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Independent Contractors and Computer Crimes - The Impossible Prosecution?

I.

The Genesis Of The Problem

Many companies have specialized computer needs that cannot be met by off-the-shelf products or by the companies' own computer personnel. Such companies instead often retain independent computer programmers to write customized programs or to bundle the programs with computer hardware⁽¹⁾ and provide an integrated computer system.⁽²⁾

The business relationship between programmer and customer may deteriorate for many reasons. The customer may not pay the programmer in accordance with their written agreement; the customer may not pay the programmer's staff; the project may generate cost overruns or encounter delays; or the program may not perform as expected. Typically, the parties resolve these disputes privately. If, however, the customer has invested considerable time or money in the project and the programmer blocks the customer's use of the system, the customer may file a complaint and the state prosecutor may seek to convict the programmer under the applicable computer crimes act.⁽³⁾

Most states as well as the federal government, consider it a crime to "willfully, knowingly and without authorization" modify, destroy, disclose, take, access, or deny access to a computer, computer program, or computer data.⁽⁴⁾ Under these criminal statutes, the prosecutor must prove beyond a reasonable doubt that the defendant acted "without authorization."⁽⁵⁾ Unique problems arise in the prosecution of the programmers who destroy, remove, alter, access, or deny access to a computer program or computer system provided to a customer. An independent computer consultant, programmer, or development

company enjoys certain rights under the federal Copyright Act⁽⁶⁾ and the Uniform Commercial Code⁽⁷⁾ ("UCC") that may provide potential defendants with reasonable grounds to believe they have authority to commit acts that would otherwise violate the computer crimes statutes.

II.

What is "Without Authorization?"

A. *State Law*

1. *The Florida Model*

Florida's Computer Related Crimes Act⁽⁸⁾ requires the State to prove that the complained of activity occurred "willfully, knowingly and without authorization."⁽⁹⁾ Although the terms "willfully" and "knowingly" are relatively common in the criminal law and fairly well understood, the Act does not define the term "without authorization" and this may present problems in the prosecution under the Act. Both as "authors" under the Copyright Act⁽¹⁰⁾ and as "sellers" under the UCC,⁽¹¹⁾ the programmer and developer may retain a residual property interest in software after installation sufficient to support a defense that the programmer or developer reasonably believed it was authorized to access the software.⁽¹²⁾ Florida's Act does not specify who may grant or deny this authorization. Is it the owner of the computer program (software), the owner of the computer system (hardware), the owner of the premises, the lessee of the computer equipment, or the lessee of the computer program? The Act's lack of guidance on these points makes successful prosecution of offending programmers difficult.

In order to constitute a violation of Florida's statute, the state must prove beyond a reasonable doubt that the defendant committed a prohibited act under circumstances indicating that no reasonable basis existed for the defendant to believe it had authority to take such action. In other words, the state must prove that the defendant had no reasonable basis to believe that the federal copyright law, the UCC, or the common law of contracts permitted such acts.

Civil litigation often resolves the questions of who owns the program and what acts are authorized under copyright and commercial law.⁽¹³⁾ In a computer crimes case, these issues may interact so as to provide the programmer with a viable defense against the criminal charges.

2. *"Without Authority" in Other States*

a. *Overview*

Like Florida, most states with computer crimes statutes do not define the term "without authorization." Two states do, however, define lack of authorization.

Colorado⁽¹⁴⁾ requires use without the express consent of the owner. Under Colorado's statute, express consent may include an employee's job description.⁽¹⁵⁾ New York⁽¹⁶⁾ requires use after notice to the user that he lacks authorization. New York specifically recognizes the defense that defendants may reasonably believe that the customer authorized their actions.⁽¹⁷⁾ When a party properly raises such a defense at trial, the state bears the burden of disproving the defense beyond a reasonable doubt.⁽¹⁸⁾

Several states require the defendant be without claim of title to alter the computer program or lack the reasonable belief that the customer has authorized the programmer to do so. Alabama⁽¹⁹⁾ and Missouri⁽²⁰⁾ require the offender be "without reasonable grounds to believe that he has such authorization." Alaska requires the offender "[lack] any reasonable ground to believe [that he] has a right" to commit the prohibited act.⁽²¹⁾ Kansas identifies as a defense "that the property or services were appropriated openly and avowedly under a claim of title made in good faith."⁽²²⁾ These states also recognize that a reasonable belief of authorization forecloses criminal liability.⁽²³⁾

Proof of computer theft in Minnesota⁽²⁴⁾ and Rhode Island⁽²⁵⁾, requires that offenders be without "claim of right" when they take, transfer, conceal, or retain possession of any computer, computer system, computer network, computer software, computer program or data. Minnesota law makes it a crime to deprive "the owner of possessionof anycomputer software"⁽²⁶⁾ and establishes a penalty based upon "the loss to the owner."⁽²⁷⁾

b. *Washington*

The Washington Court of Appeals reviewed the state law crime of computer trespass⁽²⁸⁾ in *State v. Olson*.⁽²⁹⁾ The Washington statute defines computer trespass as occurring when a person "without authorization, intentionally gains access to a computer..."⁽³⁰⁾ The defendant police officer was convicted under the statute after accessing a computer and obtaining print-outs identifying coeds of a local college when no on-going investigation of those coeds was in progress.⁽³¹⁾ The appellate court reversed the conviction and found the police officer had authority to access the computer as part of his job, and that the statute did not prohibit his "use" of the data.⁽³²⁾ The court found the term "authorize" to mean "to endorse, empower, justify, or permit by or as if by some recognized or proper authority (as custom, evidence, personal right, or regulating power)."⁽³³⁾ The court held that the "trial court in the instant case was required to find lack of authorization beyond a reasonable doubt."⁽³⁴⁾

c. *California*

Prior to 1989, California's computer crimes statute provided that "[a]ny person who maliciously accesses, alters, deletes, [or] damages...." a computer or a

computer program is guilty of a computer crime.⁽³⁵⁾ In *Mahru v. Superior Court*,⁽³⁶⁾ an appellate court construed the scope of the earlier statute. A computer software development company agreed to provide a computer system and technical support services to its customer, a credit union.⁽³⁷⁾ The credit union subsequently terminated the contract because the system did not operate as specified.⁽³⁸⁾ The developer then altered two files on the system that were physically located at the credit union.⁽³⁹⁾ As a result, the credit union could not use the system for four business days.⁽⁴⁰⁾ Because the credit union had already paid for the computer lease and the support services contract, the lower court found the developer breached the lease and support contract.⁽⁴¹⁾ The developer and certain key employees were convicted under the earlier version of California's computer crime statute.⁽⁴²⁾ Upon review, the appellate court found that although the acts of the defendants may have been spiteful and injurious, they were not criminal in nature. The court stated that "[w]e cannot see what difference it makes who breached [the contract] first and whether [the developer] was justified, as a matter of contract law, in abruptly ceasing its performance. Surely,criminal [conduct] cannot turn ona breach of contract."⁽⁴³⁾

Currently, the California computer crimes statute⁽⁴⁴⁾ requires that the act occur "knowingly and without permission" in order to obtain a conviction.⁽⁴⁵⁾ By replacing "maliciously" with "knowingly and without permission," the California legislature has narrowed the application of the statute.

d. *Arizona*

In *State v. Moran*,⁽⁴⁶⁾ prosecutors charged an employee under the Arizona computer crime statute⁽⁴⁷⁾ for failing to decode a program he had encrypted for his former employer. The applicable statute provided that anyone who "intentionally and without authorization" damaged or destroyed a computer program committed a crime punishable as a felony.⁽⁴⁸⁾ As part of his job, the employee routinely encoded programs he developed for his employer.⁽⁴⁹⁾ When he failed to decrypt a program upon request, his supervisor terminated his employment and brought charges against him.⁽⁵⁰⁾ At the close of the state's case, the trial court dismissed the count brought under Arizona's computer crimes statute.⁽⁵¹⁾ On review, the appellate court agreed with the trial court's dismissal "[b]ecause defendant was authorized to encode his or her program [and] his acts did not amount to *unauthorized* alteration or impairment."⁽⁵²⁾ The *Moran* case illustrates that "authorization" often implicit in a programmer's job description may thwart convictions under computer crimes acts.

The above cases demonstrate some of the difficulties prosecutors face in prosecuting computer programmers and developers under state computer crimes statutes. The lack of a clear definition of authorization and the uncertainty of the authorization's origin, together with a vague reasonableness

standard, fail to provide prosecutors with practical guidance in pursuing these types of cases. Furthermore, because the statutes in question are criminal statutes, prosecutors must meet a high--and therefore difficult--burden of proof.

