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Protecting the Look and Feel of Computer Software in the United States and Australia

Daniel A. D. Hunter

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PROTECTING THE "LOOK AND FEEL" OF COMPUTER SOFTWARE IN THE UNITED STATES AND AUSTRALIA

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PROTECTING THE "LOOK AND FEEL" OF COMPUTER SOFTWARE IN THE UNITED STATES AND AUSTRALIA

I. INTRODUCTION

Computer software poses a vexatious issue in Intellectual Property law. Copyright clearly affords some protection to computer programs in Australia and the United States, but the question is: How far does the protection extend?

The issue of "look and feel" protection arises from the special nature of computers and the computer industry. Certain manufacturers create computer programs which become "industry standards." These programs lead the market by long margins over their competitors. To remain in business, some smaller manufacturers will replicate the industry standard program. They do not actually copy the code which is protected by copyright, but they copy the "look" and the "feel" of the program. In other words, they replicate the exact look of the visual display created by the program, and the exact way the program operates. They do not copy the actual instructions which make up the program; only the way it appears and works.

In the United States two streams of computer copyright cases have developed. Although seemingly separate, they have recently combined to form the basis for "look and feel" litigation. The first stream of cases decided the extent of copyright protection for computer software as a literary work. This stream will be labelled the "literary work stream." The second stream of cases examined copyright protection in the computer program's audiovisual display. This will be labelled, unsurprisingly, the "audiovisual work stream."

Over time, developing case law in the literary work stream raised three questions. The Courts answered the first two questions affirmatively. They asked:

1. Does copyright subsist in an application program?
2. Does copyright protect operating system programs?

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The third question asked:

3. Does the 1976 Copyright Act protect the structure, sequence and underlying organization of the computer program?

This important question embodies the unanswered issue in the "look and feel" arena. The landmark case of Whelan v. Jaslow seemed to protect the structure, sequence and organization of a computer program. However, the courts remain divided on this question. This article will analyze this division and the reasons why it persists.

The cases in the audiovisual work stream decided two questions:

1. Does copyright protect the displays in computerized video-games?
2. Does copyright protect the computer displays of programs which are not video-games?

At first blush, the second question does not appear very complicated. No real distinction exists between video displays and computer displays. No real distinction exists between video displays and computer displays because both are simply television screens controlled by a computer chip. The emergence of the "look and feel" issue complicated what was, in the author's opinion, standard audiovisual copyright. Copyright in the "look and feel" of a computer program should not exist. Rather, audiovisual copyright comfortably covers the "look" of the program, and the "feel" need not be protected. Some cases adopted this distinction, while another case confused the copyright in the audiovisual display of a program with the separate copyright in the literary work. Subsequent courts compounded this confusion by creating a new element...
protected by audiovisual copyright: protection of the non-literal expression of the display screen sequence.10

Chapter 2 examines both streams and their different formulations.11

The third chapter examines Australian law relevant to "look and feel" protection. In Australia no case has directly examined this issue. Thus, the third chapter analyzes copyright and other avenues of litigation potentially available to plaintiffs. These avenues include copyright, passing off, unfair competition and actions under Part V of the Trade Practices Act 1974 (Cth.).

The fourth chapter draws conclusions about the way copyright has been used in the United States, and how far "look and feel" protection extends. The chapter also examines whether copyright or another form of protection will be or should be adopted in Australia to protect the "look and feel" of computer software.

II. "LOOK AND FEEL" IN THE UNITED STATES

This chapter is divided into two sections. The first section examines important introductory concepts of United States copyright law.12 The second analyzes both the emergence and current status of "look and feel" copyright protection.

A. Introduction to U.S. Copyright

The Copyright Act of 197613 protects an article if copyright subsists in it.14 Computer programs can earn copyright protection as literary works15 and the screen displays created by the programs

11. See infra pp. 121-37, The "Look and Feel" Cases.
12. This article is not a treatise on Copyright Law. See generally, M. NIMMER & D. NIMMER, NIMMER ON COPYRIGHT (1987); A. LATMAN & R. GORMAN, COPYRIGHT FOR THE EIGHTIES (1981); B. KAPLAN, AN UNHURRIED VIEW OF COPYRIGHT (1967); W.F. PATRY, LATMAN'S THE COPYRIGHT LAW, (6th ed. 1986).
can be copyrighted as audiovisual works.\textsuperscript{16} 

1. Infringement

Section 501(a) contains the elements of infringement. It provides that "anyone who violates the rights of the copyright owner" infringes copyright. Plaintiffs prove infringement either through evidence of actual copying, or by proof of access to the plaintiff's work and substantial similarity between the plaintiff and the defendant's works.\textsuperscript{17}

Two different approaches to the test of infringement have arisen. Both approaches first ask whether the defendant had access to the plaintiff's work. This establishes a presumption that the defendant used the plaintiff's work in the creation of its work. This presumption is upheld with a finding of substantial similarity.

The two approaches part company on the question of what amounts to substantial similarity. The Second Circuit in \textit{Arnstein v. Porter}\textsuperscript{18} developed the first approach. This court required the dissection of similarities from the viewpoint of the ordinary person. The Ninth Circuit case of \textit{Sid \& Marty Krofft Television Productions, Inc. v. McDonalds Corp.},\textsuperscript{19} looked first at similarity of ideas and then at the similarity of expression. The next section details these different approaches.

\textbf{a. The Different Circuit Court Tests}

\textit{Arnstein} stated that in examining the defendant's work for similarities, the court should look to expert testimony and analytical dissection of the works.\textsuperscript{20} Upon finding similarities, the court then asks whether an "ordinary observer" would find the similarities so marked that the copying becomes illegal. Courts do not admit expert testimony in applying this "ordinary observer" test.

\textit{Krofft}\textsuperscript{21} created a different approach. The court divided the steps more explicitly. After proving access as required by the Sec-

\begin{footnotesize}
\begin{enumerate}
\item[18.] 154 F.2d 464 (2d Cir. 1946), \textit{cert. denied}, 330 U.S. 851 (1947).
\item[19.] 562 F.2d 1157 (9th Cir. 1977).
\item[20.] 154 F.2d at 468.
\item[21.] 562 F.2d 1157 (9th Cir. 1977).
\end{enumerate}
\end{footnotesize}
ond Circuit, the Ninth Circuit then applied an "extrinsic test," followed by an "intrinsic test." The "extrinsic test" addresses the question of substantial similarity of ideas between the allegedly infringed and infringing work. This extrinsic test entails an objective dissection of the work with all similarities and differences noted by the court. In applying the extrinsic test the court may admit expert testimony.

In examining the ideas behind the works the court looks for more than similarity; the similarity must be substantial. After hearing the expert testimony, the judge decides if the idea is substantially similar as a question of fact. If the judge finds against the plaintiff on this test, then the action fails. However, in the "look and feel" arena, this will almost never happen. The offending copy will always be substantially similar in idea, since it's whole purpose seeks to imitate the user interface of the program.

However, a favorable finding for the plaintiff on this test is not dispositive, since the extrinsic test examines only the similarity of ideas, not the copyrightable similarity of expression.

The "intrinsic test" follows a finding for the plaintiff on the extrinsic test. The court examines the similarity of the plaintiff's and defendant's expression of the ideas. The plaintiff must prevail on this issue because copyright only protects the expression of an idea.

The intrinsic test requires substantial similarity of expression. The Ninth Circuit Court of Appeals in Krofft, like the Second Circuit in Arnstein, stated that in examining similarity of expression the court must look at the works from the viewpoint of the "ordinary reasonable observer." This adopts the earlier decision of Roth Greeting Cards v. United Card Co. In Roth the court stated that: "[T]he test of infringement is whether the work is recognizable by an ordinary observer as having been taken from the

22. Sid & Marty Krofft Television Prods. v. McDonalds Corp., 562 F.2d 1157 (9th Cir. 1977).
23. Shakespeare's play "Romeo and Juliet" and the musical "West Side Story" provide good examples. The ideas behind each work are substantially similar: both deal with lovers from warring groups, internece battles, and the eventual death of the main characters.
25. 562 F.2d 1157 (9th Cir. 1977).
27. Sid & Marty Krofft Television Prods. v. McDonalds Corp., 562 F.2d 1157, 1164 (9th Cir. 1977).
protected source.\textsuperscript{29}

The court applies this ordinary observer test without reference to the earlier dissection or expert testimony.\textsuperscript{30} Thus, both the Krofft and Roth courts advocated a "gestalt"\textsuperscript{31} approach in using the intrinsic test by looking at the works with the somewhat untutored and uncritical eye of the ordinary observer.

The Roth court emphasized the "gestalt" approach by introducing a term which embodies this methodology. The court said that in deciding the intrinsic test in that case, "It appears to us in total concept and feel the cards of Universal are the same as the copyrighted cards of Roth."\textsuperscript{32}

\textbf{b. The Preferred Approach}

The difficulty is, which of the two tests should be applied? Since Federal Circuit Courts of Appeal are not bound by decisions of each other,\textsuperscript{33} thirteen tests could theoretically evolve.\textsuperscript{34} Usually one or at most two tests will emerge as the leaders of the field. This occurs when one Circuit decides many cases in the area and gains acceptance by other Circuits as particularly expert in the area. Due to the number of decisions in the computer field made by the Ninth Circuit\textsuperscript{35} the Roth/Krofft test will likely be followed in other

\begin{itemize}
\item \textsuperscript{29} Roth Greeting Cards v. United Card Co., 429 F.2d 1106, 1110 (9th Cir. 1970) (quoting White-Smith Music Publishing Co. v. Apollo Co., 209 U.S. 1, 17 (1907)); Bradbury v. Columbia Broadcasting Sys., 287 F.2d 478, 485 (9th Cir. 1961).
\item \textsuperscript{30} Sid & Marty Krofft Television Prods. v. McDonalds Corp., 562 F.2d 1157, 1167 (9th Cir. 1977).
\item \textsuperscript{31} "A 'shape,' 'configuration,' or 'structure' which as an object of perception forms a specific whole or unity incapable of expression simply in terms of its parts . . . ." OXFORD ENGLISH DICTIONARY (2d ed. 1989).
\item \textsuperscript{32} Roth Greeting Cards v. United Card Co., 429 F.2d 1106, 1110 (9th Cir. 1970) (emphasis added). This term "total concept and feel" was adopted in Krofft, and though it is impossible to say for certain, may be the origin of the term "look and feel." See A.L. CLAPES, SOFTWARE, COPYRIGHT & COMPETITION (1989). The terms should not be confused nor used interchangeably. "Total concept and feel" is used to decide the intrinsic test. "Look and feel" only describes the general area of litigation, and is not a term of art.
\item \textsuperscript{33} H.J. ABRAHAM, THE JUDICIAL PROCESS, 148-176 (1986).
\item \textsuperscript{34} The First to the Eleventh Circuits, the District of Columbia Circuit, and the Federal Circuit.
\end{itemize}
Circuits.

However, even if this does happen, the Ninth Circuit Court of Appeal in *Krofft* opined that no conflict existed between the *Roth* and *Arnstein* tests. The *Krofft* court thought *Arnstein*'s test was essentially the same extrinsic/intrinsic two step test. With the exception of the subsidiary "total concept and feel" test, the tests are basically identical. Any analysis of fact situations in this article will be on the basis of the *Roth/Krofft* test, because it divides the issues more clearly.

The next section of this article looks at the emergence of "look and feel" issues.

**B. The Emergence of the "Look and Feel" Cases**

As already stated, two streams of computer copyright cases form the basis for "look and feel" litigation: the literary work and audiovisual work streams.

1. The Literary Work Stream

The literary work stream of cases examined the protected elements of the computer program.

Computer programs fit Judge Learned Hand's level of abstractions test remarkably well. They display the necessary continuum of elements of ideas and expression. The concept of the program forms the highest level of ideas. An example of this is the unprotected idea of the program as a "word processor" or "spreadsheet" program. At the other end of the continuum, the individual instructions demonstrate the most concrete expression of the idea and are clearly protectable. What then, of the elements in between?

Nowadays software is usually written by a method called "structured programming." At the most abstract or "idea" level, the programmer decides or is told what the program should do. Next the programmer creates a pattern of functions. The functions

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36. "We believe that the court in *Arnstein* was alluding to the idea-expression dichotomy which we make explicit today." 562 F.2d at 1165.
37. See supra pp. 102-05, *Introduction*.
38. Nichols v. Universal Pictures Corp., 45 F.2d 119, 121 (2d Cir. 1930).
make up isolated modules to which the programmer assigns certain tasks and between which the programmer designates certain methods of interaction. The grouping, interaction and naming of modules, *inter alia*, provide the program's structure. Finally, the programmer individually codes each module; placing the instructions in such an order that the module performs the assigned task. This vastly simplified picture presents a continuum that Learned Hand envisaged. At one end of the continuum, the specification of the whole program's operation must constitute the unprotectable idea. At the other end of the continuum, the instructions represent clear expression. 

Plaintiffs in the cases described below, asked the courts whether the structure, the function names, the function interaction, and the grouping of modules warranted copyright protection.

a. *Synercom v. University*

The earliest federal court decision on computer software was, interestingly enough,41 concerned with the copyrightability of the program structure. In *Synercom Technology v. University Computer Co.*,42 the court decided the complicated issue of protectability of program structure. The court found that structure was not protected, because of a fear of creating wide-reaching monopolies. How the court arrived at their decision, which in the author's opinion is incorrect, bears closer analysis.

