Chapter 12

Copyright's "Reach": Infringement

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INTELLECTUAL PROPERTY:
LAW & THE INFORMATION SOCIETY
Cases and Materials, 2nd Edition

An Open Course Book.

CHAPTER TWELVE
Copyright's "Reach": Infringement

Introduction

Once one knows what subject matter copyright *covers*, the next and linked question is "what conduct *infringes* copyright?" Obviously, to answer this question fully we would have to consider the limitations and exceptions to copyright and we have not yet covered those. Our question is different. How far does the right reach? Answering that question will bring in the material covered in the last chapter—since, by definition, the copyright will only cover the copyrightable aspects of a work; expression but not idea, for example. But it will also bring up separate questions: What are the exclusive rights that copyright provides and what does it take to infringe them? Where does idea stop and expression begin? Does a paraphrase infringe? What counts as "too little to count as copying"? Should the same rules apply to infringing a novel and a computer program? How does one go through the actual process of separating copyrightable wheat from un-copyrightable chaff?

PROBLEM 12-1

These problems are designed to test your intuitions about copyright infringement before reading the cases that lay out the doctrinal framework. After finishing the chapter, reassess your answers.

a.) James goes to one of the few bookstores left in his town (which has a profusion of bird seed shops. Go figure.). The bookstore sells both new and used books. One of their most expensive offerings is a prime condition, unopened edition of Madonna's *Sex*, a 1992 book that, famously, has pictures of Madonna eating pizza naked, hitch hiking naked and so on and, less famously, has an exploration of sexuality, power dynamics and S&M. James is a shallow guy and just wants to look at the nudie photos. But he is also cheap and does not want to pay the requisite price. The book is firmly held closed by a sealed paper band so that readers cannot see the images inside. The paper band clearly announces that it can only be broken by a purchaser, that breaking the band constitutes a promise to buy, and that doing so without paying, since the contents are copyrighted, constitutes copyright infringement. James waits until the shopkeeper is not looking and breaks the band. He peeks inside, and—his curiosity satisfied and his mind teeming with prurient imagery—replaces the broken band and takes his leave without buying anything. **Has James infringed copyright? Is the answer different if James is one of the original "Google**

Glassholes"? (Early adopters of the Google Glass device, which looks like a pair of spectacles and permits real time recording.)

b.) Jennifer has long been fascinated by the kind of business strategy and self-improvement books sold in airport bookstores. She studies the people who buy *The Seven Habits of Highly Effective People, Lean In* and *What Color is Your Parachute?* Then she watches them as they flip through their purchases in the waiting area and on the plane. She notes that while people buy these books in large numbers, they rarely *read* them. She concludes that even these short, relatively punchy offerings are too lengthy for the average traveler and comes up with a brilliant business idea in the process. She decides to write 10 page *précis* versions of each book. While she does not use the same words as the originals, she meticulously lays out all of the concepts, arguments and conclusions they contain. Jennifer's versions contain no criticism or commentary on the original, merely a condensed summary of their points. She thinks this will allow busy business travelers to pretend to have read the books without going through the time and expense of leafing through them. Her service is wildly popular and she sells it to the SkyMall catalog and to various airline magazines, whose slightly greasy, *E. coli* encrusted pages now contain a "Jennifer's 'Fake It To Make It' Bookshelf" summarizing the bestsellers of the day. Inevitably, she is sued by both the authors and the publishers of the books she has digested. **Has Jennifer violated copyright?**

c.) Irritated by all the law suits, Jennifer searches for an alternative business idea. She notes that the only books more popular than self-help and business improvement titles are diet books. She decides to write her own. Called *The Last Diet Book,* it consists of two sentences printed in 48 point type. "Eat less. Exercise more." The remaining 200 pages of the book are blank. The book is a huge success. James sees it and decides to publish his own book. It is called *The Last Diet Book, Abridged Edition.* It has the same two sentences, but only 100 blank pages following them, to cut down on costs. Meanwhile Anthony starts up a blog called "Eat Less. Exercise More." The blog makes fun of diet crazes. Anthony concludes each posting with the tag line "Eat Less. Exercise More." **Has James or Anthony violated copyright? (Bonus question: Has James violated trademark law? Has Anthony?)**

d.) Sergey is a computer programmer who discovers an apparently universal truth. In every serious relationship, friendship or work partnership, one person will be a time-realist and one a time-fantasist. One party will accurately predict when it is necessary to leave in order to get to the airport on time, or when one needs to start the paper in order to finish it in a timely manner. The other person in the relationship will have an expansive, optimistic sense of duration in which it is always possible to clean the kitchen, do the taxes and learn Russian before packing for the flight that departs in one and a half hours. Sergey writes an app called "Leave now!" that, once you have put in your schedule and answered a number of questions, will tell you when you need to leave, start writing or what have you. The app is one of the most downloaded in history. Intrigued, Larry—who was once a programmer but now installs cable for Time Warner—decides to write his own app that does exactly what "Leave Now" does. He carefully studies all of the functions Sergey provided—such as integrating data on traffic and airport delays into its answers—and offers each of those functions in his competing app, "It's Later Than You Think." **Has Larry infringed Sergey's copyright?**

e.) Imagine that Shakespeare's works have been taken out of the public domain. (Shakespeare's works were never actually under copyright so it is not technically a

restoration.) Congress has conveyed the new copyright over Shakespeare's works to the Folger Shakespeare Library in Washington DC for its tireless work to promote the Bard and because the Folger "will be a good conservator of his literary heritage." James has long been a fan of *Hamlet*. He writes a novel featuring a gloomy and indecisive Scandinavian prince who has strangely intense feelings for his mother, a correspondingly poor relationship with his uncle/stepfather, and a *really* flaky girlfriend who talks about flowers a lot. The prince is called Hamnet (the name of Shakespeare's son, who died young). **Could the Folger Library sue James for copyright infringement? [Bonus assignment: Find the lines in the *Golan* majority opinion that indicate it would be unconstitutional to withdraw Shakespeare's works from the public domain and give copyright in them to the Folger Library.]**

