Computers and the Law

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CLASS 3

Copyright Law pt. 1
Copyright Law

• What is the scope of protection afforded to a copyright embodied in computer software?

Requirements for Copyright
FEDERAL CONSTITUTIONAL POWER

• "The Congress shall have power . . . To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."
• U.S. CONST. art. I, § 8, cl. 8.

Copyright Requirements

• For an author to have a valid copyright in a particular work, the work must
  (i) be original,
  (ii) remain fixed in a tangible medium of expression, and
  (iii) have involved a minimum degree of creativity.

Originality

• Must:
  – be an original work of the author
  – "a work independently created by its author, one not copied from pre-existing works, and a work that comes from the exercise of the creative powers of the author's mind, in other words, 'the fruits of [the author's] intellectual labor.'"
• Artistic merits are irrelevant,
• The underlying idea of a work is not subject to copyright protection.
Fixation

• Works must be fixed in a tangible medium of expression to be protected under the Copyright Act.
• Works must be embodied in a tangible form that is "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration."
• The requirement for fixation is met when the work can either be directly perceived or perceived with the aid of a machine or other device.

Fixation

• "Artic contends that the audiovisual displays of Midway's games do not meet that requirement. Artic's argument is based on the specific technology by which the images that appear on the game screens are generated. ....
• "While Artic's argument has a certain facial validity, it nonetheless fails. The fixation requirement, as is clear from the statute, does not require that the work be written down or recorded somewhere exactly as it is perceived by the human eye. Rather, all that is necessary for the requirement to be satisfied is that the work is capable of being "reproduced ... with the aid of a machine or device." 17 U.S.C. § 102(a)."

Not Protected by Copyright

• Ideas, concepts, facts, historic events
• Plot concepts & outlines (only plot details)
• Stock plots & scenes
• Stereotype characters
• Material copied from public domain
OTHER UNCOPYRIGHTABLE MATERIAL

- Words & short phrases; familiar symbols or designs; variations of typographical ornamentation, lettering or coloring; lists of ingredients or contents
- Works consisting entirely of public domain information: e.g., standard calendars, height & weight charts, tape measures & rulers, schedules, lists or tables taken from public documents or other common sources

Protection of Fictional Characters

- Is a fictional character an idea (rather than an expression of an idea) and therefore not protectable by copyright?

Protection of Fictional Characters

- "It is clear that when cartoons or movies are copyrighted, a component of that copyright protection extends to the characters themselves, to the extent that such characters are sufficiently distinctive."
- See Warner Bros. Entertainment, Inc. v. X One X Productions (8th Cir. 2011)
Protection Schemes

• Some works are protectable by amendments or extensions to the copyright law, or by other laws that have similar rights to copyright law

List of Protection Schemes

• Architecture
• Hot News
• Rights in Ideas
• DMCA/Access to Works (future class)
Architecture

• “An original design of a building created in any tangible medium of expression, including a constructed building or architectural plans, models, or drawings, is subject to copyright protection as an “architectural work” under section 102 of the Copyright Act (title 17 of the United States Code), as amended on December 1, 1990.

• “Protection extends to the overall form as well as the arrangement and composition of spaces and elements in the design but does not include individual standard features or design elements that are functionally required.”

National Basketball Assoc. v. Motorola, Inc.

How news elements [from INS]
(i) the plaintiff generates or collects information at some cost or expense
(ii) the value of the information is highly time-sensitive,
(iii) the defendant’s use of the information constitutes free-riding on the plaintiff’s costly efforts to generate or collect it
(iv) the defendant’s use of the information is in direct competition with a product or service offered by the plaintiff
(v) the ability of other parties to free-ride on the efforts of the plaintiff would so reduce the incentive to produce the product or service that its existence or quality would be substantially threatened

Rights in Ideas

• Some ideas may be protectable by an implied contract
  – Implied contract when creator of an idea submits the idea to another party for purposes of selling it, and the parties come to a mutual understanding that the recipient will pay for any use of the idea
  – Issue - State law “implied in fact” contracts are not preempted by the Copyright Act.