The plaintiff, Synercom, modified an existing non-copyrighted program designed to solve structural engineering problems. Synercom changed the format of the input and instructional manuals, to make the program easier to use. The company then registered copyright in the program and manuals. Two ex-employees of Synercom formed EDI, one of the defendant companies. They independently created their own structural analysis program. Due to Synercom's market dominance, the defendants believed the success of their program required Synercom's input format. With the same input format, EDI's program could readily use large stacks of data cards created by Synercom's engineers. EDI's compatibility with Synercom's program saved them considerable time and money, allowing them to undersell Synercom and hopefully woo away their customers.

41. "Interestingly enough" because the more obvious and simpler question asks the "iterative analysis" question of what percentage of a plaintiff's instructions have been copied?
Synercom sued for copyright infringement allegedly present in the input format, as an adjunct to copyright in the computer program. The Federal Court of the Northern District of Texas examined the idea/expression dichotomy in relation to the plaintiff's input formats, and found that these formats represented ideas and not expression.

The court reviewed previous “blank form” cases, which examined whether copyright protected a mere “blank form” with various fields outlined in the form. Courts since the seminal case of Baker v. Selden have uniformly denied protection of a “blank form” unless the form conveys some information in addition to simply storing information. Likewise, since the Synercom court found that the input formats provided no information, it denied copyright protection.

Since the current batch of “look and feel” cases deal with the copyrightability of the user interface this case is significant. That an, albeit trivial, user interface in Synercom was unprotected suggests that courts will subsequently deny protection for the user interface or user input format. District Judge Higginbotham in Synercom strengthened this analysis by analogizing the input format to the H-pattern gearshift in manual cars. His Honour said that to allow the first manufacturer of this H-pattern shift copyright protection would confer a dangerous and wide-reaching monopoly. Similar to a consistent Macintosh-like interface for all computers, the use of such a gearshift “might be socially desirable; as it would reduce the retraining of drivers.”

This argument is not new. Copyright law has always required a balance of two competing public policies. The first policy favors the dissemination of knowledge created through intellectual effort. The incentive of a limited economic monopoly on the product of the effort encourages this intellectual effort. The opposing public policy limits economic monopolies which extend beyond the public good and prohibits using these monopolies for wide-ranging com-

43. 101 U.S. 99 (1879).
45. 462 F. Supp. at 1011-12.
46. See infra pp. 121-37, The “Look and Feel” Cases.
47. 462 F. Supp. at 1013.
48. As shown by the existence of all statutes protecting intellectual property, e.g. in Australia: Copyright Act 1968 (Cth); Designs Act 1906 (Cth); Trade Marks Act 1955 (Cth); Patents Act 1952 (Cth); and in the United States Copyright Act 1976, Title 17, U.S.C.; Patents Act 1952, Title 35, U.S.C.; Lanham Act, Title 15, U.S.C.
mmercial control of markets.49

In refusing protection for fear of creating a monopoly, Judge Higginbotham ignores a fundamental aspect of monopolies. The market in which the monopoly operates determines whether the monopoly becomes “dangerous and wide-reaching.” Important differences exist between the market for gearsticks and the market for user interfaces making Judge Higginbotham’s argument against protection fail upon closer inspection for three reasons.

First, there are only a finite number of possible gearstick patterns. Granting a monopoly on H-pattern gearsticks creates a danger because manufacturers could then copyright all unique gearstick patterns. Eventually, with all possible gearstick patterns copyrighted, manufacturers could charge exorbitant royalties for use of their pattern. In contrast, an almost infinite variety of input formats exist and are available to creators of programs. There is no danger of running out of input formats.

Secondly, designing the H-pattern shift requires such minimal intellectual effort that it will doubtlessly fail to earn the protection of copyright. Compare this with the extensive work required to create a coherent and efficient user interface or input format,50 and the analogy between gearsticks and input formats begins to wear a little thin.

Finally, copyright does not actually grant a monopoly. Unlike patents, copyright only protects the creator’s work from copying. If another person independently creates the same input format or user interface then they can claim copyright protection, and the first creator has absolutely no recourse.

So, with respect, Judge Higginbotham erred in saying that copyright in the input format creates a dangerous monopoly.51

49. Hence the existence of antitrust legislation in the United States and Australia, e.g. in the U.S.: Sherman Antitrust Act, Title 15, U.S.C., chap. 1; Clayton Act, Title 15, U.S.C., chap. 1; and in Australia: Trade Practices Act 1974 (Cth).


b. SAS, Johnson and Q-Co

Three cases followed which at first glance seemed to deal with a separate issue: Can the program translation from one computer language or one machine to another language or machine infringe the copyright in the original program? The cases were SAS Institute v. S & H Computer Systems,\(^52\) Inc., E.F. Johnson Co. v. Uniden Corp.\(^53\) and Q-Co Industries v. Hoffman.\(^54\) In deciding the above question, the courts looked at the protectability of the structure of the program. Essentially, the courts said that the translation could infringe copyright, provided both programs demonstrated substantial similarity.\(^55\) The SAS court found substantial similarity in near-literal copying, an identical redundant subroutine and, more importantly for this discussion, structural copying. In Uniden numerous instances of identical copying, repetition of redundant pieces of code and similarities in the algorithm ("Barker Code" sequence) demonstrated substantial similarity.\(^56\) Both cases assumed that structural copying constituted an infringement,\(^57\) placing them fundamentally at odds with Synercom.

Q-Co’s decision appears to follow Synercom. Q-Co held that structure was not protectable expression. However the court’s reasoning is confused and one can read it a number of ways.

The copyrighted program at issue was a “teleprompter”; it displayed text on a television screen and prompted television newscasters. The allegedly infringing copy was written in a different language making direct copying impossible. However the programmer for the defendants admitted using the plaintiff’s concept and structure.

actionable in copyright. Also discussed at the time was the application of copyright to source and object code, as well as the method of fixation of subject matter such as on microchip or floppy disk. This is beyond the scope of this paper and will not be discussed further. (For discussion on this and other issues not covered here, see GAZE, COPYRIGHT PROTECTION OF COMPUTER PROGRAMS (1989); A. LATMAN & R. GORMAN, COPYRIGHT FOR THE EIGHTIES (1981); A.L. CLAPES, SOFTWARE, COPYRIGHT & COMPETITION (1989); M.B. NIMMER & D. NIMMER, NIMMER ON COPYRIGHT (1989); GUIDE TO COMPUTER LAW, (CCH 1989).

56. 623 F. Supp. at 1492-98.
57. 605 F. Supp. at 830; 623 F. Supp. at 1494 (use of identical sampling rate, use of sampling error table); 623 F. Supp. at 1495 (use of H-matrix); 623 F. Supp. at 1496 (copying of 38 of 44 subroutines).
Even so, the court denied protection. They reasoned that the: “order and organization [of the program modules] can be more closely analogized to the concept of wheels for the car rather than the intricacies of a particular suspension system.”

This decision placed the structure of the program at the same level of abstraction as ideas, rendering it unprotectable. Oddly, this statement clashes with an earlier statement that the allegedly copied program would not escape infringement if similarity were shown in substantial elements “including structure and arrangement.”

Furthermore, the court referred to a previous non-computer case where book structure constituted protectable expression. In Meredith Corp. v. Harper & Row Publishers, the “topics to be included, [and] weighting of topics and sequencing of topics” comprised copyrightable expression. Thus, the court held that the defendants’ adoption of the book’s structure, content, and sequence infringed upon the plaintiff’s copyright.

Q-Co referred to Meredith, but distinguished it because in the case at bar the structure amounted to indispensable expression. The court then adopted the stance that structure in computer programs is protectable expression unless it falls within one of the standard exceptions, such as indispensable expression. Thus, although the court’s reasoning appears confused, it’s rationale falls in line with SAS and Uniden because it recognizes copyright protection for computer programs.

c. Whelan v. Jaslow

The major case of Whelan Associates v. Jaslow Dental Laboratory enhanced the majority view granting copyright protection to a program’s structure. Whelan decided categorically that structure

58. 625 F. Supp. at 616.
59. Id. at 615.
61. 378 F. Supp. at 687.
62. The case concerned the plaintiff’s book entitled “Child Development and Personality.” The book, by three eminent specialists, was the standard college text and of considerable value. The defendant publishers took the plaintiff’s book as a model and extracted the ideas in each topic and had them written out by freelance writers. The level of correspondence even down to the content of individual sentences and paragraphs was, according to the court, quite remarkable.
63. That is to say, elements necessarily dictated by the idea itself, not imaginatively created by the copyright holder. Herbert Rosenthal Jewelry Corp. v. Kalpakian, 446 F.2d 738 (9th Cir. 1971).
was a proper subject matter for copyright. This proposition has been widely criticised, but seems to have attracted criticism for stating explicitly what had already implicitly become accepted. The cases of *Uniden*, *Q-Co*, *Meredith* and *SAS* all point in the direction *Whelan* eventually took. So, *Whelan* does not stand in petulant isolation.

This case concerned a software contractor, Elaine Whelan and her client, Jaslow Dental Laboratory. Whelan created a program for Jaslow Dental Laboratory which managed the accounting, inventory and billing for dental laboratories. Whelan retained copyright in the program and registered it with the Copyright Office as a literary work. The program ran on an IBM minicomputer, and Jaslow seized the opportunity of translating the program to run on the ever-increasingly popular IBM personal computer. Jaslow sued Whelan under state law for trade secret appropriation. Whelan retaliated in copyright, and removed the case to the federal court on the trade secret and copyright issues.

Commentators have accorded *Whelan* landmark significance because it adopted the approach that the structure, sequence and organization of a computer program deserves copyright protection. The court decided a number of propositions on this point. First copyright protects the general format of the file structures in a program. This conflicts almost directly with *Synercom*. Secondly, the court held it unnecessary to show complete similarity between the two programs. Substantial similarity of overall structure, order, sequencing or organization will suffice to constitute infringement.

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d. *Plains Cotton v. Goodpasture*

There followed the case of *Plains Cotton Co-op v. Goodpasture Computer Service*. This case was similar on the facts to *Whelan*.

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68. *807 F.2d 1256, 1 U.S.P.Q.2d (BNA) 1635 (5th Cir. 1987), reh'g denied, 813 F.2d 407 (5th Cir. 1987), cert. denied, 484 U.S. 821 (1987).*
because the defendants rewrote the plaintiff’s existing mainframe program, Telcot, for personal computers. The Fifth Circuit Court of Appeal declined to follow the Third Circuit’s lead in Whelan on the question of what it termed “organizational copying.” Instead it followed Synercom, also decided in the Fifth circuit, holding that the structure and sequence of a computer program constituted ideas. The court distinguished Whelan for three reasons. Only the last argument pertains to the question of whether copyright protects structure. This argument claimed that the evidence of similarities resulted largely from “externalities in the cotton market.”

The final argument is similar to Q-Co, reasoning that structure amounted to indispensable expression. The doctrine of merger is a standard exception to protectability, whether of commonly copyrighted elements such as program code or less commonly copyrighted elements like program structure. Therefore the primary reason the Plains Cotton court distinguished Whelan is a common doctrine, which Whelan never questioned. The reason for distinguishing Whelan is therefore illogical. It is the author’s submission that subsequent courts should prefer the reasoning of Whelan over Plains Cotton. The most recent case in the stream, Pearl Systems v. Competition Electronics, supports this approach.

e. Pearl Systems v. Competition Electronics

Pearl Systems v. Competition Electronics revolved around the plaintiff’s pistol-shot timing device. The defendant marketed a very similar device which the plaintiff alleged copied subroutines in its device. The judge found for the plaintiff, following Whelan without demur: “the separate subroutines in a computer program are protected by the copyright laws, See Whelan Associates, Inc. v. Jaslow Dental Laboratory, Inc.”

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69. Id. at 1262.
70. Id. In fact, the court used a confusing double negative to make this simple proposition, “[D]eclin[ing] to hold that [structure and sequence] cannot constitute ‘ideas’ in a computer context.”
71. The first two reasons don’t address the question of whether structure is protected, but relate only to the facts of Plains Cotton. These reasons were that the courts’ review was not on the merits and that Plains Cotton was a preliminary hearing.
72. 807 F.2d at 1262.
73. This is an application of the doctrine of merger. The doctrine denies copyright protection to elements of a work which are expression but which are dictated by the underlying idea. Herbet Rosenthal Jewelry Corp. v. Kalpakian, 446 F.2d 738 (9th Cir. 1971).
74. See supra note 73.
76. Id. at 1524. Plains Cotton was cited as contrasting authority, but was not discussed.
f. Conclusion

The above cases demonstrate the division between the courts. Meredith, SAS, Uniden, Pearl Systems, and Whelan favour the proposition that copyright protects structure, sequence and organization. Goodpasture rejects this, and Q-Co doesn’t help either way. Which then, is the better approach?

Despite the aforementioned flaws in Plains Cotton77 and Q-Co78 reasoning, it is still useful here to examine the contrasting policy considerations concerning the copyright protection of program structure.

The expansion of the bounds of copyright in computer programs came under a great deal of scrutiny and criticism, particularly after Whelan.79 Carl Sundholm addresses the three main arguments against the adoption of Whelan, and therefore the protection of structure, sequence and organization.80 The arguments essentially claim that:

1. Approximating an existing program takes as much effort as creation of the original.
2. Protecting the concept of the program’s structure is too vague and dangerously open to abuse, as it extends copyright beyond its philosophical endpoint.
3. Protecting the structure stifles the creation of innovative new programs.

The first argument is simply not correct. Creating the structure, interaction of modules, and organization of the program forms one of the most time-consuming and expensive components of programming. By adopting structured programming methods,81 the actual coding is almost trivial since the structure determines which instructions to use and where they should be placed.