B. *Federal Law*

1. *Defining "Without Authorization"*

The federal Computer Fraud and Abuse Act ("Act")⁽⁵³⁾ makes certain proscribed acts a federal crime.⁽⁵⁴⁾ The Act, however, does not define the term "authorization." Although the Act defines the phrase "exceeds authorized access," the definition fails to provide significant statutory guidance regarding the meaning of the critical term "authorization."⁽⁵⁵⁾

The legislative history of the Computer Fraud and Abuse Act of 1986⁽⁵⁶⁾ discusses two types of activities that the Senate Judiciary Committee did not intend to result in a conviction under the statute. First, the legislative history indicates that if data is lost during an authorized repair of a computer, the programmer has not violated the statute.⁽⁵⁷⁾ Second, the legislative history supports the use of so called "time-bomb" software routines. A computer programmer or developer may incorporate a "time-bomb" software routine into a computer program to ensure that the customer pays according to contract. If the customer does not pay, the developer in turn fails to reset a time-out clock contained in an essential software routine, and the computer program eventually stops processing data.⁽⁵⁸⁾

With the exception of authorized repair and "time-bomb" routines, however, the Computer Fraud and Abuse Act does not address the unique rights of programmers under copyright, commercial and contract law.

2. *Apparent Authorization under the Copyright Act*

Federal copyright law grants programmers certain rights that may authorize, or lead programmers to believe they are authorized, to act in a certain manner.⁽⁵⁹⁾ Three major aspects of copyright law potentially affect a defendant's belief regarding authority to commit acts that may be prohibited under applicable computer crimes statutes.⁽⁶⁰⁾ First, programmers may believe that they own the copyright to a program and therefore have the right to control its first publication.⁽⁶¹⁾ Second, owners of a lawfully made copy of a program have the right to destroy or otherwise dispose of the copy as they see fit.⁽⁶²⁾ Third, ownership of copyright is distinct from ownership of a copy;⁽⁶³⁾ therefore, a programmer may still own the copyright to a program even if the customer rightfully possesses a copy of the program.

The copyright owner has the exclusive right to control the first publication of a copyrighted work.⁽⁶⁴⁾ The Copyright Act defines "publication" as the

distribution of copies to the public.⁽⁶⁵⁾ The Supreme Court explicitly recognized the importance of this right in *Harper & Row, Publishers, inc. v. Nation Enterprises*,⁽⁶⁶⁾ in which the Court held that even fair use might not present a defense to infringement of the copyright owner's right of first publication.⁽⁶⁷⁾ Ownership of a copyright includes the exclusive right to make copies of the copyrighted work and to distribute or publish the copies.⁽⁶⁸⁾ Infringement of the right of first publication deprives the copyright owner of this exclusive right to control the future publication or use of the work.⁽⁶⁹⁾ Once an author sells a copy of the program, the rightful owner of that copy may dispose of the copy in any fashion.⁽⁷⁰⁾ This is known as the first sale doctrine.⁽⁷¹⁾ The author essentially relinquishes control over the work, and the first-sale buyer may resell the program without any royalty liability to the author. Ownership of a copy differs from mere possession of a copy in that possession alone does not vest any rights of ownership in the possessor.⁽⁷²⁾ Nevertheless, the rightful owner of a copy of a computer program cannot rent or lease that copy without the consent of the copyright owner.⁽⁷³⁾

The Copyright Act thus provides guidance regarding the right to access or otherwise manipulate a computer program. Like the Federal Computer Fraud and Abuse Act, however, the Copyright Act does not specifically define the term "authorization." Furthermore, because the Copyright Act provides at least three statutory provisions upon which defendants may base their "reasonable belief" of authorization,⁽⁷⁴⁾ prosecuting programmers for violations of state computer crimes acts remains difficult.

III.

The Scope of Ownership in Computer Programs

A. Claims of Copyright Ownership

1. The Independent Contractor Programmer

As discussed above in section II.B.2., the Copyright Act may provide a defense for a computer programmer who destroys, alters, or removes a computer program contained in a customer's computer. The programmer may have acted under a good faith belief that as an independent contractor, he owns the copyright to the program and has the right to control first publication of the copyrighted work.⁽⁷⁵⁾

The Copyright Act expressly provides that "ownership of copyright is distinct from ownership of any material object [the original or a copy] in which the work is embodied."⁽⁷⁶⁾ Ownership of a copyright, for example, enables one to exclude others from copying, distributing, or modifying the work (i.e., the program), or making a derivative work.⁽⁷⁷⁾ The first or original embodiment of a work is defined as a copy under the Copyright Act.⁽⁷⁸⁾ When a computer program is created, the original version of the program is considered a copy

under copyright law. It is crucial to determine, however, whether the programmer sold or transferred ownership of the original or first copy of the program to the developer. If the programmer did so, the fact of sale or transfer of ownership will undermine an argument that the programmer had a good-faith belief he was protecting his right of first publication by destroying, altering, or removing the software. If a programmer has not sold or otherwise transferred the first copy of the program, his acts may be reasonable to protect his right of first publication.

The Copyright Act provides that ownership initially vests in the author of a work. If a programmer is an employee and the work is made within the scope of employment, the Act deems the employer to be the author.⁽⁷⁹⁾ In all other circumstances, the programmer is the author.

In *Community for Creative Non-Violence v. Reid*,⁽⁸⁰⁾ the Supreme Court applied common law agency principles to determine the existence of an employer-employee relationship. In addition to the agency factors listed in *Restatement (Second) of Agency* § 220(2), the Court also weighed a number of other factors.⁽⁸¹⁾ Under the Supreme Court's test in *Reid*, if a court finds that an employer-employee relationship exists, the court must then determine whether the employee created the work or program within the scope of his employment.⁽⁸²⁾ Before creating a particular computer program, many programmers and developers enter into written agreements that set forth the scope of work to be done and compensation rate. The presence or absence of such an agreement is one factor that a court may consider in determining whether the programmer is an employee.⁽⁸³⁾

State employment law may also be important in determining a programmer's rights as a employee.⁽⁸⁴⁾ Florida law is instructive in this regard. In *Hilldrup Transfer v. State Department of Labor*,⁽⁸⁵⁾ the court held the state labor board misconstrued the type of control an individual must exercise in order to establish an employer-employee relationship. Under the *Restatement (Second) of Agency*, one must look to the extent of control the individual exercises over matters authorized by the agreement.⁽⁸⁶⁾ In *Hilldrup*, the written agreement between the parties specifically stated that the plaintiff had no control of the details of the truck driver's work.⁽⁸⁷⁾ In *Georgia-Pacific Corp. v. Charles*,⁽⁸⁸⁾ the court held a written agreement between a truck driver and a lumber company reflected the parties' belief that the driver was an independent contractor.⁽⁸⁹⁾ In *F.L. Enterprises v. Unemployment Appeals Commission*,⁽⁹⁰⁾ a written agreement as well as the parties' course of conduct revealed the extent of control exercised over a salesperson who sold time share units. The court concluded the salesperson was an independent contractor notwithstanding the fact that the other party required the salesperson to attend certain meetings.⁽⁹¹⁾ In *Robinson By and Through Bugera v. Faine*,⁽⁹²⁾ the court held a nurses' registry could not be vicariously liable for a nurse's alleged negligence when the registry was merely an employment agency, the nurse did not have an exclusive relationship with the

registry, the nurse was paid by her patients, and the registry withheld neither taxes nor social security and provided no medical or health benefits.⁽⁹³⁾ In *Delco Industries v. Department of Labor & Employment Security*,⁽⁹⁴⁾ the court found a written agreement providing that a telephone solicitor was an independent contractor⁽⁹⁵⁾ precluded the creation of an employer-employee relationship where the defendant was only concerned with profits and not with exerting control over its salespersons as an employer ordinarily would.⁽⁹⁶⁾

Once the owner of a copyright is identified, any transfer of the copyright must be in writing and signed by the copyright owner.⁽⁹⁷⁾ The copyright law requirement that changes in ownership must be memorialized in writing is akin to the statute of frauds requirement in contract law.⁽⁹⁸⁾ In the absence of a written transfer, copyright ownership remains with the author or owner--the programmer or developer--regardless of the amount of money a customer pays for the software.⁽⁹⁹⁾

2. *Rights of Copyright Owners*

The Copyright Act establishes a copyright owner's exclusive rights to make copies, to distribute those copies, to publicly perform the work, and to make derivative works.⁽¹⁰⁰⁾ The Act does, however, limit these exclusive rights. For example, a copyright owner cannot prohibit the rightful owner of a program from making back-up or archival copies,⁽¹⁰¹⁾ cannot prohibit the owner of a copy from loading the program into a machine,⁽¹⁰²⁾ and cannot bar other fair uses of the program by the lawful owner of a copy.⁽¹⁰³⁾ Most importantly, once the copyright owner sells a copy of the program--whether the original version or the one-hundredth copy--the copyright owner cannot restrict further sale or disposition of the program,⁽¹⁰⁴⁾ although the copyright owner can restrict its rental.⁽¹⁰⁵⁾ If the copyright owner does not sell the program, however, a person in possession of the program does not have the right to sell or otherwise dispose of it.⁽¹⁰⁶⁾

Prosecutors may find it useful to analyze defendants' behavior under the Copyright Act before bringing charges under computer crimes acts. Copyright ownership or a belief in such ownership may provide defendants with reasonable grounds to believe that their allegedly criminal behavior was lawful.