• Why no copyright protection/action?
  – Possibly because of No work
Protection of Computer Software

Protection ofLiteral Elements of Code

• Are literal elements of the code subject to copyright protection?
  – Code itself is eligible subject matter and subject to copyright protection

• Source code or object code?
  – Both

Protection ofNonliteral Elements of Code

• Are nonliteral elements of the code subject to copyright protection?
  – Internal structural details of software design
  – User interface elements
  – Interactive behavior of programs
Nonliteral Elements Protectable

• “Most courts confronted with [computer program copyrightability] have determined that copyright protection extends not only to the literal elements of a program, i.e., its source code and object code, [] but also to its ‘nonliteral’ elements, such as the program architecture, ‘structure, sequence and organization’, operational modules, and computer-user interface.”

• Engineering Dynamics, Inc. v. Structural Software, Inc., 26 F.3d 1335 (5th Cir. 1994)

Applicable Test

• The abstraction-filtration-comparison test is used in determining whether one program is substantially similar to another program for purposes of copyright infringement.

Abstraction-Filtration-Comparison Test

• Step 1 - Separate protectable expression from unprotected ideas
• Step 2 - Filter out elements of the program which are unprotectable
• Step 3 - Compare the remaining protectable elements of the infringed program to the corresponding elements of the allegedly infringing program to determine whether there was sufficient copying of protected material to constitute infringement.
A look at some cases…

Lotus Development Corp. v. Borland International

- Lotus (P)
  - Creator of Lotus 1-2-3 spreadsheet program
- Borland (D)
  - Creator of Quattro Pro competing spreadsheet program
- Basis of Proceeding
  - Borland used Lotus’s menu hierarchy in a competing program. Is the menu hierarchy subject to copyright protection? D.C. said yes.

Lotus Development Corp. v. Borland International

- Why can’t this case be considered on the Altai framework?
- “The initial inquiry should not be whether individual components of a menu command hierarchy are expressive, but rather whether the menu command hierarchy as a whole can be copyrighted.”
Lotus Development Corp. v. Borland International

• 17 U.S.C. §102(b)
• “In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.”

Lotus Development Corp. v. Borland International

• The court holds that the Lotus menu command hierarchy is an uncopyrightable method of operation.
  – The hierarchy is a method by which the program is operated and controlled
  – The expression is not copyrightable because it is part of the “method of operation”

Lotus Development Corp. v. Borland International

• “[O]ur initial inquiry is whether the Lotus menu command hierarchy is a ‘method of operation’.”
Other Possible 102(b) Issues?
• Numbering system of a catalog?
• Software program for automation of legal forms?
• APIs?

Protection for Program Outputs
• Protection of screen displays are available as an audio-visual work (e.g., as a compilation)

Video Games
• What portions of a video game could be subject to copyright protection?
  – Game as a whole?
  – Elements of the game?
  – Game characters?
  – Incidents, characters, and/or settings relating to the game theme?
Incredible Technologies, Inc. v. Virtual Technologies, Inc.

• Incredible Technologies – Plaintiff
  – Golden Tee
• Global VR – Defendant
  – PGA Tour Golf

How did play of the games compare?
How did the games differ?