The second argument seeks to create the spectre of wide mo-

81. See supra note 40 and accompanying text.
nopolies and concomitant unlimited liabilities for defendants. The argument is fallacious. Programmers must flowchart, document and analyze the structure of every commercial program before writing any code. The structure is at least as concrete as the actual instructions which programmers eventually place in the positions assigned by the rigorous structure. Moreover, even without flowcharts and other records of the structure, a trained person could easily diagram and analyze the structure of a well-coded program from the instructions in the program. There is no logical reason why the tests for substantial similarity already mentioned could not be applied to structure as easily as to the instructions.

The third argument is a dangerous one. It assumes that a new program must copy the structure of the existing program in order to advance the field of computer programming. Mr. Sundholm fails to clarify his contention. Any program which must copy a substantial portion of an existing program can hardly be termed "innovative." Moreover, this argument applies equally to any copyright subject matter, not only the computer field. Yet no one would claim that we should dilute copyright protection, in order that "innovative" derivative works should be made at the expense of the original author.

For these reasons, in the author's opinion, the arguments against the protection of structure, sequence and organization remain unpersuasive.

2. The Audiovisual Work Stream

A spate of copyright cases began in 1981, all involving computer controlled video games. The cases became known as the "video game cases." Unfortunately this appellation gives the impression that the cases form one homogeneous set, deciding the same fundamental issues. This was not so.

Most of the video game cases concerned audiovisual copyright. However, certain courts decided cases concerning audiovi-

82. These games are essentially a small computer. The computer displays the output on a cathode ray tube, like a television tube. Users input information by a number of joysticks and buttons mounted on the cabinet which house the tube, the computer chip and the input devices. The player uses the joysticks and buttons to control certain images presented on the screen by the computer. Other images are controlled by the computer itself.

sual copyright on the basis of literary work copyright. This section will not discuss the video game cases decided on "literary work" principles. It will focus on the audiovisual cases, which laid the foundations for "look and feel" copyright.

a. Atari v. Williams

The first three cases on video game audiovisual copyright concerned only direct copies. The fourth, Atari, Inc. v. Williams Electronic, addressed a more interesting issue because the defendant modified the plaintiff’s game. The plaintiff’s game, Pac-Man, featured a character chased around a maze by ghost characters. The defendant’s game, although similar, differed from Pac-Man in certain important respects. This game, Jawbreakers, had a different shape and form, additional features, and different accompanying music and colours. The court made a comprehensive list of the similarities and differences, and decided no substantial similarity existed. Though the idea of the maze chase game originated from Pac-Man, of course copyright did not protect the idea. Moreover, the ordinary observer would not have noticed the similarities in the expression of the games. Thus, the court declined to hold infringement.


The next case Atari, Inc. v. North American Phillips Consumer Electronics Group, again concerned Pac-Man imitators. The Seventh Circuit Court of Appeals adopted Krofft. It stated that the defendant's game, K.C. Munchkin captured the "total concept and feel" of Pac-Man. In applying the "total concept and feel" test,
the court looked to the effect it would have on the ordinary observer, and found for Atari.

c. Midway v. Bandai

_Midway Manufacturing Co. v. Bandai-Am._\(^90\) followed _Krofft’s_ bifurcated extrinsic/intrinsic test without modification. In this unusual case, the defendant copied the plaintiff’s full sized original into a less sophisticated, handheld video game. In applying the extrinsic part of the test the court found that the idea was copied, based on the expert evidence and the numerous similarities. In applying the intrinsic test, the court held that though certain features were different, the ordinary observer looking only at the gross features\(^91\) would find substantial similarity. The court also rejected the defendant’s contention that they had merely copied the idea, and that the elements constituted indispensable expression. To uphold such a contention would assume the idea included the detailed elements or expression and “[i]f such a reasoning were accepted, a copyright defendant could always avoid liability merely by describing a plaintiff’s work in great detail and labeling [sic] that as a description of the ‘idea’ of the plaintiff’s work.”\(^92\) Such a ploy would not be tolerated by the courts.

d. Stern v. Kaufman

The next case, _Stern Electronics Inc. v. Kaufman_,\(^93\) adumbrated several important questions which have since become fundamental to the “look and feel” debate:

1. Whether an audiovisual work is original when the code of the uncopyrighted computer program determines its features?

2. Does a change in the order of presentation of the copyrighted audiovisual elements caused by the user’s interaction invalidate the copyright?

3. Is a defendant program’s identical display an infringement of the plaintiff’s copyrighted display even where the defendant has a different program code?

Omni, a co-defendant, sold games which were for all intents and purposes identical to Stern’s copyrighted game called Scramble.

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91. _Id._ at 138 (quoting _Universal Athletic Sales Co. v. Salked_, 511 F.2d 904, 908-09 (3d Cir. 1975), _cert. denied_, 423 U.S. 863 (1975)).
92. _Id._ at 148.
Stern had registered audiovisual, but not literary work copyright, because numerous computer programs can generate the identical display. For example if only the literary work were protected, then program B could precisely copy program A’s display and not infringe A if B’s code was different. As the court said, exactly the same display could be generated by an almost infinite number of different computer programs.94

The defendants raised two arguments. First, they claimed no originality existed in the audiovisual work, thereby precluding copyright protection. They argued that the previously created, uncopyrighted computer program determined the features of the display. The court gave this argument short shrift. It stated simply that courts may sever the literary work and audiovisual copyrights without affecting the other, provided an element of originality exists in each. Since the audiovisual copyright elements in Scramble stemmed from the plaintiff, Stern satisfied this originality requirement.

Secondly, the defendants argued that users created new works each time they played the game, because users’ actions resulted in slightly different sequences of images shown on the screen. The court rejected this by reasoning that the same copyrighted sights and sounds were repeated, albeit in slightly different arrangements.95

This case decided important issues which have arisen in the recent crop of “look and feel” litigation.96 The question of whether copyright protects an identical display even when it has a different program code is fundamental to “clone” manufacturers. Stern decided that in this fact situation infringement existed. For example, audiovisual registration would sufficiently protect the look of the Apple Macintosh user interface or Lotus 1-2-3 interface. With identical audiovisual displays, Stern’s reasoning would apply and hold the defendant liable even if the clone had a different underlying code.

Stern also held that even if a computer user changes the display, it will not invalidate the copyright. The change in the display’s order of the copyrighted audiovisual elements is immaterial, if there is a repetition of the separate copyrighted elements.97

94. Id. at 855.
95. Id. at 856.
96. See infra pp. 121-37, The “Look and Feel” Cases.
e. Kramer v. Andrews

After a three year lull, the final audiovisual video game case appeared. This case, Kramer Manufacturing Co. v. Andrews,98 dealt with a video poker game called Hi-Lo Double Up Joker Poker. In examining audiovisual copyright, the court applied the ordinary observer test. They held the defendant had infringed audiovisual copyright, and interestingly, that the copyright in the literary work was also infringed because of the audiovisual infringement. The court said the "'memory device' or computer program qualifies as a copy of plaintiff's audiovisual work and as such is protected under the plaintiff's [audiovisual] copyright."99

The effect of this statement may well extend beyond the court's expectations. For if a substantially similar work in visual terms infringes a program's audiovisual copyright even though it has a different code, then on this court's formulation the non-similar coding infringes the plaintiff's copyright in the literary work. This is a dangerous concept. It remains to be seen whether this anomaly is ever applied to the extent postulated.

3. The "Look and Feel" Cases

The literary work stream and the audiovisual work stream seemed to be heading in entirely different directions. The literary work stream focused on the structure of the computer program. The audiovisual work stream addressed only the appearance of the computer program. However, in any field as narrow as computer software copyright, the streams inevitably intersected. Broderbund Software v. Unison World100 represents this intersection. This court applied the literary stream cases of Synercom101 and Whelan102 to audiovisual copyright.

Since then, a number of "look and feel" cases emerged and altered copyright protection of user interfaces. Some cases decided that audiovisual copyright in the displays protects the user interface. Other cases extended this and copyrighted the sequence of the displays. This section will examine all of these cases.

98. 783 F.2d 421, 228 U.S.P.Q. (BNA) 705 (4th Cir. 1986).
99. Id. at 441-42 (emphasis in original).
a. Broderbund v. Unison World

Broderbund licensed a program called Print Shop, which ran on the Apple II computer. The program created personalized greeting cards. Unison negotiated with Broderbund to translate Print Shop from the Apple II format to IBM-PC format. During negotiations, Unison proceeded to replicate the function and exact appearance of Print Shop, with Broderbund's permission. Negotiations broke down, and Unison instructed its programmers to continue development of the IBM version. They retained the work already copied from Print Shop, and finished the program using their own ideas for an "enhanced" version. Broderbund sued for audiovisual copyright infringement when Unison marketed its finished program, The Printmaster. \(^{103}\)

The court analyzed the two previous literary work cases: \(^{104}\) Synercom and Whelan. \(^{106}\) This seems strange since the plaintiffs claimed audiovisual copyright infringement. However, the court held Whelan's reasoning applied to audiovisual copyright as well: "Whelan thus stands for the proposition that copyright protection is not limited to the literal aspects of a computer program, but rather extends to the overall structure of a program, including its audiovisual displays." \(^{107}\)

The court decided this proposition appeared more attractive than the opposite view taken in Synercom, for two reasons.

First, Synercom preceded Whelan, giving the Whelan court the advantage of Synercom's reasoning. The court's rejection of Synercom's reasoning indicates that, all other things being equal, the Whelan court disapproved of Synercom. The Broderbund court

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103. Broderbund Software v. Unison World, 648 F. Supp. 1127 (N.D. Cal. 1986). The action was also brought in textual copyright infringement, trademark infringement, and unfair competition under relevant state law. At trial, the court only decided the audiovisual copyright issue.

104. Before examining these cases, the court first dealt with the problem of indispensable expression. District Court Judge William Orrick recognized that copyright protection may not be available if the idea and the expression have merged, but concluded that no such merger existed in the instant case. He drew this conclusion because the plaintiffs had another greeting card printing program called Stickybear Printer aimed at the children's market. This program embodied the same idea of a greeting card printing program, but no merger existed because the program's expression was very different. Id. at 1132.


felt the latter case should prevail, simply because it was the latter. 108

Secondly, opined Orrick J., “Congress intended sequencing and ordering to be protectable in appropriate circumstances, . . . and the computer field is not an exception to this general rule.” 109

Therefore the court found that Whelan “compel[led] the rejection of the defendant’s argument that the overall structure, sequencing, and arrangement of the screens in “Print Shop” fall outside the ambit of copyright protection.” 110

Having determined this, the court then found infringement because Unison had actually admitted their attempts to replicate Print Shop. 111 However, “[i]n the interest of creating a comprehensive record” 112 the court decided the question of substantial similarity. 113 The court applied the Krofft test. 114 It found substantial similarity of ideas on the expert evidence given, and on the intrinsic test found that the infringing work captured the “total concept and feel” 115 of the original work.

This case created one ground-breaking principle: copyright

108. This strange reasoning leads to the inevitable conclusion that a latter case should always be followed in preference to an earlier one. The court does not say how this proposition is affected if the latter case is wrong at law.


110. Id. at 1133-1134. The court also decided two subsidiary issues: the “utilitarian article” doctrine and the “rules and instructions” doctrine.

The “utilitarian article” doctrine stems from the definition of a pictorial, graphic work in 17 U.S.C. § 101. It only allows for copyright protection for any separate and independent aesthetic element of a useful article, provided utilitarian considerations do not dictate the design and shape. The court dismissed the defendant's argument stating that it was “clear that the structure, sequence, and layout in 'Print Shop' were dictated primarily by artistic and aesthetic considerations, and not by utilitarian or mechanical ones.” Id. at 1134.

The defendant's final argument concerned the “rules and instructions” doctrine. This doctrine disallows copyright protection for rules and instructions of processes. The rationale behind this concept, is that providing copyright protection for the rules and instructions is tantamount to providing copyright protection to the idea or process, where none is otherwise available. Unison sought to disallow copyright for the Print Shop menus on the basis that the idea and expression had merged. Since the court had previously held that this was not the case, this argument was of no assistance to the defendant. Id. at 1134. Moreover, the court held that the menus were protectable for another reason: the screens contained stylistic creativity above and beyond the mere expression of rules or instruction. Id.


112. Id. at 1136.

113. The defendant had not denied access to the plaintiff's work, so the court merely noted the issue.

114. Sid & Marty Krofft Television Prods. v. McDonalds Corp., 562 F.2d 1157, 1164 (9th Cir. 1977).


116. The court finished its analysis with a rejection of the defendant's argument as to estoppel and “unclean hands.” These are beyond the scope of this paper, and are not generally relevant to “look and feel” copyright.
protects the sequence of displays. According to the court, a sequence of audiovisual displays of a user interface comprises a copyrightable audiovisual work. This represents the first time a court ever enunciated such a principle. It was not the last.

b. DCA v. Softklone

The next case, Digital Communications Associates v. Softklone, concerned copyright infringement of the plaintiff’s program called Crosstalk XVI. DCA’s programmers spent hundreds of man-hours designing Crosstalk’s main status screen. These programmers knew that if they grouped information into packets of five to nine pieces of data they could improve information recall. They designed the status screen as “command-driven” not “menu-driven.” The user would have to remember commands which performed the specified functions, because the program did not present a menu to the user. The programmers therefore had to design the screen within the optimal range for short-term recall. Bearing these considerations in mind, they developed a distinctive status screen which was easy to remember and use.

Softklone marketed their product called Mirror, a non-iterative copy of Crosstalk. Softklone began advertising. Mirror is the mirror image of Crosstalk XVI, the industry standard in data communications software for small business computers. Mirror’s design closely reflects Crosstalk XVI’s menus, commands and features. In fact, if you have used Crosstalk XVI before, you will feel right at home with Mirror. The one thing you will not find reflected in Mirror is Crosstalk XVI’s $195.00 price. Because we control the reflection, Mirror costs only $49.95.