B. *Rights under the UCC*

Contract law and the Uniform Commercial Code determine the scope of an agreement between the parties and their respective rights and obligations. The UCC initially provides a well-documented framework to determine whether the parties reached an agreement and the extent of their rights and liabilities. If the UCC does not apply to the transaction, common law contract theories apply instead.

Prosecutors seeking a programmer's conviction under a computer crimes statute must analyze the terms and conditions of the agreement between the parties to determine whether the copyright owner transferred copyright, sold a copy of the program, or leased the program to the customer. The programmer can sell, lease or lend a copy⁽¹⁰⁷⁾ of the program to the customer. If a developer contracts with a programmer to provide software to a third party customer, the programmer can sell, lease, or lend a copy of the program to the developer, who may then transfer possession to the customer. Sometimes the parties use written agreements to specify the scope of the project and compensation to be paid for the work. If the written agreement discusses copyright in the program, ascertaining whether the parties contemplated a sale should be a relatively simple matter. The time of transfer may or may not be specified in the contract. A significant number of written agreements do not discuss the copyright to the programs, and as a result the copyright owner's statutory rights remain unaffected by the written agreement.⁽¹⁰⁸⁾

In some instances, the written agreement does not discuss rights to the program *per se*

and may simply establish that the programmer will provide services to the customer in exchange for compensation. Such contracts are silent about the tangible property the programmer creates and the resulting intellectual property rights in the work. The copyright owner's statutory rights are not affected by these contracts.

1. *Computer Software and Programs as Goods*

In the case of transactions involving computer programs or software, a threshold question exists as to whether the UCC even applies to such transactions.⁽¹⁰⁹⁾ The UCC provides that "[u]nless the context otherwise requires, [Article 2] applies to transactions in goods."⁽¹¹⁰⁾ The term "transaction" has a broader meaning than the term "sale" because a sale is defined as the passage of title from the seller to the buyer for a price,⁽¹¹¹⁾ whereas transactions do not necessarily entail passage of title. Some courts have held that the parties must contemplate a "sale" before the provisions of Article 2 will apply to the contract.⁽¹¹²⁾ Under Article 2, "goods" refer to all items that are movable at the time they are identified under the contract.⁽¹¹³⁾ Computer programs and software are movable and may be identified under the contract. In criminal proceedings, some courts have held that software is not movable, although the logic in these cases may be faulty.⁽¹¹⁴⁾ In order for software to function, it must be stored in a tangible, movable medium such as a disk or computer print-out.

The UCC also requires the goods be identified before an interest in the goods can pass from seller to buyer.⁽¹¹⁵⁾ At the beginning of a software development project, goods may not be identified under the contract because the parties contemplate the creation of a new program. On other occasions, the programmer is hired to modify an existing program,⁽¹¹⁶⁾ in which case the

goods--the program modifications--are not identified because they do not exist at the time of contracting. In contrast, existing programs, such as off-the-shelf programs, are identified under the contract.⁽¹¹⁷⁾ As a project progresses and the programmer writes code, the goods may become identified, and the buyer may obtain an insurable interest in the goods.⁽¹¹⁸⁾

Although no specific UCC provision excludes services, case law holds that a contract relating solely to services (e.g., an employment contract) or primarily for services with the transfer of personal property as merely an incidental feature is not governed by Article 2 of the UCC.⁽¹¹⁹⁾ Courts often apply a "predominant features" test to ascertain whether the UCC applies in a given situation: "[a] contract is for 'service' rather than 'sale' when 'service predominates,' and the sale of items is 'incidental.'"⁽¹²⁰⁾

Courts are divided as to whether computer systems--that is, software and hardware--constitute goods or services. In *F. & M. Schaefer Corp. v. Electronic Data System Corp.*,⁽¹²¹⁾ the buyer of software for a data processing system argued that the software could not be the subject of a replevin action.⁽¹²²⁾ The court rejected this argument and found the system tangible, consisting of all copies of tapes, instructions, and other material copies.⁽¹²³⁾ In *In re Bedford Computer Corp.*,⁽¹²⁴⁾ the court held a research and development contract for a new type of computer system to be a contract for sale with delivery to be made at the completion of the research. In *Hi Neighbor Enterprises v. Burroughs Corp.*,⁽¹²⁵⁾ the court found that because a computer system was supplied as a unit, the UCC applied to the transaction without any discussion of its rationale for doing so.⁽¹²⁶⁾ Books, which contain intellectual property protected under copyright law, are also goods under Article 2 of the UCC.⁽¹²⁷⁾ Courts have also applied the UCC to a contract for services that resulted in the creation of pamphlets,⁽¹²⁸⁾

and to a contract for the creation of video games that utilize internal computer programs.⁽¹²⁹⁾

A second issue that must be resolved before applying the UCC to software transactions is whether the parties reached an agreement regarding the first or original copy of the program. The UCC defines "agreement" as the bargain of the parties as found in their language and by implication from other circumstances, including course of dealing, trade usage, course of performance,⁽¹³⁰⁾ or course of conduct.⁽¹³¹⁾ If programmer and customer enter into a written agreement that provides only for the delivery of services and does not discuss who will retain the program copy, a court may find the parties contemplated the customer would receive at least a copy of the program.⁽¹³²⁾ The parties' specific course of conduct, however, will affect this aspect of the agreement and particularly the time of delivery. Moreover, ownership of the original program copy must be consistent with copyright law.

The UCC is designed to provide missing terms in an agreement.⁽¹³³⁾ The

more terms the parties leave open, the less likely they intended to conclude a binding agreement.⁽¹³⁴⁾ Under section 2-207(3), the parties' conduct may suffice to establish a contract for sale even though the writings of the parties do not otherwise establish a contract.⁽¹³⁵⁾ Section 2-207(3), must be read in light of section 2-201, the UCC statute of frauds.⁽¹³⁶⁾

Section 2-201 provides that partial performance of an oral contract can render the contract enforceable in whole or in part as to goods that have been received and accepted or with respect to goods for which payment has been made and accepted.⁽¹³⁷⁾ Even though partial payment may have been made under an oral contract, the seller can be required to deliver a portion of the goods, provided that the goods are apportionable.⁽¹³⁸⁾ Because computer programs are rarely apportionable,⁽¹³⁹⁾ however, the programmer must fully perform and complete the program before delivering it to the customer. Moreover, accepting partial payment under the contract most likely will trigger the statute of frauds exception of the UCC.

The UCC provides some guidance as to when a "sale" or transfer of goods occurs in the absence of a specific agreement to the contrary. The UCC defines delivery of goods as the tender of conforming goods to the customer.⁽¹⁴⁰⁾ Title or ownership of the goods or program passes when the programmer completes performance under the agreement and formally delivers or presents the program to the customer.⁽¹⁴¹⁾

2. Transactional Complications

If a programmer writes a program at the customer's location, formal delivery occurs when the programmer completes the program and turns the program over to the customer.⁽¹⁴²⁾ If a dispute arises between the parties before the programmer formally "delivers" the program to the customer as set forth in the UCC, the programmer may retain the right to alter or remove the program or destroy the program copy in the customer's possession. Conviction under a computer crimes act may therefore become extremely uncertain since it may turn on the tender of conforming goods to the customer.⁽¹⁴³⁾

If the customer fails to pay the programmer for the program or for his services, the UCC allows the programmer to demand adequate assurance from the customer regarding payment under the contract.⁽¹⁴⁴⁾ Because the program cannot be delivered until it has been completed,⁽¹⁴⁵⁾ if the customer fails to make progress payments according to the agreement or provide adequate assurance of such payments, the programmer may stop performance under the contract, refuse to deliver the program,⁽¹⁴⁶⁾ and bolster this refusal by disabling the code already in the customer's possession. Again, conviction under computer crimes acts is highly uncertain in these circumstances.

