes by contributing hard-to-get material" (USA Today, Aug 26, 2004)

**Counter Neutralizations**

For those who believe piracy is wrong, the alternative to the appeal to higher loyalty is that the action is based on self interest. People are worse off because of the action, and the higher loyalty is not recognized/ justified. According to those who condemn piracy, pirates create a multitude of problems. For example:

"Pirated programs are more likely to have viruses and flaws than legal software" (New York Times, Aug 24, 1995)

"much of the fake software is bug-ridden" (USA Today, Aug 1, 2001)
“Every copy of bootlegged software shifts profits from legitimate software producers and hinders their ability to invest in new applications” (Los Angeles Times Jul 26, 1998)

Ambiguous:
Some of the items we coded for do not fit neatly into Sykes’s and Matza’s definition of neutralization techniques. For those who argued for unauthorized duplication the category capturing monetary gains was not placed in any of Sykes and Matza’s techniques. For those who argued against unauthorized duplication issues of who software ownership and copyright as a valuable asset to a software producer.

Not Applicable:
Some of the items we coded are inapplicable to neutralization and counter neutralization techniques. For example: the process of duplication is not complicated, that proceeds from piracy can support terrorism, that piracy can be committed because of euphoric feelings (among others), there is no technical support with pirated software, and that certain software are restricted by “rogue” nation status (among others).

Now that we have reviewed neutralization and counter neutralization techniques, we compare frequencies of the two sets to answer the following question.

Research Question (2b): Are proponents on both sides of the piracy issue arguing their position from similar neutralization techniques?

To determine to what degree the rationales match up along neutralization and counter neutralization techniques, we refer to Figure 3.
Based on Figure 3, we note the mismatch in frequencies of neutralization and counter neutralization types of arguments in the public discourse surrounding software piracy. In fact appeal to higher loyalty vs. reduction to self interest and denial of victim vs. fairness of system are the closest in terms of equal arguments frequencies. Arguments surrounding denial of injury vs. expectation of injury are least matched.

5.0 Conclusions
Ethical decisions have been distinguished from other decisions on the bases of the use of principled justifications and of the social nature of ethical decisions. The first of these features leads to the need to examine the arguments used to condone piracy. The second feature leads to grounding the analysis in theories of social construction. The focus of this work was on understanding how piracy is perceived by the public. We deliberately selected piracy as the focus of our study due to its ambiguous moral nature.
Summary of Findings
An analysis of mainstream newspaper articles dealing with software piracy was performed as an indicator of how people within American society think and feel about this subject. Some clear results emerge from our analysis. One of which is the degree of variety surrounding rationales given for/against software piracy. We recounted instances of rationales for and against the unauthorized duplication of software. We classified the rationales for and against piracy using Fiske’s (1991) structures for social interaction and found that those who condone piracy mostly evoke authority ranking and market pricing models, whereas those who condemn piracy mostly evoke market pricing. The mismatch between the types of rationales points to a disjoint in the public conversation surrounding the issue of software piracy. With respect to Sykes and Matza’s theory of neutralization, it is also clear that not all the rationales given for/against software piracy fit neatly into Sykes and Matza (1957) framework. Specifically the denial of victim is not addressed. Furthermore, there is a mismatch between neutralizations and counter neutralizations. One of the most interesting findings of this paper has to do with a belief maintained by those who condone piracy that they are not only “not hurting anybody” but that they are in fact “doing good or helping.” Ashforth and Anand (2003) can help us to understand this stance explaining that “ideologies help distance individuals and groups from the aberrant moral stance implied by their actions and perhaps even forge ‘a moral inversion, in which the bad becomes good’.” (Adams and Balfour 1988 cited in Ashforth and Anand 2003 p. 16).

Limitations
Here, we describe decisions made about how we conducted the research and the issues that resulted. In selecting newspaper articles as the target of our investigation, we note that the media’s role is not merely to report what goes on, but to determine which topics are published and to provide spin that can impact people’s thought processes. Previous academic works have stated that newspapers “not wholly a rational product” (Park 1923, p. 273), and that “Journalists simultaneously create and perpetuate an image of reality when they assemble news products” (Stallings 1990, p. 87). It is also important to state that newspapers reflect [not only the world out there but] practices of those whom have
power (Schudson 1989). As such, a publication supported by (for example) Microsoft will have an interest in presenting a particular view point of the software piracy issue.