The two programs were essentially identical to the user, but
Digital Communications Associates (DCA) could find no evidence of iterative copying of code. DCA sued anyway, and alleged copyright infringement in the status screen and in the program as a literary work.

Copyright in the Status Screen

The defendant first argued the idea/expression dichotomy. It claimed:

1. The status screen was an indispensable expression of the idea underlying the screen; or
2. The status screen was merely a "blank form" and hence unprotectable.  

The court dismissed the first argument. It held that the ideas behind the computer software were such things as the screen reflecting the status of the program and the nature of a command driven program, inter alia. The arrangement of the screen was "unrelated to how the computer program operates, and [is] 'expression.'" \(^{123}\)

The analogy between Crosstalk's status screen and Synercom's\(^ {124}\) input formats assisted the defendant's second argument. The defendants argued the status screen was a blank form, did not convey information and therefore unprotected. After close examination, the court concluded that the screen, even if a form, "clearly expresses and conveys information and, therefore, is copyrightable." \(^ {125}\)

Copyright in the Literary Work

DCA also argued that Softklone's status screen infringed the copyright in their computer program, even though no code was copied. The court disagreed and held that copyright protection of a computer program does not extend to the audiovisual display, because the screen does not copy the program's literary or substantive content. \(^ {126}\) The court noted but ignored the argument made in

\(^{122}\) This is the same argument which was fatal in Synercom Tech. v. University Computing Co., 462 F. Supp. 1003, 199 U.S.P.Q. (BNA) 537 (N.D. Tex. 1978).


\(^{126}\) Id. at 456.
Kramer, apparently because it creates an “anomaly”127 which the court was loathe to perpetuate.

c. Manufacturers Technologies v. Cams

The judge bifurcated the next case, Manufacturers Technologies v. Cams, into two separate judgments: the first128 decided the substantive issues of liability and the second129 decided the quantum of damages.

The employees of Manufacturers Technologies, Inc. (MTI), wrote a program called COSTIMATOR. Industry used the program to estimate the cost of machining a manufactured part. The plaintiff registered the program and selected screen displays.130

The defendants Cormier and Laviana, as sales representatives of MTI, saw versions of COSTIMATOR, and formed Cams, Inc. Cams marketed two essentially identical cost estimating programs: QC and RAPIDCOST. Both programs cost approximately one-tenth to one-twentieth of plaintiff’s product. MTI sued for copyright infringement.131

The Court discussed the computer copyright cases,132 and expressed disapproval of Broderbund’s reasoning. It criticized the Broderbund court’s interpretation of Whelan’s reasoning. “The Broderbund court extended the reach of Whelan by equating computer program copyright protection for the structure, sequence, and organization of a program with protection of the screen outputs, . . .”133

Given the Copyright Office’s new practice of making one regis-

127. Id.; see M. Kramer Mfg. Co. v. Andrews, 783 F.2d 421 (4th Cir. 1986) (The argument in M. Kramer is that the audiovisual copyright actually protects the literary work).
130. Program: Version 01.00, Copyright Registration No TX-1-1737-901. The manual was also registered. (Version 01.00, Copyright Registration No TX-1-808-645))

Screens: Version 01.00, Copyright Registration No. TX-1-544-052
Version 01.01, Copyright Registration No. TX-1-544-053
Version 01.02, Copyright Registration No. TX-1-544-054
Version 01.03, Copyright Registration No. TX-1-544-055

131. MTI also claimed unfair competition pursuant to the Lanham Act, 15 U.S.C. § 1125(a), and state law, Connecticut Unfair Trade Practices Act, Conn. Gen Stat. § 42-110b(a), both of which are beyond the scope of this article and are not discussed here.

132. The Court first noted that the Copyright Office had at the time changed its practice and a single copyright registration of a computer program extended copyright protection not only to the source and object codes of the program but also to the screen displays. Manufacturers Tech. v. Cams, 706 F. Supp. 984, 990-991 (D. Conn. 1989).
tration for both literary and audiovisual copyright, the Court examined the two alternatives: either to follow Broderbund or "treat the single registration of the computer program as accomplishing two interrelated yet distinct registrations: one of the program itself and one of the screen displays or user interface." It adopted the latter.

The Court then looked at the copyrightability of various elements of the plaintiff's work. It held that the elements within the screen and the use of various keys to move within the screens were not copyrightable: they were indispensable expression. However, the court found three elements copyrightable. They were:

1. The "external sequencing"; the way the program steps through various screens to obtain information. This was copyrightable for the evidence revealed that no two human cost estimators performed this function in the same way. This took the sequencing out of the bounds of indispensable expression;
2. The screen for the report showing status of the cost estimating job;
3. The screen which prompted the user for information about the estimating job. This screen conveyed information itself unlike a "blank form."

The judge, after finding copyright in these works, applied the Arnstein v. Porter extrinsic/intrinsic test and found infringement. The court determined substantial similarity existed between the sequence and flow of display screens in the plaintiff's and defendants' works.

The court therefore seemed to have, what horse-racing enthusiasts call, an each-way bet. It disapproved of Broderbund which first developed the principle of copyright in non-literal audiovisual elements, such as sequencing. Yet it held that sequencing was copyrighted, and therefore the defendants had infringed copyright.

135. Id. at 993.
136. The court's interchangeable use of the terms "screen display" and "user interface" imply that it saw no difference between the two. This places user interfaces directly within audiovisual copyright concepts.
d. Telemarketing Resources v. Symantec

The next case, Telemarketing Resources v. Symantec\(^{140}\) adds little to the field, because it was, in the author's opinion, poorly decided. However, this case provides a good example of the confusing outcome that results from mixing the principles of *Whelan* and *DCA*.

Brown Bag and Symantec both created software "outlining programs," which allowed the user to construct, revise and reorganize an outline. The programs, called *Grandview* from Symantec and *PC-Outline* from Brown Bag were actually quite different.\(^{141}\) Even so, the court granted a summary judgment motion in Symantec's favor.

The legal reasoning adopted is unusual. The Judge started badly, stating in his opening sentence: "The Court is called upon to decide whether the 'look and feel' of the screen displays in the defendants' computer outlining program are substantially dissimilar from the plaintiffs' copyrighted program. . . ."\(^{142}\)

To use such a loose term as "look and feel" as a term of art augurs ill for the remainder of the judgment. The Court went on: "Copyright protection applies to the user interface, or overall structure and organization of a computer program, including its audiovisual displays or screen 'look and feel.' "\(^{143}\)

This formulation fatally mixed the literary work copyright test of "structure, sequence, and organization" in *Whelan* with the audiovisual work copyright principles of *DCA*. As if this were not enough, the judge threw in a pinch of "look and feel" terminology to create an unholy stew. While the author does not take issue with the decision of the case, it is his opinion that to draw no distinction between the abovementioned elements asks for trouble. The Court gave no substantive reasoning for why the above elements warranted copyright protection.

The court went on to dissect analytically the elements of the plaintiff's alleged similarities in order to determine if the similarities resulted from indispensable expression.\(^{144}\) The court found that the majority of features allegedly infringed were not protected and summary judgement was granted to the defendant because, "[n]o rea-

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141. *Id.* at 1994-1996. The Court discussed the numerous differences at length.
142. *Id.* at 1992.
143. *Id.* at 1993.
144. *Id.* at 1995 (following Data East USA v Epyx, 862 F.2d 204, 208 (9th Cir. 1988)).
sonable jury could find that the screens are substantially similar.”\(^{145}\)

Note that the judge looked at the screens alone, and not the sequencing of the elements. Even though the judge cited *Broderbund* it did not follow *Broderbund’s* logic, adopted by the *MTI* court. The *Symantec* case was therefore decided on ordinary audiovisual copyright principles.

e. Johnson Controls v. Phoenix Control

The next case was *Johnson Controls v. Phoenix Control Systems*.\(^{146}\) Johnson Controls designed and implemented automated process control systems. The software in issue contained a suite of programs used to control waste water plants. John Schratz, a former Johnson Controls employee, sought to market similar software, and formed Phoenix Control. Phoenix Control attempted to market similar software. Johnson Controls sued for copyright infringement, *inter alia*. The District Court granted an injunction prohibiting Phoenix Control from copying, distributing, preparing derivatives of or publishing, (*inter alia*) the plaintiff’s software. The Ninth Circuit Court of Appeals reviewed the injunction, and reversed.

Since this case involved only a preliminary injunction the plaintiff needed to demonstrate a “reasonable likelihood of success on its copyright infringement claim.”\(^{147}\) The plaintiff succeeded, as there was substantial similarity, though the Court did not examine each element in the two programs.\(^{148}\)

Two interesting points arise out of the case. First, the Court said that the user interface is also called the “look and feel” of the program and “is generally the design of the video screen and the manner in which the information is presented to the user.”\(^{149}\) The Court equated “look and feel” with display screens.

Secondly, the Court specifically differentiated between the two streams of computer copyright in the United States.\(^{150}\) It talked of two “non-literal components”: structure, sequence and organization, and the user interface or display screens.\(^{151}\) This places the


\(^{146}\) 886 F.2d 1173 (9th Cir. 1989).

\(^{147}\) *Id.* at 1174.

\(^{148}\) *Id.*

\(^{149}\) *Id.* at 1175 n.3.

\(^{150}\) *Id.* at 1175.

\(^{151}\) *Johnson Controls v. Phoenix Control Sys.*, 886 F.2d 1173, 1175 (9th Cir. 1989).
case in line with Broderbund and MTI's reasoning, in finding that non-literal audiovisual elements deserve copyright protection.

f. Lotus v. Paperback

The most eagerly awaited case since Whelan was Lotus Development Corp. v. Paperback Software International.\(^{152}\) Though only a District Court case, District Judge Keeton's decision provides an exhaustive and instructive analysis.

The Lotus facts mimic the DCA case, except that the program at the center of the controversy was a spreadsheet program,\(^{153}\) \textit{I-2-3}. Paperback Software created a clone of \textit{I-2-3}, the market leader, without copying any code.

However, the spreadsheet program created an important distinction between the \textit{DCA} and the \textit{Lotus} cases. The cells in a spreadsheet merely provided places for inserting data, making them closer in nature to the "blank form." This concept formed the essence of the defendants' case in \textit{DCA}. Lotus anticipated that copyright would protect the actual user interface as expression, since the spreadsheet idea was neither protectable nor indeed theirs.\(^{154}\) Furthermore, the command interface, unlike that in \textit{DCA}, was not particularly complex.

The court first discussed general computer principles and subsidiary constitutional issues. Then it looked at the defendants' argument that the user interface was a useful article and hence not protected by copyright.\(^{155}\) The defendants advanced the "H-pattern gearstick" principle\(^{156}\) propounded in \textit{Synercom}.\(^{157}\)

The Court explicitly rejected this formulation and stated: "\textit{Synercom}'s central proposition—that the expression of non literal sequence and order is inseparable from the idea and accordingly is

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153. A spreadsheet program allows entry of data into boxes drawn on the screen, called cells. Cells can be linked together by use of formulae. Thus if data is changed in one cell, any cells linked to the changed cell will be automatically recalculated. An inverted "L" sits across the top of these cells. Above the "L" lies certain information such as the cell reference and the command line, where the user commands are typed. Associated with the command line there were instructions displayed for each command. These are called the "long prompts." Spreadsheet programs are used for financial planning, accounting and the like.
154. The original spreadsheet program was called \textit{Visi Calc}, and was manufactured by Visicorp.
155. \textit{See supra} note 117 and accompanying text.
156. \textit{See supra} note 47 and accompanying text.
not copyrightable—has been expressly rejected by several courts.158 The Court then went on to examine the copyrightability of 1-2-3, using Learned Hand’s “levels of abstraction” test. It held that:

1. copyright did not protect the idea of the spreadsheet;159

and

2. copyright did not protect the rotated “L” forming the top of the cell block, the use of an “attention” key to move from cells to menu, or the numerical operation keys (+, −, /, *), since these expressive elements merged with the idea of a spreadsheet;160 but

3. copyright did protect the menu structure as a whole. This included the structure and order of the terms, the presentation of the menu on the screen, the choice of commands, and the text in the “long prompts” of the menu.161

The judge then decided whether the structure, sequence and order of the menu command system constituted a substantial part of the plaintiff’s work. Since the menu system provided the “unique element”162 of 1-2-3, the judge found no difficulty holding for the plaintiff. The court easily found infringement for two reasons. Not only was the defendants’ copying “so ‘overwhelming and pervasive’ as to preclude, as a matter of law, any assertion of independent creation,”163 but the defendants admitted copying.

Here the judge directly applied Whelan’s “structure, sequence, and organization” test for literary work copyright to the audiovisual display copyright in the menu system.164 This mirrors the reasoning of MTT and Broderbund.165

The Court then examined the defendant’s policy arguments. It found without exception they were inconsistent with the Copyright Act and described them as “strained analogies and word

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160. Id. at 66.

161. Id. at 67-68.

162. Id. at 68.

163. Id.


One argument, however, deserves some discussion.

The defendant argued that the plaintiffs only had literary work copyright. They also alleged the infringement existed in the user interface or screen displays which are audiovisual works. The court responded with an unusually vituperative statement:

This contention borders on the frivolous. First, I emphatically reject the defendants' premise, based on yet another word game, that equates the user interface of 1-2-3 with 1-2-3's "screen displays." In ruling that defendants have infringed plaintiff's copyright, I have not ruled that defendants are liable because they copied the "screen displays" of 1-2-3. Rather, I have concluded that defendants copied protected nonliteral elements of expression in the user interface and the underlying computer program.