A programmer may also be concerned that the customer will make a back-up copy of the program.⁽¹⁴⁷⁾ By make a back-up copy prior to formal delivery of

the program, the customer may frustrate the programmer's rights under the UCC to withhold delivery of the goods. The programmer may reasonably exercise his rights under the UCC by destroying all copies of the program in the customer's possession, including back-up copies. If contract law authorizes such acts, computer crimes statutes should not criminalize them. [\(148\)](#)

If the customer notifies the programmer of the customer's intention to make multiple copies of the program, and the parties did not contemplate such copying when they initially negotiated the contract, the customer's intent to copy may constitute anticipatory breach. [\(149\)](#) At the time of contracting, the parties bargained for the creation and delivery of a single copy of the program and for its use by the customer. [\(150\)](#) Under the contract, the customer agreed to use only one copy. [\(151\)](#) The threat to make and distribute multiple copies effectively repudiates the customer's obligation to accept and use a single copy of the program. [\(152\)](#) Once the customer repudiates a performance not yet due, the programmer may exercise his or her rights under the UCC to repossess the program or destroy the customer's copies. The exercise of these rights, together with a belief that a reasonable person has those rights, may bar a criminal prosecution under a computer crimes act.

If the customer alters the scope of the work or if the program does not work as expected and the customer withholds payment, this too may constitute breach of contract. If the programmer thereafter denies the customer access to the program, he may be acting under a reasonable belief that he has a right to do so and therefore should not violate a computer crimes act.

This breach of contract defense, even if erroneous, has been recognized in California. In *Mahru v. Superior Court*, [\(153\)](#) criminal liability did not attach when the defendant breached a contract even though the defendant was civilly liable. In the multiple copy - further distribution scenario, the customer's intention to make and distribute copies also violates the programmer rights under the Copyright Act. [\(154\)](#) A reasonable argument can be made that the programmer may alter, modify, or destroy the customer's copy of the program in order to preserve his rights under the Copyright Act.

C. Common-law Contract Theories

Common law contract theories may also reinforce a programmer's belief that the law justifies, and hence authorizes, the programmer's actions in destroying or disabling a customer's computer system. If a customer infringes a programmer's copyright when the customer makes multiple program copies, the customer cannot later recover against the programmer in a contract action because the customer's selected mode of performance is illegal. [\(155\)](#) If the programmer cannot be civilly liable for destroying the customer's illegal copies, criminal liability should not attach for the same act. [\(156\)](#)

Violations of the Copyright Act such as making multiple copies are also

injurious to members of the public. Contracts that contemplate injuries to third parties or the public are illegal under the contract law.⁽¹⁵⁷⁾ For example, an agreement to print books in violation of another's copyright is an illegal performance of a contract.⁽¹⁵⁸⁾ Again, if a customer cannot recover civil damages from a programmer under these circumstances, the state cannot rightfully convict the programmer under a computer crimes act, especially if the programmer reasonably believes that the law allows him to act in this manner.

If a customer always intended to make and distribute multiple copies of a program and only recently informed the programmer of this intention, a reasonable belief that the programmer was or would be defrauded by the customer may be inferred. The common law of contracts may allow the programmer to repossess the goods.⁽¹⁵⁹⁾ Upon learning of the customer's intention to distribute copies of the program, the programmer has the right to remove the program from the possession of the customer, by destruction or otherwise. Again, if principles of commercial law authorize the programmer to act in this manner, the programmer cannot be reasonably convicted under a computer crimes act.

A transaction between a programmer and a customer also may be classified as a bailment or a lease instead of a sale of the original program copy.⁽¹⁶⁰⁾ Key factors in determining whether the parties contemplated a bailment include whether title remains in the lessor and whether the lessee intends to return the property.⁽¹⁶¹⁾ In *Pagliarulo Building Contractors, Inc. v. Avco Financial Leasing Co.*,⁽¹⁶²⁾ the court held that upon lessee's failure to make lease payments for the computer system, the lessor's three alternatives were to terminate the lease and repossess the equipment, retake the equipment and seek to hold the lessee liable for the difference between the original lease and a subsequent re-lease of the equipment, or to hold the lessee liable for all payments due under the lease.⁽¹⁶³⁾

Under a bailment theory, even if the agreement between the parties contemplates a loan or lease of the program, the programmer has the right to remove the program from the possession of the customer upon nonpayment. If the programmer reasonably believes that the agreement is a loan or lease, he is authorized to alter, disable, or remove the program and should not be convicted under a computer crimes act.

IV.

CONCLUSION

In view of the intricacies of the Copyright Act, the UCC, common law contract theories, and the complex factual aspects of the computer crime asserted against an independent programmer or development company, a conviction under a computer crimes act may be difficult to obtain. The UCC, common law contract, or the Copyright Act often provide programmers with reasonable grounds to believe in the legality of their actions. Apparent or actual "authority"

grounded on commercial law theories may provide a programmer with an absolute defense to charges under a computer crimes act for removing, modifying, or destroying software at a customer's location. A prosecutor, in anticipation of these defenses, must be prepared to prove that a person in the position of the programmer would not have had a reasonable expectation all lease payments due pursuant to an acceleration clause. *Id.* under any commercial or copyright law theory to commit acts prohibited by the applicable computer crimes statute. [\(164\)](#)

1. In the alternative, the customer might hire a computer development company ("developer") to write the computer program or build the computer system. In such cases, the developer rather than the customer may retain a programmer to write and install the program and the computer equipment at the customer's place of business.
2. The term "computer system" as used in this Article refers to an integrated computer hardware and software system. Typically, the software or computer programs will be loaded onto computer equipment by the programmer or development company pursuant to an agreement with the customer.
3. This article provides an analysis of computer crime statutes. Because software and associated data have been held to be "property" under criminal theft laws, the theories advanced herein may be equally applicable to allegations of criminal theft of computer software. *See Hancock v. Decker*, 379 F.2d 552 (5th Cir. Tex. 1967) *per curiam*; *People v. Gopal*, 171 Cal App. 3d 524, 217 Cal. Rptr. 487 (1st Dist. 1985) (where there is no special statute covering stolen software it was proper to charge the defendant under the general statute covering possession of stolen property); *Hancock v. State*, 402 S.W.2d 906 (Tex. Crim. App. 1966), *aff'd.*; *Ward v. Superior Court*, 3 Computer L. Serv. Rep. 206 (Cal. Super. Ct. 1972) (holding that computer programs come within the meaning of the statute defining the offense of theft).
4. Florida's Computer Related Crimes Act, Fla. Stat. § 815.01-.07 (1993), is an example of a computer crimes statute. The Computer Fraud and Abuse Act, 18 U.S.C. § 1030 (1988), is the federal statute prohibiting unauthorized access into federal interest computers. This article will initially analyze the Florida statute and then discuss various other computer crime statutes and the Computer Fraud & Abuse Act.
5. *United States v. McRee*, 7 F.3d 976, 982 (11th Cir. Ga. 1993) (explaining that the prosecutor must prove beyond a reasonable doubt that the defendant acted with the intent to steal).
6. 17 U.S.C. §101 *et seq.* (1988).
7. Uniform Commercial Code (1990).
8. Fla. Stat. §§ 815.01-.07 (1993).