District Court
– “Global VR had access to and copied IT's original instruction guide and the video display expressions from Golden Tee.”
– No likelihood of success because “expressions on its control panel are not dictated by creativity, but rather are simple explanations of the trackball system; at best, they are entitled to protection only from virtually identical copying; [and] (2) the video displays contain many common aspects of the game of golf”

Ordinary Observer Test
– “Because it is pretty clear here that Global VR set out to copy the Golden Tee game, the second question [(i.e., whether the ‘copying, if proven, went so far as to constitute an improper appropriation.’)] comes closer to the issue we must face, and it leads us to the ‘ordinary observer’ test: ‘whether the accused work is so similar to the plaintiff's work that an ordinary reasonable person would conclude that the defendant unlawfully appropriated the plaintiff's protectible expression by taking material of substance and value.’"
• Protection of Expression
  – “In these games, an ordinary observer, seeing a golf game on the video display and a trackball to operate the game, might easily conclude that the games are so similar that the Global VR game must infringe the Golden Tee game. But because ideas—as opposed to their expression—are not eligible for copyright protection … protection does not extend to the game itself.”

• Scenes a faire doctrine
  – “The doctrine refers to ‘incidents, characters or settings which are as a practical matter indispensable, or at least standard, in the treatment of a given topic.’ These devices are not protectible by copyright. … For instance, the mazes, tunnels, and scoring tables in Atari’s PAC-MAN were scenes a faire.”

• Trackball System
  – “The trackball system of operating the game is not subject to copyright protection. Functional features, such as the trackball system, might, at least potentially might, be eligible for patent protection.”
  – Why?
Incredible Technologies, Inc. v. Virtual Technologies, Inc.

• Copying of Instructions
  – “[W]hile there arguably are more ways than one to explain how the trackball system works, the expressions on the control panel of Golden Tee are utilitarian explanations of that system and are not sufficiently original or creative to merit copyright protection. Furthermore, the judge said, to the extent they might be subject to a copyright, they would merit protection only against virtually identical copying.”

Incredible Technologies, Inc. v. Virtual Technologies, Inc.

• Scenes a faire
  – What elements are common to a game of golf when implemented as a video game?
  – “[S]cenes a faire refers to incidents, characters, or settings which are as a practical matter indispensable, or at least standard in the treatment of a given topic.”

Incredible Technologies, Inc. v. Virtual Technologies, Inc.

• Virtual Identical Copying Only
  – “In presenting a realistic video golf game, one would, by definition, need golf courses, clubs, a selection menu, a golfer, a wind meter, etc. Sand traps and water hazards are a fact of life for golfers, real and virtual. The menu screens are standard to the video arcade game format, as are prompts showing the distance remaining to the hole. As such, the video display is afforded protection only from virtually identical copying.”
Incredible Technologies, Inc. v. Virtual Technologies, Inc.
• End result?
  – No infringement

Tetris Holdings v. XIO Interactive
• What portions of a video game are subject to copyright protection?

Tetris Holdings v. XIO Interactive
• Case Background
• D.C. NJ - Finding in favor of Tetris
Tetris Holdings v. XIO Interactive

- **Game**
  - Tetris – puzzle game developed by Alexy Pajitnov

- **Parties**
  - Tetris Holdings – Alexy Pajitnov + Henk Rogers
  - Xio Interactive - Desiree Golden

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Tetris Holdings v. XIO Interactive

- **Who owns the Tetris copyrights?**
- **Has Tetris ever licensed its intellectual property?**
- **How did Xio come to develop its program?**
  - “Xio says, it copied Tetris in such a way so as not to copy any protected elements after diligently researching intellectual property law, and that it also tried to obtain a license from Tetris Holding, but was refused.”

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Tetris Holdings v. XIO Interactive

- **Timeline**
  - 5/09 – Mino 1.0
  - 7/09 – Mino 1.1 and Mino Lite
  - 8/09 – Tetris Holdings files DMCA takedown to remove apps from Apple store; Xio counsel sends counter notifications
  - 12/09 – filing of lawsuit
Tetris Holdings v. XIO Interactive

What elements did Tetris assert were copyrightable elements?