Again, this formulation follows Broderbund. Clearly, the Broderbund, MTI, Johnson and Lotus courts have created a new category of audiovisual copyright matter: the sequence of the audiovisual displays.

The Court gave a second reason why the plaintiff survived this final argument: the literary work registration covers the visual displays generated by the program. The Copyright Office refused to register a separate audiovisual copyright when Lotus applied for it.

166. 740 F. Supp. at 71.

Without going into excessive detail, the following were the defendants' first three arguments and the Court's reasons for rejecting them:

First, the computer program was a "useful article" and hence not copyrightable. This was rejected as a word play: though factually a "useful article" it could not be in copyright law since it was the expressed intention of the legislature to protect computer programs. Id. at 71-72.

Secondly, 1-2-3 has a "macro" facility which allows the user to write a short program to perform certain steps automatically. This means it is a language and languages are not protectable. The court held, at its most fundamental, that 1-2-3 was not a language since the macro facility is only part of 1-2-3, and it could be a language in any case since a language cannot be a set of instructions, which 1-2-3 patently was. Id. at 72-73.

Thirdly, for the purposes of developers of programs there should be a "bright line" policy rule that only source and object code should be copyright and nonliteral elements never should. This was a matter to be left to Congress, and the Court would not be goaded into judicial lawmaking. Id. at 73.

169. See supra note 137 and accompanying text.
170. 740 F. Supp. at 81-82.
g. The Apple Cases

The Apple cases present somewhat more complicated facts. The software in question pertained to not just one program but a homogeneous set. The Macintosh User Interface, which controls Apple's Macintosh computer, is a graphical not textual user interface. It allows the user to control the computer without memorizing long and complicated commands. A "move-and-point" system controlled all functions which were graphically represented on the screen. The system's simplicity and intuitiveness provided the main reason for wide public acceptance of the Macintosh computer.¹⁷¹

The main operating system of the Macintosh is called the Finder. However, most if not all application programs written for the Macintosh conform to the specifications laid down by Apple for software developers. Therefore a user can move between inumerable programs from different manufacturers and the user interface will almost invariably appear the same. This avoids expensive retraining.

_Xerox v. Apple_

Xerox allegedly developed parts of this interface, for use in their Star project. The similarity of Star and the Macintosh Interface gave rise to the suit in Xerox Corp. v. Apple Computer Inc.¹⁷² Xerox sought, _inter alia_, a declaratory judgment to establish them as the sole owner of Star's work copyright. They also sought an order striking out the Macintosh copyright registrations for unlawful use of pre-existing copyrighted material. Xerox claimed that it could not license Star because potential licensees feared that Apple would sue them for copyright infringement of the Macintosh Interface.¹⁷³

The court did not examine the copyrightability of the user interface, because an action for declaratory judgment requires the existence of an actual controversy. The plaintiff must harbor a "real and reasonable apprehension that he will be subject to liability if he continues to manufacture his product."¹⁷⁴ The court held that

¹⁷¹ Note for example that T. Turnpaugh, Senior Vice President of Technology Services at Seattle First National Bank, said "the difference in learning to use the Macintosh compared to learning [a conventional machine] is about 8-to-1 in the Mac's favour." Laplante, "Apple Offers Alternative to MS-DOS Machines," INFOWORLD, Oct 13, 1986, at 15.
¹⁷³ _Id._ at 1545.
¹⁷⁴ _Id._ at 1546.
since Apple had never threatened licensees with suit, they lacked evidence to "support the existence of a 'real and reasonable apprehension of liability' on Xerox's part."\footnote{175}{Id. at 1547.}

As to the order striking out Apple's copyright registration the court decided simply that it did not have power to cancel copyrights under the Copyright Act.\footnote{176}{Id. at 1549.}

Round one now over, Apple stepped into the ring again, but this time as plaintiff not defendant.

\textit{Apple v. Microsoft}

Apple's \textit{Macintosh} ranks second in market domination behind IBM's \textit{PC}. The \textit{PC} originally did not have a graphical user interface, and users had to memorize complicated commands. Various manufacturers, IBM among them, realized the potential of an interface like the \textit{Macintosh}'s. The race to develop a user interface like the \textit{Macintosh} for the \textit{PC} was on.

Digital Research Inc. (DRI) created the first graphic user interface: the \textit{Graphics Environment Manager (GEM)}. In the eyes of more than one reviewer, it bore "a striking resemblance to the Macintosh screen."\footnote{177}{Thompson, \textit{Bringing the Macintosh to the PC}, INFOWORLD, June 10, 1985 at 43.} Apple threatened DRI with a copyright infringement suit on the basis of the emerging "look and feel" cases. The case never came to court. As part of the settlement, DRI paid Apple an undisclosed sum, and agreed to alter certain aspects of \textit{GEM} to make it look less "Macintosh-like."\footnote{178}{4 COMPUTER L. REP. 338 (1985); Forbes, \textit{DRI Says New GEM Meets Apple's Terms'}, INFOWORLD, Nov. 11, 1985 at 1.}

Microsoft became involved next. It created the original, non-graphical interface for the IBM \textit{PC}, and created a new graphical one called \textit{Windows 1.0}. \textit{Windows 1.0} had a number of similarities with the \textit{Macintosh User Interface}. Again Apple rattled their sabres, and the parties reached an agreement in 1985. Part of that agreement provides as follows:

2. Visual Copyright License from Apple
   A. Grant. Apple hereby grants to Microsoft a nonexclusive, worldwide, royalty-free, perpetual, nontransferable license to use those derivative works [that is to say \textit{Windows 1.0} and other Microsoft programs] in present and future software programs and to license them to and through third parties for use in their software programs.\footnote{179}{BIX law/litigation \#551, from glass, April 18, 1988.}
Thus, they forestalled the issue, but not for long.
IBM brought out a new series of personal computers, called the Personal System/2 (PS/2). It needed a new operating system, and Microsoft agreed to write it. They called it the Operating System/2 (OS/2). Its user interface, the Presentation Manager or Windows 2.03, looked similar to Windows 1.0. It was also more similar to the Macintosh User Interface than Windows 1.0.

To further confuse the issue, Hewlett-Packard created their own user interface called New Wave. This interface was designed for use with Windows 2.03, and also allegedly looked similar to the Macintosh User Interface.\(^\text{180}\)

With the PS/2 looking like a large success, Apple it seems, wished to sow fear, uncertainty, and doubt\(^\text{181}\) in the minds of the computer purchasers. Thus, Apple sued Hewlett-Packard, for alleged audiovisual copyright infringement and unfair competition. They also sued Microsoft for contributory infringement.\(^\text{182}\)

The judge divided the case into at least four separate judgments. The first\(^\text{183}\) dealt exclusively with contractual issues relating to the 1985 settlement agreement. The Court held that the agreement was confined only to Windows 1.0: "the parties . . . [inserted] language showing an intent to limit the license and accompanying release of claims to the visual displays in the then current version of Windows, Version 1.0."\(^\text{184}\)

In the second case\(^\text{185}\) the Court analyzed in detail the elements of the Macintosh interface covered by the 1985 agreement. It ruled that all the elements in Windows 1.0 could be used in Windows 2.03 without infringement. The only substantive elements of similarity not licensed included the ability to move icons\(^\text{186}\) on the screen and the use of windows which overlapped and were not "tiled."\(^\text{187}\)

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180. It has been suggested that it is actually different in look, but that it is possible to reconfigure the screen display. It was further suggested that Microsoft worked very hard to reconfigure New Wave to look as much like the Macintosh as possible. BIX law/litigation #558 from glass, April 18, 1988.

181. Sterlicchi, Mr. Nice Guy Era Ends With FUD Plot, COMPUTING AUSTRALIA, March 28, 1988 at 12.


184. Id. at 928


186. Icons are pictorial representations of programs and files on the screen. They allow the user to "see" the file.

187. Windows are the main working area of GUIs. Windows 1.0 only allowed "tiled" windows, i.e. windows which sat side by side. Windows 2.03, like the Macintosh, allows windows to overlap.
Microsoft and Hewlett-Packard obtained a partial summary judgment leaving the most important copyright issues undecided.

The third case, *Apple Computer Inc. v. Microsoft Corporation and Hewlett Packard Company*\(^{188}\) filed recently, dealt with a number of subsidiary motions for partial summary judgment.\(^{189}\) The substantive copyright issues remain for the next phase. When and if this phase goes to trial is anybody's guess.

However, the court's examination of the license demonstrates that it is not adopting *Broderbund’s* principle that the sequence of the displays is copyrightable. The Judge has narrowed the copyright issue to the elements discussed above. Indeed in the third case, the court said, "Implicit in Judge Schwarzer's approach to the case is a rejection of Apple's fundamental contention that the 'total concept and feel' of the Macintosh graphic user interface is protectable expression."\(^{190}\) Thus it appears likely that the court will deal with the "look and feel" issue as exclusively within audiovisual copyright principles.

\(h.\) Conclusion

What are we left with after these cases?\(^{191}\) Is "look and feel" really so threatening to the very fabric of copyright law in the

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189. These motions were: Defendant's motion for partial summary judgment on the basis that the licensed Microsoft Excel displays are identical to the Macintosh, Hewlett Packard motion for partial summary judgment on the basis that Hewlett Packard's New Wave displays are covered by the 1985 Agreement, and Apple's motion for partial summary judgment concerning validity of its copyrights. All motions were decided in Apple's favor.

190. *Id.* at 51.

191. There are two peripherally relevant cases, *Worlds of Wonder, Inc. v. Vector Intercontinental, Inc.*, 653 F. Supp. 135 (N.D. Ohio 1986) and *Worlds of Wonder, Inc. v. Veritel Learning Sys., Inc.*, 658 F. Supp. 351 (N.D. Tex. 1986), which are dangerous anomalies. Both cases involve the same electromechanically animated stuffed toy bear, called Teddy Ruxpin. The manufacturer of Teddy Ruxpin sued the two defendants for producing audio tapes which caused Teddy Ruxpin to move and speak in the same way as it did when playing its tapes. The courts compared the visual effect of Teddy Ruxpin when activated by the plaintiffs and defendants' tapes, and found a substantial similarity in "concept and feel." 653 F. Supp. at 139.

The court's analysis with respect, completely ignores the fundamental point: can the animated movements of the bear be copyrighted at all? The answer is clearly no. The only category it falls within is an audiovisual work, and it fails to gain protection due to operation of the "utilitarian article" doctrine. Furthermore if a tape controlling the movements of the bear infringed the copyright in the facial features, then there is no reason why a battery powering the movements would not also infringe the copyright in the movements, provided W.O.W. also manufactured batteries for the bear. (For this example I am indebted to Boorstyn, *Infringement of Software Copyright*, CAL. LAW., October, 1987 at 51). This logical *non sequitur* demonstrates the dangerous nature of these two decisions. These cases should be, and largely have been, ignored.
PROTECTING THE "LOOK AND FEEL"

United States? The answer to this lies in the various reasonings of the courts.

Two decisions found purely audiovisual copyright in display screens, just as the courts did in the video game cases. These two cases are DCA and Brown Bag. Judging by the court's comments in the third Apple case, it appears that this decision will be decided in the same way. Both DCA and Brown Bag dissected the screen elements and determined if they were copyright. This is a standard application of audiovisual copyright, and should not be regarded as controversial.

There are four cases which have introduced a new copyright element: non-literal expression. The non-literal expression in this area is the sequence of the screens. These four cases are Broderbund, MTI, Johnson and Lotus.

Is this new element of display sequence properly within the bounds of copyright? The courts have been careful only to protect non-literal expression and it is therefore impossible to argue that this destroys the idea/expression dichotomy. The arguments against protection for screen sequence are similar to those posited against protecting program structure after Whelan. As I have already shown these arguments are fallacious and the same holds true for the arguments against protecting display sequence.

Provided then that the courts seek only to protect expression there is no good reason why “look and feel” should not be protected. “Look and feel” does break new ground, but the report of the copyright’s death at the hands of “look and feel” is “an exaggeration.”

III. “LOOK AND FEEL” IN AUSTRALIA

The Anglo-Australian jurisdiction has yet to analyze the “look and feel” issue. Therefore, any examination of this issue in Australia consists of mere speculation. However, a review of the potential fields of law which may apply in a look and feel dispute will help determine a litigant’s probable outcome. In this chapter the Australian law of copyright, passing off, unfair competition, and unfair trade practices will be examined and related to the “look and feel” issue.

To anchor this discussion as deeply as possible, this article will

192. "The report of my death was an exaggeration." S.L.CLEMENS (Mark Twain), [Cable from Europe to the Associated Press], reported in J. COHEN, THE PENGUIN BOOK OF QUOTATIONS, at 401 (1960).
193. Note however the two cases infra pp. 146-48, Cases.
apply the Australian law to particular fact situations. Since no Australian cases exist, the “standard” United States “look and feel” fact situation will provide the perspective. Digital Communications Associates v. Softiklone Distributing Corp. and Lotus Development Corp. v. Paperback Software International represent the best examples of the standard situation. In both those cases a large manufacturer invested substantial effort in creating a program interface. A “clone-maker” deliberately replicated the “look and feel” of the interface. The “clone” looked and worked exactly the same as the original, but sold at a considerably lower price. Manufacturers advertised extensively to inform potential buyers of the differences between the two products.

A. Copyright as a Form of “Look and Feel” Protection

Australian and American law are generally very similar. They have identical policy considerations and stem initially from the Statute of Anne and its predecessors.