9. Fla. Stat. §§ 815.04-.06 (1993).
10. 17 U.S.C. § 101 *et seq.* (1988).
11. U.C.C. § 2-501(2).
12. See the discussion in Part III of this Article.
13. *Avtec Sys. v. Peiffer*, 21 F.3d 568 (4th Cir. Va. 1994).
14. Colo. Rev. Stat. § 18-5.5-101(1) (1986 & Supp. 1993).
15. *Id.*
16. N.Y. Penal Code § 156.00(6) (McKinney 1988 & Supp. 1995).
17. In New York, the statute provides a defense based upon the fact that "the defendant had reasonable grounds to believe that he had [1] authorization to use the computer.....[2] the right to alter in any manner or destroy the computer data or the computer program....[or]...[3] the right to copy, reproduce or duplicate in any manner the computer data or the computer program." N.Y. Penal Code § 156.50 (McKinney 1988 & Supp. 1995). The comments provide that the reasonableness test imports an objective element into the determination of whether the defendant's belief that he had authorization to use the computer would be reasonable to an ordinary person, in the defendant's situation and circumstances. *Cf. People v. Goetz*, 497 N.E.2d 41 (N.Y. 1986) (explaining that the reasonableness standard must be based on the circumstances facing a defendant or his situation).
18. N.Y. Penal Code § 25.00(1) (McKinney 1988 & Supp. 1995).
19. Ala. Code §§ 13A-8-102(a), 13A-8-103(a)(1) (Supp. 1993).
20. Mo. Rev. Stat. § 569.095 (Supp. 1994).
21. Alaska Stat. § 11.46.740 (1989 & Supp. 1993).
22. Kan. Stat. Ann. § 21-3755(3) (1988 & Supp. 1993).
23. A treatise on computer law states "[a]n actor's reasonable belief that he was authorized to use a computer, his claim of right or his claim of title will foreclose criminal liability in several states because of either a failure of proof or by operation of an affirmative defense. All offenses under the computer crime laws of Alabama, Alaska, Kansas, Missouri and New York require that the state either provide or rebut an allegation that the actor was without reasonable grounds to believe that he was authorized or entitled to perform the acts at issue." 1 CCH Computer L. Guide ¶9710 (1994).
24. Minn. Stat. § 609.89(1)(b) (1987 & Supp. 1994).

25. R.I. Gen. Laws § 11-52-4 (1981 & Supp. 1993).
26. Minn. Stat. § 609.89(1)(b) (1987 & Supp. 1994).
27. *Id.* at § 609.89(2)(a)-609.89(2)(a)-609.89(2)(b).
28. Wash. Rev. Code § 9A.52.110 (1988 & Supp. 1994).
29. 735 P.2d 1362 (Wash. Ct. App. 1987).
30. *Id.* at 1363 (quoting Wash. Rev. Code § 9A.52.110 (1988 & Supp. 1994)).
31. *Id.* at 1364.
32. *Id.* at 1365.
33. *Id.* at 1364 (citing WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 146 (1981) (emphasis added)).
34. *Id.* at 1365.
35. Cal. Penal Code § 502(c) (West 1989) (emphasis added).
36. *Mahru v. Superior Court*, 191 Cal. App. 3d 545, 237 Cal. Rptr. 298 (2d Dist. 1987)
37. 191 Cal.App.3d at 546, 237 Cal. Rptr. at 298.
38. 191 Cal.App.3d at 547, 237 Cal. Rptr. at 298.
39. 191 Cal.App.3d at 547, 237 Cal. Rptr. at 299.
40. 191 Cal.App.3d at 548, 237 Cal. Rptr. at 299.
41. 191 Cal.App.3d at 547, 237 Cal. Rptr. at 299.
42. *Id.* See also Cal. Penal Code § 502(c) (West 1983).
43. *Mahru v. Superior Court*, 191 Cal. App. 3d at 549, 237 Cal. Rptr. at 300.
44. Cal. Penal Code § 502(c)(1)-(7) (West 1989 & Supp. 1995).
45. Another section of the statute refers to "knowing" behavior but that section relates to the introduction of a "contaminant" (defined in the statute) into a computer. See *id.* § 502(c)(8).
46. *State v. Moran*, 784 P.2d 730 (Ariz. Ct. App. 1989)
47. Ariz. Rev. Stat. Ann. § 13-2316(B) (West 1989). See also *State v. Moran*,

784 P.2d at 731.

48. *Id.*

49. *Id.* ("Defendant ["employee"]'s supervisor testified that [defendant] would be expected, though not required, to [encode his programs].").

50. *Id.*

51. *Supra* note 47 at 9.

52. *Moran*, 784 P.2d at 731 (emphasis added). The appellate court also reversed the employee's conviction under Arizona's criminal damage law, Ariz. Rev. Stat. Ann. § 13-1602(a) (1989) and held that this statute implicitly included the element "without express permission of the owner" because that element was explicitly found in the aggravated criminal damage law, Ariz. Rev. Stat. Ann. § 13-1604(a) (1989). The criminal damage law was a lesser included offense. *Id.* at 732.

53. 18 U.S.C. § 1030 (1988). The Computer Fraud and Abuse Act evolved from an earlier federal computer crime statute, the Counterfeit Access Device and Computer Fraud and Abuse Act of 1984, enacted as part of the Comprehensive Crime Control Act of 1984, Pub. L. No. 98-473, 98 Stat. 2190 (1984). See S. Rep.No. 433, 99th Cong., 2d Sess. 12 (1986), reprinted in 1986 U.S.S.C.A.N. 2479.

54. Under the Act it is illegal to (a) knowingly access a computer "without authorization or exceed[] authorized access" and obtain national defense or foreign relations information; (b) intentionally access a computer "without authorization or exceed[] authorized access" and obtain financial information; (c) intentionally access a computer for the exclusive use of the United States "without authorization"; (d) knowingly and with intent to defraud access a federal interest computer "without authorization or exceed[] authorized access" and obtain anything of value; (e) intentionally access a federal interest computer "without authorization" and alter, damage or destroy information or prevent the authorized use of the computer or information if the resulting loss is \$1,000 or more or if the information relates to medical records; and (f) knowingly and with intent to defraud traffic in passwords "without authorization" if the trafficking affects interstate commerce. 18 U.S.C. § 1030 (a).

55. The statute provides that "[t]he term 'exceeded authorized access' means to access a computer with authorization and to use such access to obtain or alter information in the computer that the accesser is not entitled so to obtain or alter." 18 U.S.C. § 1030(e)(6).

56. S.Rep.No. 432, 99th Cong., 2d Sess. 12 (1986).

57. The Committee report indicates that a concern was raised as to whether the statute "might cover authorized 'repairs' to a computer system because

'alteration' of the data is part of the gravamen of the offense, and repairs presumably can involve altering data. It is not the Committee's intent to criminalize properly authorized repair activities. For example, this section does not prohibit employees of communications common carriers from engaging in activities that are necessary to the repair of the carrier's service. The Committee believes that the requirement in subsection (a)(5) [18 U.S.C. §1030(a)(5)] that alterations occur after an unauthorized access is sufficient in itself to preclude its application to authorized repairs but wishes to leave no doubt that authorized repair activities are not covered by (a)(5)." S. Rep. No. 432, 99th Cong., 2d Sess., 12 (1986) *reprinted in* 1986 U.S.S.C.A.N. 2479, 2490.

58. *Id.* The Committee report further provides "[t]he second concern is that (a) (5) [18 U.S.C. §1030(a)(5)] might be construed as criminalizing the use in computer leasing services of automatic termination devices or so-called 'time bombs.' Frequently, a provider of computer services will build into his program a mechanism that automatically terminated the service if a user fails to pay his bill for the service on time. Concerns have been expressed that the provider might be considered liable under (a)(5) [18 U.S.C. §1030(a)(5)] for having 'prevented authorized use' of the service. That is not the Committee's intent. Having failed to pay his bill for the ... service, the delinquent user is no longer an 'authorized user' of the service, and termination of his access to the service is not an offense under this subsection." *Id.*

59. See 17 U.S.C. §§ 106, 106A, 177.

60. The Copyright Act may also pre-empt the alleged offense of the criminal statute. See *Rosciszewski v. Arete Assoc. Inc.*, 1 F.3d 225, 230 (4th Cir. 1993) (holding, *inter alia*, that state computer copying claim was preempted by the Copyright Act); *Crow v. Wainwright*, 720 F.2d 1224, 1226 (11th Cir. 1983) (holding that federal Copyright Act preempted Florida regulation due to substantial equivalency between elements of claim under both law).

61. 17 U.S.C. § 106(3).

62. 17 U.S.C. 109(a). This is known as the first sale doctrine.

63. 17 U.S.C. § 101.

64. *Supra* note 61. See also 2 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHTS § 8.11[a] (1994).

65. 17 U.S.C. § 101. Offering to distribute copies to a group of persons for further distribution also constitutes a publication. *Id.* "Distribution" may be by sale or other transfer of ownership, rental, lease or lending. 17 U.S.C. § 106 (3).

66. *Harper & Row, Publishers Inc. v. Nation Enterprises*, 471 U.S. 539 (1985).

67. If a work, be it a book, movie or computer program, is copied without the

approval of the copyright owner, the copier has infringed the owner's copyright in and to the work. However, if a work is copied for purposes such as criticism, comment, news reporting, teaching, scholarship, or research, the copyright owner's rights have not been violated because the copyright statute exempts such activities as being a fair use of the work. The fact that a work is unpublished does not present a bar to the defense of fair use. 17 U.S.C. § 107.