1. Seven Tetrimino playing pieces made up of four equally-sized square joined at their sides;
2. The visual delineation of individual blocks that comprise each Tetrimino piece and the display of their borders;
3. The bright, distinct colors used for each of the Tetrimino pieces;
4. A tall, rectangular playfield (or matrix), 10 blocks wide and 20 blocks tall;
5. The appearance of Tetriminos moving from the top of the playfield to its bottom;
6. The way the Tetrimino pieces appear to move and rotate in the playfield;
7. The small display near the playfield that shows the next playing piece to appear in the playfield;
8. The particular starting orientation of the Tetriminos, both at the top of the screen and as shown in the “next piece” display;
9. The display of a “shadow” piece beneath the Tetriminos as they fall;
10. The color change when the Tetriminos enter lock-down mode;
11. When a horizontal line fills across the playfield with blocks, the line disappears, and the remaining pieces appear to consolidate downward;
12. The appearance of individual blocks automatically filling in the playfield from the bottom to the top when the game is over;
13. The display of “garbage lines” with at least one missing block in random order; and
14. The screen layout in multiplayer versions with the player’s matrix appearing most prominently on the screen and the opponents’ matrices appearing smaller than the player’s matrix and to the side of the player’s matrix.

Xio does not concede is that it copied any protected elements. Instead, it argues the elements it copied were not original expression, because they were part of the game itself—the rules, function, and expression essential to the game play—which is not protected. Before releasing its product, Xio researched copyright law, both through its own independent studying and based on advice of counsel, before designing its game.
Tetris Holdings v. XIO Interactive

- Courts Analysis
- Elements of computer programs may be protectable by copyright law
- What is not protectable 102(b)
  - “In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.”

Tetris Holdings v. XIO Interactive

- Idea expression dichotomy
  - “[C]opyright will not protect an idea, only its expression”
- Tests
  - Whelan – “the purpose or function of a utilitarian work would be the work’s idea, and everything that is not necessary to that purpose or function would be part of the expression of the idea.”
  - Abstraction-Filtration-Comparison

Tetris Holdings v. XIO Interactive

- Merger
  - “Merger exists when an idea and its particular expression become inseparable.”
  - When there are few or no other ways of expressing an idea
- Scenes a Faire
  - “applies to expression that is so associated with a particular genre, motif, or idea that one is compelled to use such expression”
  - Unprotectable expression
Tetris Holdings v. XIO Interactive

• Protectable Portions
  – Game Labels
  – Game Boards
  – Playing Cards
  – Graphical Works
• Unprotectable Portions
  – Game mechanics
  – Rules

Tetris Holdings v. XIO Interactive

• Xio’s position
  – “Tetris Holding cannot protect by copyright what is only protectible by patent and therefore not only are the ideas of Tetris (or the rules of the game) not protectible, but neither are the “functional aspects” of the game or expressive elements related to the game’s function or play.”

Tetris Holdings v. XIO Interactive

• “Xio is correct that one cannot protect some functional aspect of a work by copyright as one would with a patent. But this principle does not mean, and cannot mean, that any and all expression related to a game rule or game function is unprotectible.”
• “[E]xpression is not protected only when it is integral or inseparable from the idea or the function under the doctrines of merger or scènes à faire.”
Tetris Holdings v. XIO Interactive

• Discussion of Lotus Case
• “Tetris Holding cannot copyright a method of operation, but may copyright an expression of a method of operation if it is distinguished from the method itself and is not essential to its operation.”

Tetris Holdings v. XIO Interactive

• “[O]ne’s original expression is protected by copyright—even if that expression concerns an idea, rule, function, or something similar—unless it is so inseparable from the underlying idea that there are no or very few other ways of expressing it.”
• What about when there are no stock elements?

Tetris Holdings v. XIO Interactive

• Did the court find that the games were substantially similar?
• “[I]t is appropriate to compare the two works “as they would appear to a layman” concentrating “upon the gross features rather than an examination of minutiae.”
Tetris Holdings v. XIO Interactive

• Other protected expression
  – the dimensions of the playing field,
  – the display of “garbage” lines,
  – the appearance of “ghost” or shadow pieces,
  – the display of the next piece to fall,
  – the change in color of the pieces when they
    lock with the accumulated pieces, and
  – the appearance of squares automatically filling
    in the game board when the game is over.