As in the United States, the Australian Copyright Act 1968 (Cth.) requires two elements to find a defendant liable for illegal copying. First, copyright must subsist in the plaintiff’s material. This means the material must be original, in the correct form, and contained within the categories enumerated in the Act. Secondly, the defendant’s work must infringe the plaintiff’s copyrighted work. Infringement depends largely on the substantial similarity between the works and whether a large part of the original work was reproduced. This chapter examines these two elements and their respective requirements.

1. Subsistence
   a. Categories

The Act categorizes many materials protected by copyright.

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196. This example has the following benefits:
   1. No “mistaken” copying occurred in the example;
   2. Courts decided both cases used for the example in the plaintiff’s favor in the United States. The example therefore represents a useful benchmark for the extent of the protection in the United States. I shall note where the Australian law would apply differently to a different fact situation.
197. *See supra* note 126 and associated text.
198. 8 Anne, c.19 (1709).
These materials include literary, dramatic, musical and artistic works, sound recordings, cinematographic films, television and sound broadcasts, and published editions of works. Only two categories of works apply to the "look and feel" question: literary and artistic works. Although a stumbling block may exist for computer programs categorized as literary works, the artistic works category should provide protection for computer displays as drawings.

**Literary Works**

The literary works category now protects computer programs. In response to a celebrated case that declined to protect object code, Parliament enacted the *Copyright Amendment Act 1984* (Cth.). The Act altered its definition of "literary work" to expressly include computer programs or computer program compilations.

The Act defines "computer program" as any instruction, in any form of expression, which causes a device having digital processing capabilities to perform a particular function. Thus, the Copyright Act clearly recognizes computer programs as literary works, and hence protects them from iterative copying in Australia.

Less clearly protected within the definition of "literary work" are "compilations." A selection or compilation of materials applies to an arrangement of text and graphics on a computer display. Therefore, a computer display could attract copyright protection as a "literary work." However, literary works *inter alia* must exist in "material form." The cathode ray tube of a computer like a television screen must continually refresh an image anywhere from thirty to sixty times per second, in order for viewers to see a pic-

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201. Copyright Act (1986) § 32.
202. Copyright Act (1986) § 89.
203. Copyright Act (1986) § 90.
204. Copyright Act (1986) § 91.
205. Copyright Act (1986) § 92.
207. The impetus behind the enactment was in fact the case when at first instance. Apple Computer Inc. v. Computer Edge Pty. Ltd. 50 A.L.R. 581 (1983).
208. Copyright Amendment Act (1984) § 10(1).
209. Copyright Amendment Act (1984) § 10(1). This section of the Amendment Act also altered the requirement that the literary work be in visible form and made non-visible works, such as object code, copyrightable.
210. Copyright Amendment Act (1984) § 10(1). Note that this does not refer to compilations of programs covered in § 10(1)(b), but to compilations of material generally.
211. Copyright Act (1986) § 22.
Judges will unlikely find this inconstancy to amount to "material form," since one cannot reproduce the work from the screen image. Due to this evanescence, it seems that a "look and feel" plaintiff could not claim copyright as a literary work in the screen display.

The way United States courts have side-stepped this issue will not assist an Australian plaintiff. In *Stern v. Kaufman* the repetition of images provided sufficient fixation to attract copyright protection. However, subsequent cases never directly raised the issue.

**Artistic Works**

Section 10(1) defines an "artistic work" as

(a) a painting, sculpture, drawing, engraving or photograph, whether of artistic quality or not;
(b) a building or a model of a building, whether of artistic quality or not; or
(c) a work of artistic craftsmanship to which neither of the last preceding paragraphs applies.

Only paragraph (a) could arguably protect computer screen displays as a painting or drawing. Unfortunately, the Act fails to define painting. Ricketson suggests that a computer display could be categorized as a painting because it only requires color placement on a two dimensional surface. He suggests that provided that the painting is substantial enough to merit protec-

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212. Though a television or computer screen appears stable, the phosphor which glows creating the picture must be regularly bombarded with electrons in order for a picture to remain on the screen. This refresh is performed automatically by circuitry in the screen. See generally A. CAKIR & D. HART, VISUAL DISPLAY TERMINALS 9-12 (1980); C. LU, THE APPLE MACINTOSH BOOK 154 (2d ed. 1985).

213. As required by Copyright Amendment Act (1984) § 22.


216. *See supra* note 97 and accompanying text.

217. Therefore artistic works require no artistic or aesthetic quality, except with works of artistic craftsmanship.

218. Obviously, paragraph 10(b) is irrelevant to a discussion of "look and feel," since a building is unlikely to be a computer program. Paragraph 10(c) is also inapplicable to this discussion. The paragraph was intended to protect works other than those in paragraph 10(a), and which were manufactured by craftsmen working in many media. *Report of the Copyright Committee, Cmnd. 8662, H.M.S.O., London (1952)* para. 260.


220. Including monochrome images.

221. S. RICKETSON, *supra* note 196 at 117.
practically any representation should satisfy the section. The screen image is two dimensional, which can be either in color or monochrome. There is no requirement of aesthetic quality, so even a textual screen should be covered by this provision.

The screen image may also be categorized as a drawing. A drawing is usually a line depiction in monochrome, and includes a diagram, map, chart or plan. In addition, many works outside this definition have been protected by this section; such as labels and lettering. Therefore, since drawings are essentially monochrome paintings, the analysis supporting the Act’s protection of computer screen displays as paintings applies also to drawings.

On the basis of the above analysis, there seems to be no reason why this section could not sustain a “look and feel” action. Judicial reluctance could pose a stumbling block toward extending the Act’s definition of paintings or drawings into the electronic media. As a result, whether Australian courts adopt the stance that the screen images constitute “artistic works” remains to be seen.

b. Originality

All works must be original. The University of London Press court held that original did not mean creative or novel in the sense of patents, but determined the test was whether the expression of the idea stems from the author claiming copyright.

222. In Merchandising Corp. of Am., Inc. v. Harpbound Ltd. (trading as Scansfeed Publication), 1983 F.S.R. 32, three stripes of paint were held to be too insubstantial to warrant protection. There was also some question of whether a painting could be applied to a three dimensional surface.

223. Ignoring the curvature of most cathode ray tubes. Nowadays FTM (Flat Tension Mask) screens are available, which are perfectly flat.

224. Copyright Amendment Act § 10(1).


227. There is no requirement that the work be in material form, as only literary, dramatic or musical works need be. See supra note 216 and accompanying text.

228. The courts have not yet faced the issue. Traditionally, courts have only held copyright to subsist in plans, machine drawings, charts and diagrams. See J. LAHORE, COPYRIGHT LAW, paras. [2.3.90], [2.3.105] (1977). In the case of Merchandising Corp. of Am. v. Harpbound Ltd, 1983 F.S.R. 32, the English Court of Appeal refused to find that makeup on a face was a painting, on the basis that the surface of the face formed part of the painting and the plaintiff could not copyright his face. Whether courts will apply the reasoning of this case to electronic surfaces is speculative.


230. Id.; see also Sands v. Robinson, 23 C.L.R. 49 (1917).
William Hill\textsuperscript{231} developed a second test. This test asks whether the author expended a degree of labor, skill and ingenuity sufficient to justify protection.\textsuperscript{232} The High Court in Computer Edge v. Apple\textsuperscript{233} combined these elements into a two stage test. The first prong asks whether the work originated from the author. The second asks if such a degree of labor, skill and ingenuity has been expended to merit copyright protection.

Generally, these two questions are simply factual. In the standard "look and feel" scenario, the work clearly emanates from the plaintiff manufacturer. Secondly, as seen in the DCA case, the manufacturer expends a great deal of skill, labor and expense to create the "look and feel."\textsuperscript{234} Thus the standard "look and feel" case clearly satisfies the requirement of originality.

However, the analysis becomes slightly more difficult when the work at issue is a compilation of prior material.\textsuperscript{235} If a commonplace or typical arrangement of existing material makes up the work, then it will not be protected.\textsuperscript{236} However, if an expenditure of labor, skill and ingenuity sufficiently distinguishes the work from prior material, it will be protected.\textsuperscript{237} Also, if "look and feel" screens are commonplace they will not be protected. Screens are likely to be commonplace if they contain purely textual displays in an ordinary "laundry list" format. Beyond that, it will depend on the facts. For example, the Crosstalk status screen in DCA would probably not be commonplace, due to its involved structure.\textsuperscript{238} Further, the unusual graphical display of the Macintosh Interface, would almost certainly pass the originality test.

c. The Nature of Copyright in Works

Section 31 expresses the nature of copyright in works. The copyright holder has the exclusive right to do any of the acts al-
ollowed by section 31. These acts differ depending on whether the work is literary, artistic, dramatic or musical.239

For copyright purposes, the only relevant right is the right to reproduce the work. The next section examines what amounts to a reproduction, and the effect of these rights.

2. Infringement

Of all possible infringements,240 the most important one is “doing of the acts comprised in the copyright.”241

a. Doing the Acts Comprised in the Copyright

Section 36 makes a tort of any infringement of one or more of the exclusive rights granted by section 31.242 Copyright protects an owner's rights from an exact reproduction or copy, but how much copying or reproduction is allowed? Difficult issues arise when considering:

1. How much of the work must be copied for infringement?

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239. For literary works the copyright holder has the exclusive right to do all or any of the following acts under § 32(1)(a):
   (i) to reproduce the work in a material form;
   (ii) to publish the work;
   (iii) to perform the work in public;
   (iv) to broadcast the work;
   (v) to cause the work to be transmitted to subscribers of a diffusion service;
   (vi) to make an adaptation of the work;
   (vii) to do any of the acts in (i) to (v) above in relation to an adaptation of the work.

In the case of artistic works, the copyright holder has the exclusive right to do any or all of the following acts pursuant to § 31(1)(b):
   (i) to reproduce the work in the material form;
   (ii) to publish the work;
   (iii) to include the work in a television broadcast;
   (iv) to cause a television programme [sic] that includes the work to be transmitted to subscribers of a diffusion service.

240. The following acts are infringement of the copyright in a work:
   1. doing the acts comprised in the copyright (§ 36);
   2. authorizing the doing of the acts comprised in the copyright (§ 36);
   3. knowingly importing articles which would infringe copyright if made in Australia (§ 37);
   4. knowingly selling, letting for hire, or trading an article which infringes copyright, or if imported would infringe copyright (§ 38);
   5. permitting a place of public entertainment to be used for the public performance of works, without the copyright owner's consent (§ 39).

241. The others are aimed at importers, retailers and distributors.

2. How closely must the alleged copy reproduce the original for infringement?

The following section discusses how the case law addresses these issues.

b. Substantiality of the Taking

If a "substantial part" of the work is infringed pursuant to the infringement provision, then the whole work will be infringed. The case law defines what constitutes a substantial part by considering a number of factors. The first and most important factor measures the quality of what is taken. If the copy reproduces an essential, vital, or material part of the work, it will infringe the work, even if it constitutes only a small quantity. This test favors the plaintiff, because the most fundamental elements of the "look and feel" program are appropriated. A second factor, quantity, also favors the plaintiff since the entire "look and feel" of the plaintiff's work is taken.

Another factor evaluates the originality of the part taken. If copied material consists of only unoriginal reproduction, it will not form a substantial part of the work, no matter what the quantity. Antithetically, if even a small part of the work is highly creative, then it may be considered a substantial part. Again this analysis favors the "look and feel" plaintiff. The references to expenditures incurred in the creation of the program in DCA bear testament to this.

A fourth factor analyzes the object of the taking. If the defendants appropriated the part of the work with animus furandi, then the court will more likely find a substantial part of the work copied. This is true even though the elements taken are not a substantial percentage of the work. However, if the defendants sought merely to illustrate a proposition, or their object was incidental to the main purpose of the authorship, then courts will find no substantial taking. By saving themselves the labor of research to cre-

244. See generally S. RICKETSON, supra note 196, at 169 n.9.
247. See supra note 126.
248. An intent to steal and hence save themselves the labor of research.
ate an improved program, the "look and feel" "clone-makers" seek to ride the coat tails of the original manufacturer. Thus, in "look and feel" cases the defendant clearly has animus furandi.

The last factor measures whether the materials are in competition. If so, the court will likely find a substantial taking, and will even disregard its insignificance in order to prevent rivals from gaining an unfair economic advantage. This factor obviously favors "look and feel" plaintiffs since the manufacturers are in direct competition, and the clone-maker is undercutting the original manufacturer.