68. The Supreme Court in *Harper & Row* held that "[p]ublication of an author's expression before he has authorized its dissemination seriously infringes the author's right to decide when and whether it will be made public, a factor not present in fair use of published works.....The right of first publication implies a threshold decision by the author whether and in what form to release his work. First publication is inherently different from other section 106 rights in that only one person can be the first publisher; as the contract with Time illustrates, the commercial value of the right lies primarily in exclusivity. Because the potential damage to the author from judicially enforced 'sharing' of the first publication right with unauthorized users of his manuscript is substantial, the balance or equities in evaluating such a claim of fair use inevitably shifts." *Harper & Row*, 471 U.S. at 551-553 (1985).

69. 17 U.S.C. § 106(1), (3).

70. The copyright law provides that "the owner of a particular copy ...lawfully made under this title,is entitled, without the authorization of the copyright owner, to sell or otherwise dispose of the possession of that copy...." 17 U.S.C. § 109(a).

71. A learned treatise states "[i]t is clear that once the copyright owner consents to the sale of particular copies or phonorecords of his work, he may not thereafter exercise the distribution right with respect to such copies or phonorecords." *Supra* note 63, at § 8.12[B][1].

72. The legislative history provides that sub-section §109(c) "qualifies the privileges specified in sub-sections[§109](a) and (b) by making clear that they do not apply to someone who merely possesses a copy...without having acquired ownership of it. Acquisition of an object embodying a copyrighted work by rental, lease, loan, or bailment, carries with it no privilege to dispose of the copy under §109(a) or to display it publicly under §109(b)" without acquiring ownership of the copy. H.R. Rep. No. 1476, 94th Cong., 2d Sess., 80 (1976), *reprinted in* 1997 U.S.C.C.A.N., 5659, 5694.

73. The Copyright Act provides that "unless authorized by ... the owner of copyright in a computer program (including any tape, disk, or other medium embodying such program), ...no person in possession of a particular copy of a computer program ...may, for the purposes of direct or indirect commercial advantage, dispose of, or authorize the disposal of, the possession of that ... computer program ... by rental, lease, or lending, or by any other act or practice in the nature of rental, lease or lending." 17 U.S.C. §109(b)(1)(A).

74. See *supra* notes 60-63 and accompanying text.

75. As stated by the Supreme Court, "[p]ublication of an author's expression before he has authorized its dissemination *seriously infringes* the author's right to decide when and whether it will be made public... The right of first publication implies a threshold decision by the author whether and in what form to release his work." *Harper & Row*, 471 U.S. at 551-553, 1985 Copyright L. Dec. (CCH) ¶ 25,793 at 19569 (1985) (emphasis added).

76. 17 U.S.C. § 202. The Copyright Act defines "copy" as any material or tangible object "in which the work is *first fixed*." 17 U.S.C. § 101 (emphasis added).

77. 17 U.S.C. §§ 106-119 (1988 & Supp. V 1993).

78. *Id.*

79. The Act provides that "(a) [c]opyright in a work protected under this title vests initially in the author or authors of the work. The authors of a joint work are coowners of copyright in the work. (b) In the case of a work made for hire, the employer or other person for whom the work was prepared is considered the author for purposes of this title, and, unless the parties have expressly agreed otherwise in a written instrument signed by them, owns all of the rights comprised in the copyright." The Copyright Act also defines a work made for hire as "(1) A work prepared by an employee within the scope of his or her employment; or (2) A work specifically ordered or commissioned for [one of 10 listed categories]... if the parties expressly agree in a written instrument signed by them that the work shall be considered a work made for hire." 17 U.S.C. § 101.

80. *Community for Creative Non-Violence v. Reid*, 490 U.S. 730 (1989).

81. *The Restatement (Second) of Agency* § 220(2) provides in full:

In determining whether one acting for another is a servant of an independent contractor, the following matters of fact, among others, are considered.

(a) the extent of control which, by the agreement, the master may exercise over the details of the work;

(b) whether or not the one employed is engaged in a distinct occupation or business;

(c) the kind of occupation, with reference to whether in the locality, the work is

usually done under the direction of the employer or by a specialist without supervision;

(d) the skill required in the particular occupation;

(e) whether the employer or the workman supplies the instrumentalities, tools, and the place of work for the person doing the work;

(f) the length of time for which the person is employed;

(g) the method of payment, whether by the time or by the job;

(h) whether or not the work is a part of the regular business of the employer;

(i) whether or not the parties believe that they are creating the relation of master and servant;

(j) whether the principal is or is not in business.

The court stated that "[i]n determining whether the hired party is an employee under the general common law of agency, we consider the hiring party's right to control the manner and means by which the product is accomplished. Among the other factors relevant to this inquiry are the skill required; the source of the instrumentalities and tools; the location of the work; the duration of the relationship between the parties; whether the hiring party has the right to assign additional projects to the hired party; the extent of the hired party's discretion over when and how long to work; the method of payment; the hired party's role in hiring and paying assistants; whether the work is part of the regular business of the hiring party; whether the hiring party is in the business; the provision of employee benefits; and the tax treatment of the hired party." *Id.* at 751. In a subsequent case, the Second Circuit Court of Appeals opined that the most important factors are withholding of taxes and providing insurance benefits to the individual. See also *Aymes v. Bonelli*, 980 F.2d 857,

(2d Cir. 1992).

82. A learned treatise states "to prevail as an employee under the first paragraph of Section 101's definition of work for hire, a hiring party must show employment in the regular course of business." 1 *Melville B. Nimmer & David Nimmer, Nimmer on Copyrights* § 5.03[B] (1994).

83. *Community for Creative Non-Violence v. Reid*, 490 U.S. at 737.

84. There is some disagreement in the intellectual property law community regarding whether state law should be applied or whether federal common law applies.

85. 447 So. 2d 414, 417 (Fla. Dist. Ct. App. 1985).

86. *Restatement (Second) of Agency* § 220 (1958).

87. *Id.* at 417.

88. 479 So. 2d 140 (Fla. Dist. Ct. App. 1985) *rev. denied* 488 So. 2d 67 (1986).

89. *Id.* at 144.

90. 515 So. 2d 1340 (Fla. Dist. Ct. App. 1987).

91. *Id.* at 1342.

92. 525 So. 2d 903 (Fla. Dist. Ct. App. 1987).

93. *Id.* at 906.

94. 519 So. 2d 1109 (Fla. Dist. Ct. App. 1988).

95. *Id.* at 1110.

96. *Id.* at 1112.

97. Regarding the transfer of copyrights, the Act provides that "[a] transfer of copyright ownership.... *is not valid unless* an instrument of conveyance ... *is in writing* and signed by the owner of the rights conveyed." 17 U.S.C. § 204(a) (emphasis added).

98. U.C.C. § 2-201.

99. 17 U.S.C. § 204(a).

100. See e.g., 17 U.S.C. § 106. These rights include the ability to make copies, to distribute those copies, to publicly perform the work, and to make

derivative works, that is, to modify the work. The right to distribute copies includes the right to distribute the work to the public by sale, by other transfer of ownership, or by rental, lease or lending. 17 U.S.C. § 106. However, the right to rent or lease a computer program is prohibited. 17 U.S.C. § 109(b)(1) (A).

101. 17 U.S.C. § 117(2).

102. 17 U.S.C. § 117(1).

103. 17 U.S.C. § 107. *See also supra* p. 14 and note 67.

104. With respect to the transfer of a copy of a work, the Act provides that "[n]otwithstanding the provisions of §106(3), the owner of a particular copy lawfully made under this title, or any person authorized by such owner, is entitled, without the authority of copyright owner to sell, or otherwise dispose of the possession of that copy...." 17 U.S.C. § 109(a).

105. 17 U.S.C. § 109(a).

106. The statute provides that "[t]he privileges prescribed by sub-sections (a) and (b) do not, unless authorized by the copyright owner, extend to any person who has acquired possession of the copy.... from the copyright owner by rental, lease, loan, *or otherwise*, without acquiring ownership of it." 17 U.S.C. § 109(d) (1988 & Supp. IV 1992)(emphasis added). The legislative history for the amendments to the Copyright Act, P.L. 94-553, 90 Stat. 2541 (1976), provides that "[a]cquisition of an object embodying a copyrighted work by rental, lease, loan, or bailment carries with it no privilege to dispose of the copy under § 109(a) or to display it publicly under § 109(b). To cite a familiar example, a person who has rented a print of a motion picture from the copyright owner would have no right to rent it to someone without the owner's permission." H.R. Rep. No. 1476, 94th Cong., 2d Sess., 80 (1976) reprinted in 5 U.S. Cong. News, 5659, 5694. The Committee's opinion has been questioned. *See generally*, 3 Nimmer & Nimmer, *supra* note 81 § 10.09[A] (1993).