Seinfield Cookbook Case

• “to the extent that the two works have general and
  abstract similarities—including their vaguely similar
titles and inclusion of illustrations of prepared dishes,
health advice, personal narrative, descriptions of how
to make purees, instructions for preparing dishes, and
language about children’s healthy eating—the district
court correctly concluded that these elements do not
raise a fact issue for trial because they are “scènes à
faire,” or “unprotectable elements that follow naturally
from [the] work’s theme rather than from [the] author’s
creativity.”

• Lapine v. Seinfeld, 2d Cir., No. 09-4423-cv, 4/28/10
  (non-presidential)
Detective Snoopy Case

- “Under the ‘scenes a faire doctrine,’ expressive elements of a work are not entitled to copyright protection if they ‘are standard, stock, or common to a particular topic, or . . . necessarily follow from a common theme or setting.’ Gates Rubber Co., 9 F.3d at 838; see also Autoskill, 994 F.2d at 1494. Here the Sherlock Holmes treatment is an expression which is common to the detective idea, and ‘is lacking in the originality that is the sine qua non for copyright protection.’ Gates Rubber Co., 9 F.3d at 838; see also Mitel, Inc. v. Intel, Inc., 124 F.3d 1366, 1374-75 (10th Cir. 1997) (noting that ‘the Irish cop’ in ‘often-recurring themes of police fiction,’ are unprotected scenes a faire) (quotation omitted).”
Common Law Copyright

- Works in “fixed medium of expression” are protected exclusively by Copyright Act [§ 101]
  - Published works, unpublished works, sound recordings, broadcasts
- Unfixed works are protected by common law copyright
  - Extemporaneous utterances, unchoreographed dance performances, unwritten jazz & musical performances
  - Unpublished works created before January 1, 1978 (even if in a “fixed medium”)

Registration and Deposit

- Registration: [§ 408]
  - Work can be registered at any time [§ 408(a)]
  - Not a prerequisite to copyright protection [§ 408]
  - U.S. authors must register before bringing infringement suit [§ 411(a)]
  - Creates prima facie presumption of validity [§ 410(c)]
- Deposit: [§ 407]
  - 2 complete copies of best edition must be deposited in Library of Congress within 3 months of first publication
  - Not a prerequisite to copyright protection [§ 407(a)]
- Penalty: $250 + retail price of undeposited work
- Sega’s certificates of registration establish a prima facie valid copyright in its video game programs. 17 U.S.C. § 410(c); Apple Computer, Inc. v. Formula Int’l Inc., 725 F.2d 521, 523 (9th Cir.1984); Sega Enterprises Ltd. v. MAPHIA, 687 F.Supp. 679, (N.D.Cal. 1994)

Term

- What is the term of a copyright registration?
  - Life of the Author + 70 years
  - For anonymous works, pseudonymous works, and works made for hire - 95 years from publication or 120 years from creation, whichever expires first
Current Notice Requirements

• Copyright notice no longer required...
• Proper copyright notice:
  – (i) the symbol © (the letter C in a circle), or the word "Copyright", or the abbreviation "Copr.",
  – (ii) the year of first publication of the work, and
  – (iii) the name of the owner of the copyright in the work.
• Why still include the notice?

Copyright Registration

• The Copyright Office’s copyright registration system is available online at http://www.copyright.gov/eco/
• You can print paper forms from the same link, but paper submissions for registration are more expensive.