Aside from news production, individuals bring their own set of experiences when trying to construct meaning from newspaper articles, where the “relative importance of media discourse depends on how readily available meaning-generating experiences are in people’s everyday lives” (Gamson and Modigliani 1989, p. 9). With the pervasiveness of software piracy, we assume that readers of newspaper articles are already familiar with unauthorized duplication of software as a concept. In that sense, there is a role for the reader of the article such that “people are not ‘cultural dopes,’ passively reading tests as the producers intended” (Gamson, Croteau, Hoynes, and Sasson 1992, p. 388).

In selecting content analysis as an investigation tool, we run the risk of span of inferential reasoning (Marshall and Rossman 1999). Here, coders can delve deeply into each sentence searching for possible effects of piracy and thinking of the issue from multiple perspectives. We have controlled for inferential reasoning by targeting the literal surface meaning of the text for coding.

**Contributions**

This paper comprises potential contributions for academics and practitioners alike. For academics the paper represents an empirical link between ethical decision-making and neutralization theory. Previous research has shown that neutralization techniques are offense specific (Sykes and Matza 1957; Mitchell and Dodder 1980; Mitchell and Dodder 1983; Agnew 1994; McCarthy and Stewart 1998; Copes 2003). Techniques of neutralization have, for the most part, been applied to serious and violent offences (e.g. Brennan 1974; Minor 1980; Agnew 1994; Alvarez 1997) and the research has been biased towards incarcerated or convicted persons. Neutralization theory has not previously been applied to software piracy, and “reasons why such illegal behavior continues to occur are lacking” (Harrington 2000, p. 83). The closest research has come to examining techniques of neutralization in the information technology field was in an article on cyber loafing (where employees use the Internet for non-business work during
business hours) (Lim 2002); related is the examination of Neumann and Simpson (1997) about bootlegging music. This took a different approach by searching for closeness to an artist, development of music, and capture of time (infatuation and fetish were also addressed).

Furthermore, conflicting results in previous neutralization research can be attributed to: over-reliance on quantitative techniques, where the “dynamic cognitive nature of neutralization suggest that qualitative methods are well suited to test the theory” (Copes 2003, p. 106). As there are no previous studies of software piracy and Sykes and Matza’s techniques of neutralization\(^\text{11}\) there is no baseline for comparison, hence our qualitative research yields a more complete picture of software piracy. As such, our content analysis of newspaper articles detailing piracy occurrences is an application of an existing method in a new technology-enabled area. In addition, our paper provides actual excerpts of the rationales. In studying the rationales given for piracy researchers can develop and test counter arguments to the justifications for committing piracy, which may help individuals begin to evoke ethical decision making processes and principles when approaching the subject. We believe this paper will help understand tolerance for piracy, and advance understanding for how moral universes are constructed for goods and services that do not fit traditional descriptions.

Practitioner contributions include implications for management and law. For example, understanding and challenging\(^\text{12}\) piracy neutralizations may reduce their acceptance, thereby evolving norms and laws to govern digital technologies; or, based on the neutralizations invoked by users, technology-producing industries may revise pricing structures, protection mechanisms, or create new products.

**Extensions and Directions for Future Research**

Using the current data set and noting that there isn’t consistent media coverage for the issue of software piracy, we could use the Department of Justice’s copyright enforcement

\(^{11}\) Harrington’s (2000) study used only “Robin Hood” and “responsibility denial” techniques.

\(^{12}\) Gorta 1998
records as a secondary confirmatory resource against which to validate the chronological trend analysis\textsuperscript{13}. Another viable extension would be to plot newspaper articles against stages of the social problem\textsuperscript{14}. Alternatively, since it is the awareness of key individuals that makes an otherwise unnoticed situation become defined as a problem (Fuller and Myers 1941), we might address how mass media can spotlight both the people and norms surrounding software piracy. We could also compare media messages across all 5 news sources. As Husted, Dozier, McMahon, and Kattan 1996 argued that cross-national carriers of ethics (such as news media, business education, and travel experience) could alter attitudes about questionable business practices, another use of this data might be to examine how US produced media messages about software piracy are viewed cross-nationally.

Independent of the current data set, researchers might conduct a content analysis of blogs or other online sources to see if the rationales presented there differ from what we have found in traditional media (Protess, Leff, Brooks, and Gordon 1985). This will particularly be interesting given that,

\begin{quote}
In the e-commerce revolution, millions of dollars are being tossed about. Rules have yet to be written, and those that have aren’t always enforced. No wonder the instances of unethical, even criminal behavior are growing exponentially (Seglin, 2000).
\end{quote}

In general media research has been shown to impact public opinion (Page, Shapiro, Dempsey 1987; Jordan and Page 1992). Specifically research has confirmed that newspaper coverage can affect policy preferences (Jordan 1993). Hence, another possibility for extending this work includes researching ties of copyright prosecutions and media agenda setting for policies and how those impact public opinion. A final direction for expanding this body of work is to study the rationales given for piracy in order to determine the degree of acceptance of such rationales.