It is therefore hard to imagine a clearer example of substantial taking on any of the above tests, than the production of a "look and feel" clone.

c. Substantial Similarity

What degree of similarity constitutes infringement? Just as in the United States, the courts require "substantial similarity" or a close objective similarity. Similarity forms the first stage in a two stage test. It is necessary so one can properly describe the defendant's work as a reproduction or adaptation of the plaintiff's. The second part of the test mandates, unsurprisingly, that a causal connection exists between the two works. Plaintiffs usually prove this causal connection by a defendant's access to the copyrighted work. The causal connection will always be found in a "look and feel" case. Obviously the defendant must have had access to the plaintiff's work in order to mimic the appearance and function of the work so closely.

d. The Idea/Expression Dichotomy

As in the United States, Australian copyright law protects expression and not the idea. The concept of "indispensable expression" also applies in Australia, although courts do not use the terms "doctrine of merger," "scènes a faire" and "indispensable expression," but instead favor "vieix jeu" and "common stock." The United States cases which denied protection on the basis that expression was inseparable from the idea would probably have the

253. 1963 Ch. at 627.
254. Id.
same result if tried in Australia.\textsuperscript{256}

The issue of \textit{scenes a faire} or \textit{vieux jeu} arises where the need to communicate with the user dictates the program’s “look and feel.” Elements in a program’s display which extend beyond the underlying idea, are protected by copyright, since they do not fall within “common stock.”\textsuperscript{257}

The issue of “look and feel” as merely a “blank form” also relates to the doctrine of merger issue. This was the fatal issue in \textit{Synercom}.\textsuperscript{258} Australia lacks a specific body of case law which has adopted the “blank form” doctrine. However, the application of the originality test achieves the same answer.\textsuperscript{259} If the work only constitutes a “blank form” it will lack sufficient labour, skill, and ingenuity to warrant copyright protection. However, in the standard look and feel case the manufacturers will have expended sufficient labour to create the look and feel of a program, given the man-hours taken to design and program.\textsuperscript{260} This is the same result achieved in the United States by application of the “blank form” doctrine.\textsuperscript{261}

3. Cases

Two cases exist within the Anglo-Australian jurisdiction which touch on “look and feel” issues. One judge from England's Chancery Division of the High Court of Justice decided the first case. Since it was an interlocutory proceeding,\textsuperscript{262} it bears marginal influence.\textsuperscript{263} The second is the \textit{Autodesk} case which after a controversial decision in the Federal Court\textsuperscript{264} was resolved on appeal.\textsuperscript{265}

\textbf{a. \textit{M.S. Associates} v. \textit{Power}}

The plaintiff in \textit{M.S. Associates} v. \textit{Power} developed and marketed software which translated other people's BASIC language

\begin{itemize}
\item \textsuperscript{256} See \textit{e.g. supra}, Patry, W.F., 30-35.
\item \textsuperscript{258} See \textit{infra} note 45.
\item \textsuperscript{259} See \textit{infra} pp. 141-42, \textit{Originality}.
\item \textsuperscript{261} See \textit{infra} note 43 and accompanying text.
\item \textsuperscript{262} M.S. Assocs. Ltd. v. Power, 1988 F.S.R. 242.
\item \textsuperscript{263} For a summary of the hierarchy of Australian court see \textit{SMITH, LEGAL PROCESS, COMMENTARY AND MATERIALS} 36-38 (Maher ed. 5th ed. 1988).
\item \textsuperscript{264} Autodesk, Inc. v. Martin Peter Dyason, 15 I.P.R. 1 (1989).
\item \textsuperscript{265} Martin Peter Dyason v. Autodesk, Inc., 18 I.P.R. 109 (1990).
\end{itemize}
programs to the computer language, C.\textsuperscript{266} The defendant, a former employee of the plaintiff, wrote an identical program.

The judge looked at the two programs' code and the structure to determine infringement.\textsuperscript{267} The judge noted, "the striking line similarity at the beginning of the defendants' program and its order with the list of functions in the plaintiffs' program, a list which is in random order."\textsuperscript{268}

He went on to detail the similarities in structure; such as groupings of functions and file structure. This analysis closely resembled Whelan's\textsuperscript{269} structure, sequence, and organization test for literary work copyright infringement.

Since this case dealt with literary work copyright, it does not directly relate to "look and feel" copyright.\textsuperscript{270} Applying Whelan in audiovisual "look and feel" cases has had somewhat illogical results.\textsuperscript{271} Computer program structure's copyrightability is largely hypothetical within this article's context, however the policy considerations discussed in relation to Whelan apply equally in Australia.\textsuperscript{272}

\textit{b. The Autodesk Cases}

The plaintiffs marketed an expensive computer-aided drafting program called \textit{AutoCAD}. This program has a small, plastic-encased microchip that slots into the serial port of the personal computer. This microchip, called the \textit{AutoCAD} lock, regularly receives a code from part of \textit{AutoCAD} called WIDGET.C. If the correct signal does not return from the lock, \textit{AutoCAD} freezes and will not operate.

One of the defendants analyzed the signal from \textit{AutoCAD} and the \textit{AutoCAD} lock and discovered a pattern could be replicated without opening the \textit{AutoCAD} lock. He then coded the pattern in an EPROM\textsuperscript{273} and the other defendants marketed the device as the "Auto-Key." The Auto-Key allowed copyright infringers to use \textit{AutoCAD}, rendering Autodesk's safeguards useless.

\textsuperscript{266} These types of programs are generically known as "cross-compilers."
\textsuperscript{267} The case concerned a motion for an interlocutory injunction where the plaintiff's burden of proof was simply that they have an arguable case, and is not decided on the merits.
\textsuperscript{269} See supra note 68 and accompanying text.
\textsuperscript{270} See supra pp. 121-37, The "Look and Feel" Cases.
\textsuperscript{272} See supra pp. 130-31, Conclusion.
\textsuperscript{273} Erasable Programmable Read-Only Memory.
On appeal from a single judge\textsuperscript{274} the Full Federal Court addressed the issues of subsistence of copyright and infringement, \textit{inter alia}.\textsuperscript{275} In the leading judgment, Sheppard, J. stated that copyright subsisted in the work. As to infringement, he said: "[T]he only similarity between the two locks is the fact that they perform the same function. There is no other similarity of any consequence."\textsuperscript{276} He therefore found there was no reproduction.\textsuperscript{277}

As with \textit{M.S. Associates}, this case has only a passing relevance to the standard "look and feel" case, such as \textit{DCA} or \textit{Lotus}. No question of audiovisual work infringement exists. This case once again mirrors \textit{Whelan} making the comments discussing the similarity between \textit{M.S. Associates} and \textit{Whelan} applicable.\textsuperscript{278} The fundamental question asks whether the AutoKey lock infringes any non-literal elements of the \textit{AutoCAD} lock. These non-literal elements can be categorized as "structure, sequence, and organization" of the code, or the visual elements of the display. The relevant non-literal element can only be the "structure, sequence, and organization" of the pattern code. Since this element was not copied, the Full Federal Court accordingly dismissed the action. This harmonizes with the analysis of the United States cases.\textsuperscript{279} As a result, the \textit{Autodesk} case adds little to the "look and feel" debate.

4. Conclusion

Australian copyright closely resembles its American counterpart. A potential "look and feel" plaintiff faces two fundamental problems in Australia. First, the section relied on for look and feel protection in the United States is actually "audiovisual work" copyright. No exact Australian equivalent exists, but "artistic work" copyright is the closest. Although no judicial barriers hinder the courts, it is unclear whether the Australian courts will extend "artistic works" into electronic images.

Secondly, American courts have a more liberal approach to

\footnotesize{\textsuperscript{274}} Autodesk, Inc. v. Dyason, 15 I.P.R. 1 (1989).
\textsuperscript{276} Id. at 136.
\textsuperscript{277} The judge also examined whether the Auto-Key lock was an adaptation of the \textit{AutoCAD} lock. He looked at the different algorithms used in each lock and pronounced simply that it would be impossible to say that the Auto-Key lock was a variant of the \textit{AutoCAD lock}. The other judges concurred in all important respects with Justice Sheppard. The appeal was unanimously allowed. Autodesk was granted leave to appeal to the High Court. The appeal was heard on 17 April 1991. At the time of the writing, the court has yet to hand down a judgment.
\textsuperscript{278} See supra note 273 and accompanying text.
\textsuperscript{279} See supra pp. 130-31, Conclusion.
precedent and generally interpret statutes more flexibly than courts in Australia. U.S. federal courts have largely ignored the fixation question for computer displays. It seems unlikely that an Australian court would be flexible as this, nor would the author argue that they should be.

All one can confidently say, is that the future of "look and feel" copyright protection in Australia is uncertain.

B. Passing Off as a Form of "Look and Feel" Protection

Passing off is a form of intellectual property similar in effect to registered trademarks. Unlike trademarks however, passing off concerns the protection of the reputation or goodwill amassed by the plaintiff, rather than protection of the mark. Passing off occurs when a defendant holds himself out as having an association with a plaintiff or plaintiff's goods or services, and in so doing causes damage to the plaintiff's goodwill or reputation.

1. Subject Matter

Like trademarks, passing off protects a manufacturer or distributor's insignia, mark or device on goods. This protection eventually extended to include the plaintiff's get-up, appearance, and any conduct which tends to associate the defendant with the plaintiff's already established reputation.

However, the court will not protect the mark or get-up as property. The property actually protected is the business goodwill or reputation established by the plaintiff. What amounts to reputation has been given a wide definition by the courts. Any benefit or advantage gained by possession of a good name or reputation will be sufficient to discharge this requirement.


281. See generally S. Ricketson, supra note 196, at 533 n.13, for a list of example cases with respect to goods.

282. In Anglo-Australian law, get-up is the traditional and technical name for the visual identity of the product. This includes advertising, labelling, etc.

283. Knott v Morgan, 2 Keen 218 (1836), 48 E.R. 610; Lee v. Haley, L.R. 5 Ch. App 155 (1869); Levy v. Walker, 10 Ch. 436 (1878).


2. Elements Required

Passing off has gone through a number of modifications in its lengthy history, but the modern requirements remain quite clear. They are threefold:

1. The plaintiff must have a reputation or goodwill which is attached to the mark, appearance or get-up;
2. The defendant must have used the same or a deceptively similar mark or get-up so as to confuse or deceive the people who purchase the goods or services;
3. The defendant's conduct must have caused, or is likely to cause, the plaintiff damage to business goodwill or reputation.  

The next section shall examine each of these elements as they apply to the standard "look and feel" case.

a. Reputation in the Mark or Get-up

The question of whether the plaintiff has a reputation which deserves protection will invariably be answered in the affirmative. Large, accepted companies with their established programs and leading market share, provide smaller companies with a reason to manufacture a clone.

However, a more difficult question arises with respect to whether the visual appearance and function of the program amounts to a mark or get-up. Clearly it is not a mark, since a mark identifies a product to the consumer. In the case of a computer program the "look and feel" does not identify the product, it is the product.

For example, one might think that the way the Apple Macintosh interface worked and looked, constituted get-up. This is not so. The court recognizes a difference between similarity in the get-ups and similarity in the actual products. As Fletcher Moulton, L.J. said in Williams Co. v. Bronnley & Co., 286 "I strongly object to look

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287. R. Stern, Software as a sensory experience: Can there be a passing off by imitation of the "look and feel" of a computer program, 7 EUR. INTELL. PROP. REV. 195 (1986). Stern notes a case which was pending in the United States, Cadam v. Adra Sys. & Adage, Inc., (D. Mass. No. C-86-2146-T, 1986) which alleged passing off. The case did not go to trial, but if it had, it would have probably been argued on the basis of copyright, as many previous cases have been.

at anything, that has a value in use, as part of the get-up of the article. Anything which is in itself useful appears to me rightly to belong to the article itself.\textsuperscript{289} This principle conclusively bars any would-be “look and feel” plaintiff from bringing their action in passing off because the interface has a “value in use” and is not part of the get-up. However, this section shall nonetheless examine the other requirements necessary for passing off, in the interests of completeness.

\begin{itemize}
\item \textit{b. Conduct of Defendant}
\end{itemize}

The defendant’s conduct matters, since it forms the fundamental element embodied in passing off. The defendant must have acted to deceive or confuse customers into believing that their goods or services were the plaintiffs or were associated with the plaintiff. The defendant need not have fraudulent or deceitful intent, but must have acted in such a way that confused purchasers.\textsuperscript{290}

In the “look and feel” cases, defendants will rarely represent themselves or their goods as associated with the plaintiff. The overall marketing thrust made by clone manufacturers portrays their product as functionally identical to the original, but cheaper since it comes from the clone-maker.\textsuperscript{291}

This observation is particularly forceful when one evaluates the product’s market. The more discriminating the class of potential consumers, the less likely the court will infer confusion resulting from a similar get-up. Thus, the court assumed newspaper readers could differentiate between the \textit{Morning Post} and \textit{Evening Post},\textsuperscript{292} but “the humble washerwoman” was unable to notice the difference between similar boxes of laundry powder.\textsuperscript{293} The purchasers of the “look and feel” programs would distinguish the two programs for three reasons. First, ordinary computer users are generally well-

\begin{footnotes}
\item\textsuperscript{290} See S. RICKETSON, supra note 196, at 533.
\item\textsuperscript{291} See supra note 126 and accompanying text.
\item\textsuperscript{292} Borthwick v. The Evening Post, 37 Ch.D. 449 (1888).
\item\textsuperscript{293} William Edge & Sons Ltd. v. William Nicolls & Sons Ltd., 1911 AC. 693. Ignoring the inherent sexism of the day note should be made of the fact that the washing powders had identical get-up, whereas the newspapers had different layouts, content and styles. Ricketson suggests the result may have been different if the papers had been of a similar type. S. RICKETSON, supra note 196, at 566.
\end{footnotes}
educated. Second, and more importantly, the computer media attention to the look and feel issue has been most intense. Third, average users could not help but notice the disparity in price. If they don't, the clone manufacturer will quickly bring it to their attention.

c. Damage

Unlike most torts, passing off damage is limited to damage to the plaintiff's goodwill. If passing off applied in the the "look and feel" arena, courts would probably find damages once similarity in the goods or services and consumer confusion was proved. Since a program and its "look and feel" clone could not appear more similar, the issue of damages will not bar the "look and feel" plaintiff.

3. Conclusion

Passing off will not provide an avenue for "look and feel" litigation in Australia. The two problems facing the potential plaintiff are:

1. The displays and function of the program, which the plaintiff seeks to protect, form the actual product itself. Passing off is restricted in its application to marks, insignias, devices, get-up and packaging surrounding the product, not the product.

2. Confusion between the plaintiff's program and the defendant's clone, is extremely unlikely because of explicit advertising and the astute market perception.