Copyright Registration

• Computer Software
  – Form TX
  – Different Fees for online v. paper
  – No trade secrets
    • first 25 and last 25 pages of source code
  – With trade secrets
    • First 25 and last 25 pages of source code with portions containing trade secrets blocked out; or
    • First 10 and last 10 pages of source code alone, with no blocked out portions; or
    • First 25 and last 25 pages of object code plus any 10 or more consecutive pages of source code, with no blocked out portions; or
    • For programs 50 pages or less in length, entire source code with trade secret portions blocked out.
Copyright Registration

• Registration of a single work as a literary work should cover visual display as well.
• However, many video games are covered as audio visual works instead of literary work.
• See Circular 61 for more information on registering a copyright in software.

Foreign Protection

• U.S. authors are entitled to protection in foreign jurisdictions under the Berne Convention.
• No requirement to register the work in the foreign country or comply with other formalities in foreign jurisdiction.
• However, infringement action must be brought in foreign jurisdiction under foreign law.

Copyright Ownership
Ownership

- General Rule – Copyright ownership vests with the author(s) of the work
  - Copyright ownership of a work can be assigned to another
  - Important exception – work made for hire

Work Made For Hire

Employees

- Within the Scope of Employment
  - the work is deemed authored by the employer and the employer will have all exclusive rights associated with the work.
- Outside the Scope of Employment
  - the work is deemed authored by the employee and the employer will simply have a license to use the particular embodiment of the work without the exclusive rights associated with the work

Non-Employees

- The work must be:
  1. specially ordered or commissioned,
  2. for use as a contribution to a collective work, as a part of a motion picture or other audiovisual work, as a translation, as a supplementary work, as a compilation, as an instructional text, as a test, as answer material for a test, or as an atlas, and
  3. in a written instrument signed by the parties that states the work shall be considered a work made for hire.
Types of Copyrightable Works

Types of Works

- Derivative Work
- Joint Work
- Composite Work
- Compilation

Derivative Work

- "A ‘derivative work’ is a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship, is a 'derivative work'."
- A derivative work is a work based upon one or more preexisting works where the original work is recast, transformed, or adapted.
- The derivative work copyright protects only new materials contributed by the author, and does not affect or enlarge the scope, duration, ownership, or subsistence of any copyright protection in the preexisting material.
Joint Work

- "A 'joint work' is a work prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole."
- The joint owners can independently exploit the work without consent of the other joint owners, but must account to the other joint owners for such exploitation.
- Term – life of last surviving author + 70 years

Composite Work

- A composite work is a work prepared by two or more authors without the intent to merge their contributions into a unitary whole.
- The work is treated as multiple works for licensing and duration each of the component parts.

Compilations

- "A 'compilation' is a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship. The term 'compilation' includes collective works."
Compilations

- What did the Federal Notice say about dance moves?
  - “A claim in a choreographic work must contain at least a minimum amount of original choreographic authorship. Choreographic authorship is considered, for copyright purposes, to be the composition and arrangement of a related series of dance movements and patterns organized into an integrated, coherent, and expressive whole. Simple dance routines do not represent enough original choreographic authorship to be copyrightable.”

Compilations

- What did the Federal Notice say about exercise movements?
  - “Exercise is not a category of authorship in section 102 and thus a compilation of exercises would not be copyrightable subject matter. The Copyright Office would entertain a claim in the selection, coordination or arrangement of, for instance, photographs or drawings of exercises, but such compilation authorship would not extend to the selection, coordination or arrangement of the exercises themselves that are depicted in the photographs or drawings.”

Discussion

1. What if you have an architectural work depicting homes that can be built that was created in the mid-1980s. Will posting an electronic copy on a website violate the copyright act?
2. Will including an image of Tom and Jerry on a personal website where you describe your favorite Tom and Jerry episodes make you liable for copyright infringement?
3. Is Michael Jackson’s “Thriller” dance subject to copyright protection? What about Psy’s “Gangnam Style”?
Copyright

- Hot areas & cases
  - First Sale Doctrine & Foreign Made Imports: John Wiley & Sons, Inc. v. Supap Kirstaeng
  - Need to Register Individual Works v. Compilation

Program Completed

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