\textsuperscript{13} Technique adapted from Adelman and Verbrugge (2000).
\textsuperscript{14} Technique from Schoenfeld, Meier, and Griffin (1979).
## 6.0 Appendices

### Appendix A: Theoretical Underpinnings for Coding Categories

<table>
<thead>
<tr>
<th>Section</th>
<th>1.1 Criminal</th>
<th>1.2 Piracy Process Characteristics</th>
<th>1.3 Economic</th>
<th>1.4 Group Dynamics</th>
<th>1.5 Helping</th>
<th>1.6 Characteristics of Digital Goods</th>
<th>1.7 Deficiencies of Law and Enforcement</th>
<th>1.8 Miscellaneous</th>
<th>1.9 Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1 Revenge</td>
<td>1.1.2 Facilitator of more serious crimes</td>
<td>1.2.1 Non-complicated</td>
<td>1.3.1 Monetary gains</td>
<td>1.4.1 Cultural and community aspects</td>
<td>1.5.1 Advertising/ Promoting</td>
<td>1.6.1 Not real/ intangibility</td>
<td>1.7.1 Judicial Processes</td>
<td>1.8.1 Deflect Responsibility</td>
<td>1.9 Other</td>
</tr>
<tr>
<td>1.1.3 Supports Terrorism</td>
<td>1.2.3 No depravation</td>
<td>1.2.4 Masks identity of perpetrator</td>
<td>1.4.2 Self efficacy</td>
<td>1.5.2 Robin Hood/ taking from rich employers so software can be available to poor</td>
<td>1.5.3 Helping someone</td>
<td>1.6.2 Original/ Copy Indistinguishable</td>
<td>1.7.2 Location of offense</td>
<td>1.8.2 Sharing w/ future purchasing</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rationales AGAINST copying/ duplicating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.1 Economic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.1 Monetary terms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Strikwerda and Ross 1992; Kwong, Yau, Lee, Sin, and Tse 2003)</td>
<td>2.1.2 Copyrights as Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1.3 Foster industry growth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Kwong, Yau, Lee, Sin, and Tse 2003)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **2.2 Alternatives to stealing**        |
| 2.2.1 Free ware/ Open source software   |
| 2.2.2 Other                            |

| **2.3 Crackdown on Piracy**             |
| 2.3.1 Pursuing pirates                  |
| 2.3.2 Links to terrorism/ organized crime |
| 2.3.3 National security                 |

| **2.4 Effects of piracy**               |
| 2.4.1 Buggy/ damaged goods/ no quality  |
| (Strikwerda and Ross 1992; Kwong, Yau, Lee, Sin, and Tse 2003) |
| 2.4.3 Not authentic product             |
| 2.4.5 No technical support              |
| 2.4.2 Lower innovation                  |

| **2.5 Illegal and Unethical**           |
| 2.5.1 Issue of Ownership                |
| (Swinyard, Rinne and Kau 1990)          |
| 2.5.2 Illegal                           |
| 2.5.3 Immoral: violation of a value/ unethical/ wrong/ cheating |

| **2.6 Other**                           |
| Rationale doesn’t fit anywhere else     |
### Appendix B: Grouping Coding Categories According to Fiske’s (1991) Structures of Social Interaction