107. The use of the term "copy" herein is synonymous with the use of the term in the Copyright Act and refers to the original version of the program as well as a copy of the original.

108. *See* 17 U.S.C. § 204(a). Transfer of copyright ownership is not valid unless it is in writing and signed by the copyright owner. As the definition of transfer in § 101 does not include non-exclusive licenses, such licenses may be transferred with a writing.

109. *Cf. Downriver Internists v. Harris Corp.*, 929 F.2d 1147, 1150-51 (6th Cir. 1991) (applicability of U.C.C. in software cases can determine whether statutes of limitations and third party beneficiary rights apply in a given case).

110. U.C.C. § 2-102 (1990).

111. See U.C.C. § 2-106(1) (1990) for the definition of the term "sale." One treatise states that "[t]he presence of the word 'transaction' in [UCC § 2-102] is frequently used as a basis for reasoning that Article 2 applies to transaction such as leases or licenses in which title to the goods does not pass from buyer to seller." *1 Computer L. Guide* (CCH) ¶7200 (1994). It may be noteworthy that all but 11 sections of Article 2 of the UCC mention "sale," "buyer" or "seller."

112. See, e.g., *Bona v. Graefe*, 285 A.2d 607 (Md. 1972).

113. U.C.C. § 2-105(1). The definition of "goods" in Article 2 relating to sales is essentially the same as the definition in Article 2A which applies to leases. See U.C.C. § 2A-103(1)(h).

114. Because software and associated data have been held to be "property" under criminal theft laws, the theories advanced herein may be equally applicable to allegations of criminal theft of computer software. *Hancock v. Decker*, 379 F.2d 552 (5th Cir. Tex 1967) *per curiam*; *People v. Gopal*, 171 Cal App. 3d 524, 217 Cal. Rptr. 487 (1st Dist. 1985)(where there is no special statute covering stolen software it was proper to charge the defendant under the general statute covering possession of stolen property); *Hancock v. State*, 402 S.W.2d 906 (Tex. Crim. App. 1966), *aff'd*,; *Ward v. Superior Court*, 3 Computer L. Serv. Rep. 206 (Cal. Super. Ct. 1972)(holding that computer programs come within the meaning of the statute defining the offense of theft).

115. Specifically, "[g]oods must be both existing and identified before any interest in them can pass. Goods which are not both existing and identified are 'future' goods. A purported present sale of future goods or of any interest therein operates as a contract to sell." U.C.C. § 2-105(2) (1990).

116. In that case, the programmer's copyrights only extend to the modifications. The modifications are classified as derivative works under the Copyright Act. 17 U.S.C. § 101 (1988 & Supp. 1992). *Durham Indus. v. Tomy Corp.*, 630 F.2d 905, 909 (2d Cir. 1980), 1980 Copyright L. Dec. (CCH) ¶ 25,185; *Jerome Freedman v. Select Information Systems*, 1983 Copyright L. Dec. (CCH) ¶ 25,520 (N.D. Cal. 1983).

117. *Step Saver Data Systems, Inc. v. Wyse Technology*, 939 F.2d 91, 94 (3d Cir. 1991).

118. The question of when an identification of goods takes place is determined by the provisions of U.C.C. § 2-501 (1990). This section also discusses the sale of future goods. See U.C.C. §2-105(1)(b) (1990). The buyer obtains a special property interest in goods by identification of existing goods as goods to which the contract refers. Such identification can be made as agreed upon by the parties. In the absence of an explicit agreement identification occurs "if the contract is for the sale of future goods other than those described in ¶(c) [referring to crops or young of animals] when goods are shipped, marked or otherwise designated *by the seller* as goods to which the contract refers." U.C.C. § 2-501(1)(b) (1990). The comments to this UCC section indicate that

there is no requirement that the goods be in a deliverable state or that all of the seller's duties with respect to the processing of the goods be completed in order that identification occur. U.C.C. § 2-501(1), cmt. 4 (1990). The comments also state that in the ordinary case, identification of particular existing goods as goods to which the contract refers is unambiguous and may occur in one of many ways. Identification may be tentative or contingent. "In view of the limited effect given to identification by this Article, the general policy is to resolve all doubts in favor of identification." U.C.C. § 2-501, cmt. 2, (1990).

119. See, e.g., *Computer Servicers, Inc. v. Beacon Mfg. Co.*, 328 F. Supp. 635, 655 (D.S.C. 1970); *Wells v. 10-X Mfg. Co.*, 609 F.2d 248, 254 (6th Cir. 1979).

120. *Triangle Underwriters, Inc. v. Honeywell, Inc.*, 604 F.2d 737, 742 (2d Cir. 1979) (quoting *North Am. Leisure Corp. v. A & B Duplicators, Ltd.*, 468 F.2d 695, 697 (2d Cir. 1972)). The predominant feature test has been applied by some Florida courts. Where the predominant feature of a transaction in which a materialman contracted to furnish, fabricate and deliver certain steel piping systems for a construction project, was held to be the furnishing of a product rather than of services, the pipe could properly be characterized as goods within the meaning of Florida's commercial statutes. *United States Fidelity & Guaranty Co. v. North Am. Steel Corp.*, 335 So.2d 18 (Fla. Dist. Ct. App. 1976).

121. 430 F.Supp 988 (S.D.N.Y. 1977), *aff'd*, 614 F.2d 1286 (2d Cir. 1979).

122. *Id.* at 992.

123. *Id.*

124. 1 Computer Cas. (CCH) ¶ 45,049 (D.N.H. 1986).

125. 492 F. Supp. 823 (N.D. Fla. 1980).

126. *Id.* at 826.

127. In *Cardozo v. True*, 342 So. 2d 1053 (Fla. Dist. Ct. App. 1977), a reader of a recipe book sued the publisher for injuries sustained due to use of the recipe. The court applied the UCC and held that there was an implied warranty only to the physical condition of the book. The court did not rule on the liability of the authors.

128. In *Lake Wales Publishing Co., Inc. v. Florida Visitor, Inc.*, 335 So.2d 335, 336 (Fla. Dist. Ct. App. 1976), an unwritten contract required defendant to compile, edit and publish pamphlets. The statute of limitations was three years for an unwritten agreement and four years if the UCC was applied to the transaction. The court stated that "[t]he items allegedly furnished by the appellant were specifically produced or manufactured and were movable. Moreover, any services rendered were of necessity directed to production of

the items." The court thus found that the pamphlets were "goods" within the meaning of the UCC definition.

129. *Capital Associates, Inc. v Hudgens*, 445 So. 2d 651 (Fla. Dist. Ct. App. 1984) (holding that the video game was a piece of equipment within the definition of movable things).

130. U.C.C. § 1-201(3)(1990).

131. The UCC provides that "[a] contract for sale of goods may be made in any manner sufficient to show agreement, including conduct by both parties which recognizes the existence of such a contract." U.C.C. § 2-204(1) (1990).

132. *Advanced Marketing Services v Dayton Data Processing, Inc.*, 1192 Ohio App. LEXIS 994, 24 (Ohio Ct. App. Montgomery County Mar. 6 1992).

133. The UCC provides that "[e]ven through one or more of the terms are left open a contract for sale does not fail for indefiniteness if the parties have intended to make a contract and there is a reasonably certain basis for giving an appropriate remedy." U.C.C. § 2-204(3).

134. See U.C.C. § 2-204(3) comments, (1990). The comments also provide that "[t]he test is not certainty as to what the parties were to do nor as to the exact amount of damages due the plaintiff. Nor is the fact that one or more terms are left to be agreed upon enough of itself to deal an otherwise adequate agreement." U.C.C. 2-204(3) comments, (1990).

135. U.C.C. § 2-207(3) (1990).

136. U.C.C. § 2-201 (1990).

137. U.C.C. § 2-201(3)(c)(1990).

138. U.C.C. § 2-201, comment 2 (1990). The statute of frauds provision in U.C.C. § 2-201 also provides that "if the party against whom enforcement is sought admits in his pleading, testimony or otherwise" that a contract is made, that contract is *not* enforceable *beyond* the quantity of goods accepted. Also, a contract is enforceable "with respect to goods for which payment has been made and accepted or to which have been received and accepted." U.C.C. § 2-201(3) (1990).