C. Trade Practices Act, Part V—Unfair Practices as a Form of "Look and Feel" Protection

The final area, trade practices law, may provide assistance to potential "look and feel" plaintiffs. In 1974, the Trade Practices
Act 1974 (Cth.) was introduced. The Act protects consumers. Part V contains the sections aimed at protecting consumers from unscrupulous and unethical trade practices.

Part V Division 1 contains the relevant sections of the Act. Sections 52 and 53 are examined separately below.

1. Section 52

This section provides consumer protection as follows:

52. (1) A corporation shall not, in trade or commerce, engage in conduct that is misleading or deceptive or is likely to mislead or deceive.

Although originally intended to assist consumers, anyone including a competitor may seek redress under section 52. Traders frequently use this section and “look and feel” plaintiffs could use it also.

a. “Misleading” and “Deceptive” Conduct

The section has been framed widely, lacking any definition for
“deceptive” or “misleading” conduct. This gives the provision flexibility, but consequently makes it ambiguous. The Parkdale case explains that no distinction exists between the two terms and that both mean “to lead into error.”\textsuperscript{301}

Section 52 also protects consumers from conduct which is “likely” to deceive or mislead. “Likely” in this context means conduct which has the “capacity” to mislead, or “may be expected” to mislead.\textsuperscript{302} This makes it unnecessary to prove actual deception.\textsuperscript{303} However, unlike passing off,\textsuperscript{304} the conduct must be more than just confusing.\textsuperscript{305} The conduct must convey enough confusion sufficiently to mislead the consumer.\textsuperscript{306} Invoking the use of this section will be factually determined by the degree of misrepresentation.\textsuperscript{307}

\textit{b. Establishing Conduct that Falls Under Section 52}

In the \textit{Taco Co. v. Taco Bell},\textsuperscript{308} the court provided guidance for determining whether conduct fell within the ambit of section 52. The guidelines were to:

1. Identify the relevant section of the public by asking who will be misled or deceived by this conduct.\textsuperscript{309}
2. Encompass all types of individuals in this relevant section by including: the astute and gullible, the intelligent and ignorant, the well and poorly educated, and men and women of all ages pursuing various vocations.\textsuperscript{310}
3. Determine whether the conduct was likely to, or actually did mislead or deceive.\textsuperscript{311}

\textsuperscript{304} See infra pp. 151-52, \textit{Conduct of Defendant}.
\textsuperscript{306} Taco Co. of Austl. Ltd. v. Taco Bell Pty. Ltd., 42 A.L.R. 177 (1982).
\textsuperscript{307} Id.
\textsuperscript{308} Id.
4. Ask why the misconception has arisen.\textsuperscript{312}

With the exception of the “audience” test embodied in the first two guidelines, these guidelines relate only to the interpretation of specific facts. This section shall therefore examine the interpretation of the standard “look and feel” cases, and then discuss the audience test separately.

Where a market leader sues a small “clone” producer, the question arises: Has the clone producer induced the market to buy the product through deceptive conduct? This conduct obviously involves the advertising, but probably also includes the actual creation of the clone. Usually, the clone producer will seek to distinguish the clone from the market leader, if only on the basis of price.\textsuperscript{313} Thus, in the standard situation, the advertising would probably not contravene section 52.

Does the actual production of this non-iterative copy contravene the section? It will not. Provided the maker identifies the product as coming from them, then they can never contravene section 52, no matter how closely the defendant’s product mimics the plaintiff’s product. \textit{Parkdale Custom Built Furniture v. Puxu} demonstrates this point. In that case the items in issue were nearly identical chairs.\textsuperscript{314} The defendant sold its chairs with clearly identifying labels, so the High Court held there was no misleading or deceptive conduct.\textsuperscript{315} Since clone producers invariably place their name on their product, “look and feel” will not fall within section 52.

\textbf{c. Audience}

Like passing off, courts in section 52 proceedings will examine the type of audience or market allegedly deceived or likely to be deceived.\textsuperscript{316} \textit{Taco Bell} mentions the gullible and less intelligent member of the specified section in the community. However, \textit{Taco Bell} relied on the earlier decision of \textit{Parkdale v. Puxu}, which examined the effect of the conduct on the reasonable class member. As Gibbs J. (as he then was) said, “The heavy burdens which the section creates cannot have been intended to be imposed for the benefit of persons who fail to take reasonable care of their own

\textsuperscript{312} Hornsby Bldg. Information Centre Pty. Ltd. v. Sydney Bldg. Information Centre Pty. Ltd., 140 C.L.R. 216, 228 (1978).

\textsuperscript{313} See supra p. 124, the \textit{Mirror} campaign; Digital Communications Assocs. v. Softklone, supra note 118.


\textsuperscript{316} See supra pp. 143-46, \textit{Passing Off as a Form of “Look and Feel” Protection}. 
interests."317

As in passing off’s audience test, the reasonable person would not think the plaintiff produced the clone, nor would they doubt which program they were using.318

d. Conclusion

Section 52 would not help a potential plaintiff in the standard “look and feel” case. Since the defendant identifies its program as emanating from the plaintiff’s, no deception arises. This is because:

1. The defendant’s identification of their program clearly defeats any alleged misleading conduct.

2. The reasonable person in the computer community would not be deceived, because of the identification, advertising, media exposure and price difference.

3. Even if the user were confused about the origin of the program, this type of confusion is not actionable under section 52.

2. Section 53

Section 53 provides in pertinent part as follows:

53. A Corporation shall not, in trade or commerce, in connection with the supply or possible supply of goods or services or in connection with the promotion by any means of the supply or use of goods or services . . . .319

(c) represent that goods or services have sponsorship, approval, performance characteristics, accessories, uses or benefits they do not have;

(d) represent that the corporation has sponsorship, approval or affiliation it does not have.

Unlike the wide provisions of section 52, section 53 enumerates specific conduct which violates this section. Also unlike section 52, breach of the provision constitutes a criminal offense.320

a. False Representations of Sponsorship or Approval

The scope of false representations encompasses virtually any


318. See supra note 126 and accompanying text.

319. Since no issue exists that “look and feel” defendants are corporations involved in commerce, it will not be discussed further.

potential form of advertising or promotion. False representations mean a direct statement, affirmation, or denial, and also includes pictures and in some cases conduct. Odometer readings on a used car,\textsuperscript{321} goods for sale with clearly visible statements,\textsuperscript{322} and television advertisements describe representations within the meaning of this section.\textsuperscript{323} Therefore under this section, any form of advertising or promotion by the "look and feel" plaintiff will amount to a representation.

There need not be a specific "representee." If defendant made the false representation, it is sufficient to offend the Act.\textsuperscript{324}

Section 53(c) prohibits representations of sponsorship or approval, \textit{inter alia}, of goods or services which they do not have. Section 53(d) prohibits similar representations of sponsorship or approval of the corporation.

Representations showing mere association are insufficient, a strong link must be represented.\textsuperscript{325} \textit{Big Mac} considered the meaning of "sponsor" and "sponsorship."\textsuperscript{326} Franki, J. held that sponsor meant, "One who enters into an engagement, makes a formal promise or pledge, on behalf of another; a surety."\textsuperscript{327} The meaning of "approval" was also examined in that case as being "to sanction, to pronounce to be good; commend."\textsuperscript{328}

Does then the advertisement of a "clone" as identical to another program falsely represent an agreement between the corporations or programs, or represent a sanctioning of the program or "clone" making corporation? It does not. The corporations are clearly in competition, since the clone drastically undersells the original. Moreover, unless the clone corporation makes no claims of sanctioning by the market leader, there will be no false representation of approval. Since the price difference entails the thrust of the advertising, no sanctioning could be inferred.

\textsuperscript{322} Weitmann v. Katies Ltd. & Ors, 29 F.L.R. 336 (1977).
\textsuperscript{324} Thompson v. Rile McKay, 29 A.L.R. 657 (1980).
\textsuperscript{326} \textit{Id.}
\textsuperscript{327} \textit{Id.} at 247. The decision of Justice Franki was overturned on appeal, but only on his ruling on section 52. His Honour's decision on section 53 was affirmed by the Full Federal Court. McWilliam's Wines Pty. Ltd. v. McDonald's Sys. of Austl. Pty. Ltd., 33 A.L.R. 394 (1980).
b. Conclusion

Section 53 will be of no assistance to a "look and feel" litigant, unless the defendant foolishly claims a sanction or agreement between the two companies. This is unlikely to ever happen.

IV. CONCLUSION

A. The American Law

The preceding discussion illustrates that "look and feel" protection is not nearly as novel as it first appears. Two distinct streams fundamentally divide "look and feel" cases: the literary work stream and the audiovisual work stream.

1. The Literary Work Stream

The apogee of current decisions protects the structure, sequence and organization of literary work stream cases. Even though Whelan v. Jaslow and Plains Cotton v. Goodpasture remain irreconcilable, the author favors Whelan's approach because it categorically protected structure, and held that substantial similarity of overall structure sequence, and organization constituted infringement. Additionally, subsequent cases support the contention that copyright protects structure.

This begs the question: Should we, in principle, protect the structure of computer programs? The reasoning of Meredith Corp. v. Harper & Row Publishers provides the best answer. Meredith held that the structure of a book amounted to protectable expression. There has been no hue and cry over Meredith, giving the clear indication that copyright protects book structure. Therefore, computer program structure should not be denied equal protection merely because it is a new field of copyright.

2. The Audiovisual Work Stream

The second stream is the audiovisual work stream. It represents the true "look and feel" stream. In the author's opinion, the literary stream and the audiovisual stream should remain distinct,

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because they deal with two different categories of copyright works. Each stream works more coherently without the introduction of each other's analytical elements because it confuses the issues. The case of *Broderbund*, to name the most obvious, stands as warning of the danger the courts face if they attempt to join these streams.

The "look and feel" stream, or audiovisual work stream, actually does not concern both the "look" and "feel" of a program. It concerns only the program's "look." It is in fact just traditional audiovisual copyright, dealing with the appearance of the work. The "feel" or functioning of the program is not examined, nor warrants it. If the actual elements in the display or the sequence of displays are sufficiently removed from a computer interface's underlying idea, then they deserve and are protected by the audiovisual copyright.

Unfortunately, the audiovisual stream is itself divided. This stream examines copyright in two distinct elements: the display screens and the sequence of presentation of the display screens. The first element, the screen itself, falls within the traditional bounds of audiovisual copyright. Protecting the sequence of those screens represents a new application of copyright.

### a. Traditional Audiovisual Copyright

Two cases have decided copyright issues on the basis of traditional audiovisual copyright. The pending *Apple* case is likely to follow their lead. The courts have created nothing controversial in applying traditional audiovisual copyright to computer displays. There is no distinction between these cases and the cases which dealt with copyright in video games.

The courts have restricted "look and feel" copyright, by dealing only with the visual appearance of the screen. This has the advantage of keeping copyright within its traditional bounds. The judges may then rely on the wealth of experience and precedent in the field. The restriction does not disadvantage a plaintiff who has placed sufficient work into the computer displays to merit copyright protection. Therefore, manufacturers obtain adequate protection. This limit on "look and feel" copyright thus balances the competing...
policies that protect intellectual effort and avoid monopoly of markets.

b. The New Application: Sequence

However, a new field of copyright protection has emerged: the sequence of computer displays. Courts in four cases, 
broderbund,\textsuperscript{337} MTI,\textsuperscript{338} Johnson,\textsuperscript{339} and Lotus,\textsuperscript{340} have determined that this sequence warrants copyright protection. This means that copyright protection for computers contains two new elements: the "structure, sequence and organization" of the code and the sequence of the displays. One court\textsuperscript{341} called both elements "non-literal expression."

Again the question arises: should sequence be protected? If one accepts Meredith's principle that structure equals expression and deserves protection, then it is hard to answer no to this question. The same principle applies to book structure, program structure and display screen structure. The latter element, display screen structure, is simply the sequence of displays presented to the user. Provided one can properly characterize a particular plaintiff's sequence as expression then no reason exists why sequence should not be protected.

B. The Australian Law

In Australia, passing off, unfair competition, and unfair trade practices clearly will not avail a potential "look and feel" plaintiff in the standard "look and feel" case. Copyright remains the most appropriate form of action, just as in the United States. However, Australian courts are more tied to precedent than their American counterparts. This may mean that "artistic work" copyright, the Australian equivalent to "audiovisual work" copyright, will not assist the plaintiff in a "look and feel" case. Unless the judges allow computer generated images on a screen to constitute a painting or drawing, the plaintiff will fail.\textsuperscript{342}

\begin{itemize}
  \item \textsuperscript{338} Manufacturers Technologies, Inc. v. Cams, Inc., 706 F. Supp. 984, 993 (D. Conn. 1989).
  \item \textsuperscript{339} Johnson Controls, Inc. v. Phoenix Control Sys., 886 F.2d 1173, 1176 (9th Cir. 1989).
  \item \textsuperscript{341} See Johnson Controls, Inc. v. Phoenix Control Sys., 886 F.2d 1173 (9th Cir. 1989).
  \item \textsuperscript{342} Whether the Australian Federal Parliament will legislate in favor of "look and feel" is a matter purely for conjecture.
\end{itemize}
The United States and Australia apply similar standard copyright concepts. Therefore, given the above proviso, the “look and feel” of a program deserves protection. Australian courts are familiar with policy arguments to grant rights to copyright plaintiffs allowing the attendant diminution of the rights of others to copy these innovations. Indeed, this balancing act is as old as copyright itself. Thus, no policy reason exists why Australian judges should not follow their Trans-Atlantic brethren.

Whether Australian courts will go this far is unlikely. The spectre of granting overwhelming monopolies, which held sway in Synercom v. University Computing, 343 will probably frighten the technically unsure judiciary into denying protection. This would be a pity, since this article demonstrates there is nothing unusual about the field.

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