<table>
<thead>
<tr>
<th>Structure of Social Interaction</th>
<th>Coding Categories of Rationales FOR Piracy</th>
<th>Coding Categories of Rationales AGIANST Piracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communal Sharing</td>
<td>1.4.1 Cultural and community aspects 1.5.1 Advertising/ Promoting 1.5.2 Robin Hood/ taking from rich employers so software can be available to poor 1.5.3 Helping someone</td>
<td>2.2.1 Free ware/ Open source software</td>
</tr>
<tr>
<td>Authority Ranking</td>
<td>1.2.5 Hard to stop 1.4.3 Feelings gained with respect to others 1.7.1 Judicial Processes 1.7.3 Restrictions on copying/ no way to legally obtain copies/</td>
<td>2.3.1 Pursuing pirates 2.5.2 Illegal</td>
</tr>
<tr>
<td>Equity Matching</td>
<td>1.2.2 Common 1.2.3 No depravation 1.2.4 Masks identity of perpetrator 1.6.1 Not real/ intangibility</td>
<td>2.4.1 Buggy/ damaged goods/ no quality 2.4.2 Lower innovation 2.4.3 Not authentic product 2.4.4 Hacking/ Viruses 2.4.5 No technical support 2.5.1 Issue of Ownership</td>
</tr>
<tr>
<td>Market Pricing</td>
<td>1.3.1 Monetary gains 1.3.2 Legally expensive to pursue</td>
<td>2.1.1 Monetary terms 2.1.2 Copyrights as Assets 2.1.3 Foster industry growth</td>
</tr>
<tr>
<td>Other</td>
<td>1.1.1 Revenge 1.1.2 Facilitator of more serious crimes 1.1.3 Supports Terrorism 1.2.1 Non-complicated 1.4.2 Self efficacy 1.6.2 Original/ Copy Indistinguishable 1.7.2 Location of offense 1.7.4 Ignorance 1.8.1 Deflect Responsibility 1.8.2 Sharing w/ future purchasing 1.8.3 Sharing w/ no future purchasing 1.8.4 Unintentional 1.9 Other (Rationale doesn’t fit anywhere else)</td>
<td>2.3.2 Links to terrorism/ organized crime 2.3.3 National security 2.5.3 Immoral: violation of a value/ unethical/ wrong/ cheating 2.6 Other (Rationale doesn’t fit anywhere else)</td>
</tr>
</tbody>
</table>
### Appendix C: Grouping Coding Categories According to Neutralization and Counter Neutralization Techniques