139. *Kaufman v. Solomon*, 524 F.2d 501, 503 (3d Cir. Pa. 1975).

140. The UCC provides that "(1) [t]ender of delivery requires that the seller put and hold conforming goods at the buyer's disposition and give the buyer any notification reasonably necessary to enable him to take delivery." U.C.C. § 2-503(1) (1990).

141. The UCC sections governing the passing of title provide "(1) [t]itle to goods cannot pass under a contract for sale prior to their identification of the

contract [U.C.C. § 2-501], and unless otherwise explicitly agreed the buyer acquires by their identification a special property as limited by this act. Any retention or reservation by the seller of the title (property) in goods shipped or delivered to the buyer is limited in effect to a reservation of a security interest. Subject to these provisions and to the provisions of the article on Secured Transactions (Article 9), title to goods passes from the seller to the buyer in any manner and on any conditions explicitly agreed on by the parties. (2) Unless otherwise explicitly agreed title passes to the buyer at the time and place at which the seller completes his performance with reference to the physical delivery of the goods.... (3) Unless otherwise explicitly agreed where delivery is to be made without moving the goods: (a) if the seller is to deliver a document of title....(b) if the goods are at the time of contracting already identified and no documents are to be delivered, title passes at the time and place of contracting." U.C.C. § 2-401 (1990) (emphasis added).

142. U.C.C. § 2-307 (1990).

143. For example, Fla. Stat. § 815.04 (1994) notes that the issue turns on whether the program conforms to the contract. If it fails to conform, then under Fla. Stat. § 672,601, the customer may accept the delivery of the program and disinvest the programmer of the authorization to destroy the program.

144. U.C.C. §2-609, sets forth the right to demand adequate assurance of performance. "(1) A contract for sale imposes an obligation on each party that the other's expectation of receiving due performance will not be impaired. When reasonable grounds for insecurity arise with respect to the performance of either party the other may in writing demand adequate assurance of due performance and until he receives such assurance may if commercially reasonable suspend any performance for which he has not already received the agreed return. (2) Between merchants the reasonableness of grounds for insecurity and the adequacy of any assurance offered shall be determined according to commercial standards. (3) Acceptance of any improper delivery or payment does not prejudice the aggrieved party's right to demand adequate assurance of future performance. (4) After receipt of a justified demand failure to provide within a reasonable time not exceeding 30 days such assurance of due performance as is adequate under the circumstances of the particular case is a repudiation of the contract." U.C.C. §2-609 (1990).

145. See the UCC's provision regarding tender of delivery of goods. *Supra* note 107.

146. The UCC provides that "[w]here the buyer fails to make a payment due on or before delivery or repudiates with respect to a part or the whole, then with respect to any goods directly affected and, if the breach is of the whole contract [U.C.C. § 2-612], then also with respect to the whole undelivered balance, the aggrieved seller may: (a) withhold delivery of such goods." U.C.C. § 2-703 (1990)(emphasis added). Subsection (c) of U.C.C. §2-703 provides that with respect to goods which have not been identified to the contract, the seller may complete the manufacture and re-sell the goods, cease manufacture and sell the goods as scrap or may dispose of those

goods "in any other reasonable manner." U.C.C. § 2-704(2) (1990). Customarily, the computer program will have been identified to the contract by the parties. Also, the program will normally not be apportionable even though partial payment has been received.

147. The rightful owner of a copy of a program may make back-up or archival copies of the program. 17 U.S.C. § 117 (1988).

148. In California, these acts would not be considered a crime. See *Mahru v. Superior Court*, *supra*, note 27. The legislative history of the federal Computer Fraud and Abuse Act, 18 U.S.C. § 1030, also supports the aforementioned theory. According to the legislative history of the federal computer crime act, a computer leasing company is not guilty of a computer related crime if the leasing company automatically disables a computer system when the lessee fails to pay his bill for the services. See note 41.

149. The UCC provisions regarding anticipatory breach are as follows: "[w]hen either party repudiates the contract with respect to a performance not yet due the loss of which will substantially impair the value of the contract to the other, the aggrieved party may: (a) for a commercially reasonable time await performance by the repudiating party; or (b) resort to any remedy for breach [U.C.C. §§ 2-703 or 20711], even though he has notified the repudiating party that he would await the latter's performance and has urged retraction; and (c) in either case suspend his own performance or proceed in accordance with the provisions of this Article on the seller's right to identify goods to the contract notwithstanding breach or to salvage unfinished goods [U.C.C. § 2-704]." U.C.C. § 2-610 (1990) (emphasis added).

150. The Copyright Act permits the rightful owner of a copy of a computer program to use the program (which may entail the making of temporary copies) and to make a back-up copy for archival purposes. 17 U.S.C. § 117 (a). The Copyright Act does not permit someone who is not a rightful owner of a copy to make a back-up copy.

151. This is particularly true if the customer use can be classified as an "alpha" test site use of the program, that is, an initial test of the program. If the program was specifically written for the customer, this argument regarding anticipatory breach is weak because the use of the program by the customer is not an obligation imposed by the contract.

152. In many instances, the programmer would have charged more money for the program if he knew that multiple copies and further distribution was contemplated by the customer. In a similar fashion, if the programmer knew that the customer wanted to own the copyright at the beginning of the project, the programmer would normally demand more compensation for the program. Accordingly, the value of the contract to the programmer is substantially impaired.

153. See note 26 at p. 8, *supra*.

154. 17 U.S.C. § 106 (1988).

155. "[T]he bargain is unenforceable by the offending party where the illegality arises from the fact that the mode of performance adopted by the party performing it is in violation of some statute, even though the contract as agreed upon was capable of being performed in a perfectly legal manner." 14 Williston TREATISE ON THE LAW OF CONTRACTS, § 1630, at 15 (1972).

156. "The illegality of the plaintiff's conduct is the vital test, not only as shown by the character of the contract itself, but by his acts in performing it... But if the performance actually rendered by the plaintiff is something in itself forbidden by law, neither the fact the bargain was in general terms as to cover either an illegal performance or a lawful performance, nor that both parties originally had no intention to have the performance unlawful, will justify recovery on the bargain if the illegality is serious or constitutes more than an incidental part of the performance...Not the illegality of the contract, but the illegality of the plaintiff's conduct either in entering into or in performing the contract is the true ground for denying recovery." 15 Williston TREATISE ON THE LAW OF CONTRACTS, § 1761, at 196-198 (1972).

157. "In general, a bargain which contemplates a wrong to a third person, or to an undefined members of the public, whether trespass, breach of trust, or fraud, is illegal." *Id.*, § 1738, at 46.

158. *Nichols v. Ruggles*, 3 Day(Conn) 145; *Planetite Co. v. Gleason-Tiebot Glass Co.*, 234 A.D. 304, 255 N.Y.S. 109. See generally, Williston, *supra*, note 119, § 1738 at 47.

159. Williston, in a section entitled "May Defrauded Seller Specifically Enforce Rights?", states that "if a seller can regain possession of goods peaceably without the aid of a court he may do so, and thereby is revested with title." 11 Williston TREATISE ON THE LAW OF CONTRACTS, §1370, at 374 (1972).

160. In most cases, the parties probably intend that the customer will retain at least a copy of the program. The intention of the parties, as manifested by their written and oral communications and associated conduct, must be ascertained.

161. A treatise provides that "[t]he basic distinction between a bailment, such as a lease, and a sale is that a bailment does not contemplate a transfer of title from the bailor to the bailee, and does contemplate a return of the bailed property to the bailor at the end of the bailment term." 1 Computer L. Guide (CCH) ¶7210 (1994).

162. *Pagliarulo Bldg. Contractors, Inc. v. Avco Fin. Leasing Co.*, 512 So.2d 1162 (Fla. Dist. Ct. App. 1987).

163. The *Pagliarulo* court held that the lessor may (1) treat the lease as terminated and retake possession of the equipment thereby terminating further liability of the lessee; (2) retake possession for the lessee's account and to

hold the lessee liable for the difference between rental provided for in the lease and the amount the lessor could recover by recover by leasing or releasing the equipment; or, (3) stand by and hold the lessee liable for the lease payments as they accrued or all lease payments due pursuant to an acceleration clause. *Id.*

164. This principle is codified in New York's computer crime statute. N.Y. Penal Code § 156.50 (McKinney 1988 & Supp. 1994). See note 12 at p. 6.