<table>
<thead>
<tr>
<th>Neutralization Techniques</th>
<th>Counter Neutralization Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Denial of Responsibility</strong></td>
<td><strong>Accepted Accountability</strong></td>
</tr>
<tr>
<td>Example and Explanation: <em>I didn’t mean it.</em></td>
<td>Example and Explanation: <em>You are responsible, you did mean it. There were alternatives you chose not to pursue.</em></td>
</tr>
<tr>
<td>Perpetrator exploits society’s distinction between intentional and unintentional outcomes, where being forced to do something by other people or circumstances can reduce culpability.</td>
<td>Perpetrator is challenged on the basis of his/ her choice and the existence of alternatives.</td>
</tr>
<tr>
<td>1.7.3 Restrictions on copying/ no way to legally obtain copies/</td>
<td><strong>Deflect Responsibility</strong></td>
</tr>
<tr>
<td>1.8.1 Deflect Responsibility</td>
<td><strong>Expectation of Injury</strong></td>
</tr>
<tr>
<td>1.8.4 Unintentional</td>
<td>Example and Explanation: <em>You hurt somebody.</em></td>
</tr>
<tr>
<td><strong>Denial of Injury</strong></td>
<td>Perpetrator is challenged on the logical expectation of injury.</td>
</tr>
<tr>
<td>Example and Explanation: <em>I didn’t really hurt anybody.</em></td>
<td><strong>Fairness of System</strong></td>
</tr>
<tr>
<td>Perpetrator proclaims that no harm is done, so no consequences should be exacted.</td>
<td>Example and Explanation: <em>Law, not vigilantism, is fair.</em></td>
</tr>
<tr>
<td>1.2.3 No depravation</td>
<td>Perpetrator is challenged on the basis of the appropriateness of the existing system.</td>
</tr>
<tr>
<td>1.5.1 Advertising/ Promoting</td>
<td><strong>Foster industry growth</strong></td>
</tr>
<tr>
<td>1.8.2 Sharing w/ future purchasing</td>
<td><strong>No depravation</strong></td>
</tr>
<tr>
<td><strong>Denial of Victim</strong></td>
<td><strong>Advertising/ Promoting</strong></td>
</tr>
<tr>
<td>Example and Explanation: <em>They had it coming to them.</em></td>
<td><strong>Sharing w/ future purchasing</strong></td>
</tr>
<tr>
<td>Perpetrator describes the negative action as a due punishment.</td>
<td><strong>No depravation</strong></td>
</tr>
<tr>
<td>1.1.1 Revenge</td>
<td><strong>Advertising/ Promoting</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Sharing w/ future purchasing</strong></td>
</tr>
</tbody>
</table>
| | **Fairness of System**
<p>| | |
| | -- |</p>
<table>
<thead>
<tr>
<th>Condemnation of the Condemners</th>
<th>Equality of Condemnation</th>
<th>Appeal to Higher Loyalty</th>
<th>Reduction to Self Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example and Explanation: Everybody is picking on me.</td>
<td>Example and Explanation: Everybody is equally picked on.</td>
<td>Example and Explanation: I didn’t do it for myself.</td>
<td>Example and Explanation: You did this for yourself, the higher loyalty is not justified as people are worse off because of your action.</td>
</tr>
<tr>
<td>Perpetrator shifts focus from the negative act to the behaviors and motives of those who disapprove.</td>
<td>Perpetrator is challenged based upon equal application of the system.</td>
<td>Perpetrator maintains the negative action was in compliance with another norm that outweighs the violated one.</td>
<td>Perpetrator challenged based on the higher loyalty claimed to be served.</td>
</tr>
<tr>
<td>1.2.2 Common</td>
<td>1.7.1 Judicial Processes</td>
<td>1.4.1 Cultural and community aspects</td>
<td>2.3.1 Pursuing pirates</td>
</tr>
<tr>
<td>1.7.2 Location of offense</td>
<td>1.7.2 Location of offense</td>
<td>1.5.2 Robin Hood/ taking from rich employers so software can be available to poor</td>
<td>2.5.2 Illegal</td>
</tr>
<tr>
<td>Reduction to Self Interest</td>
<td>Reduction to Self Interest</td>
<td>Reduction to Self Interest</td>
<td>Reduction to Self Interest</td>
</tr>
<tr>
<td>Ambiguous</td>
<td>Ambiguous</td>
<td>Ambiguous</td>
<td>Ambiguous</td>
</tr>
<tr>
<td>1.3.1 Monetary gains</td>
<td>2.1.2 Copyrights as Assets</td>
<td>2.4.1 Buggy/ damaged goods/ no quality</td>
<td>2.3.2 Links to terrorism/ organized crime</td>
</tr>
<tr>
<td>2.5.1 Issue of Ownership</td>
<td>2.4.2 Lower innovation</td>
<td>2.3.3 National security</td>
<td>2.4.3 Not authentic product</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>1.1.2 Facilitator of more serious crimes</td>
<td>1.1.2 Facilitator of more serious crimes</td>
<td>1.2.1 Non-complicated</td>
<td>2.4.5 No technical support</td>
</tr>
<tr>
<td>1.1.3 Supports Terrorism</td>
<td>1.1.3 Supports Terrorism</td>
<td>1.2.4 Masks identity of perpetrator</td>
<td></td>
</tr>
<tr>
<td>1.2.1 Non-complicated</td>
<td>1.2.1 Non-complicated</td>
<td>1.3.2 Legally expensive to pursue</td>
<td></td>
</tr>
<tr>
<td>1.2.4 Masks identity of perpetrator</td>
<td>1.2.4 Masks identity of perpetrator</td>
<td>1.4.2 Self efficacy</td>
<td></td>
</tr>
<tr>
<td>1.2.5 Hard to stop</td>
<td>1.2.5 Hard to stop</td>
<td>1.4.3 Feelings gained with respect to others</td>
<td></td>
</tr>
<tr>
<td>1.3.2 Legally expensive to pursue</td>
<td>1.3.2 Legally expensive to pursue</td>
<td>1.6.1 Not real/ intangibility</td>
<td></td>
</tr>
<tr>
<td>1.4.2 Self efficacy</td>
<td>1.4.2 Self efficacy</td>
<td>1.6.2 Original/ Copy Indistinguishable</td>
<td></td>
</tr>
<tr>
<td>1.4.3 Feelings gained with respect to others</td>
<td>1.4.3 Feelings gained with respect to others</td>
<td>1.7.4 Ignorance</td>
<td></td>
</tr>
<tr>
<td>1.6.1 Not real/ intangibility</td>
<td>1.6.1 Not real/ intangibility</td>
<td>1.8.3 Sharing w/ no future purchasing</td>
<td></td>
</tr>
<tr>
<td>1.6.2 Original/ Copy Indistinguishable</td>
<td>1.6.2 Original/ Copy Indistinguishable</td>
<td>1.8.3 Sharing w/ no future purchasing</td>
<td></td>
</tr>
</tbody>
</table>
References


AutoDesk Piracy Prevention Fact Sheet  


Doesn't Everybody Do It?
Internet Piracy Attitudes and Behaviors: A report on a survey of end-user attitudes
toward software and content use (and piracy), conducted by SIIA and KPMG — Fall 2001
Report available at: http://www.siia.net/divisions/content/pubs/kmpg.pdf


Major Study Finds 36 percent of Software in Use Worldwide is Pirated: $29 Billion in Losses Last Year


Plagiarism. org http://www.plagiarism.org/plagiarism_stats.html


Serafini, D. DVD Piracy in the US becomes an Industry


Stone, D. M. Software Piracy
http://lrs.ed.uiuc.edu/wp/crime/piracy.htm


http://www.usdoj.gov/ag/annualreports.html


Worldwide Business Software Piracy Losses Estimated At Nearly $11 Billion In 1998  