Exclusive Rights

> **17 U.S. Code § 106—Exclusive rights in copyrighted works**
> **Subject to sections 107 through 122, the owner of copyright under this title has the exclusive rights to do and to authorize any of the following:**
> **(1) to reproduce the copyrighted work in copies or phonorecords;**
> **(2) to prepare derivative works based upon the copyrighted work;**
> **(3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;**
> **(4) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly;**
> **(5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly; and**
> **(6) in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission.**

Remember the naïve young thing who arrived in law school, dewy-eyed and thinking that property was pretty simple? One either owned something or one did not. Perhaps that was never you, but in any case exposure to the first year curriculum would soon have changed that misimpression. In place of the binary, "property or not" conception, one learns that property is a "bundle of rights" of varying shape and design. Does one have the right to exclude, to demand compensation but not to exclude, to alienate, to use for a defined period but not to alienate? What is true of real and personal property is doubly so for copyright. Just as trademark was not "absolute ownership of the *word*" so copyright is not "absolute ownership of the *work*."

§ 106 defines the exclusive rights owned by a copyright holder. (§ 1201, which we will cover later, adds a special set of rights over digital copyrighted works protected by technical measures that control one's ability to access or to reproduce the work.) Read through the rights enumerated. Notice how much is *not* covered. Reading is not copyright infringement. Selling one's used copy of the book is not copyright infringement. Privately

performing a dramatic or musical work is not copyright infringement.

As we learned in the last chapter, by definition, copyright can only cover copyrightable subject matter. This is the first, vital, restriction of copyright's ambit. Even within that subject matter copyright's reach is restricted to certain actions—"§ 106 significant acts"—copying, distributing, publicly performing and so on. This is the second limit on copyright's reach. But even when one has engaged in one of the actions covered by a § 106 exclusive right, the question is has one actually done enough to *violate* the right. In this chapter we will focus largely on two of the rights of § 106—the reproduction and derivative works rights. We will ask, when does copying constitute infringement? (The questions of whether something is a public performance, public display, or distribution are no less vexed. We just do not have space for them here, though in the next chapter you will be reading a fascinating case about whether "in-line linking" and "framing" by an image search engine implicate the public display right.)

It may be helpful to remember this: the discussion of copyrightable *subject matter* also suffuses the discussion of copyright *infringement.* This is not a situation in which some areas are completely public and not subject to property rights (a Hawaiian beach, a white pages telephone directory) while others (your farm, a song) are completely private and completely owned. This is more like a situation in which even the farm that is clearly private property has public rights of way running through it, rights of overflight running over it. Property and commons exist in a tight braid, not as two separate plots on a map.

Feist tells us that "To establish infringement, two elements must be proven: (1) ownership of a valid copyright, and (2) copying of constituent elements of the work that are original." There must be copying. It must be enough copying. And it must be copying of material subject to the copyright—the ideas and facts in a work are not. But how do those abstractions work themselves out in concrete cases?

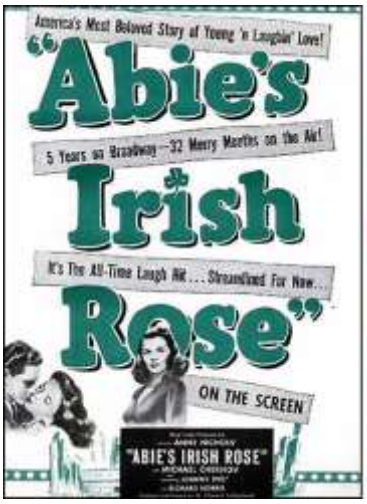
a.) The Idea/Expression Distinction in Infringement Analysis

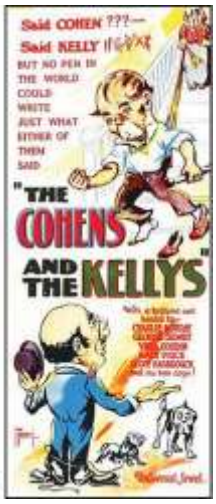
Nichols v. Universal Pictures Corp. et al.

45 F.2d 119 (2d Cir. 1930)

L. HAND, Circuit Judge.

The plaintiff is the author of a play, "Abie's Irish Rose," which it may be assumed was properly copyrighted under section five, subdivision (d), of the Copyright Act, 17 USCA § 5(d). The defendant produced publicly a motion picture play, "The Cohens and The Kellys," which the plaintiff alleges was taken from it. As we think the defendant's play too unlike the plaintiff's to be an infringement, we may assume, *arguendo*, that in some details the defendant used the plaintiff's play, as will subsequently appear, though we do not so decide. It therefore becomes necessary to give an outline of the two plays.





Abie's Irish Rose image information available at http://en.wikipedia.org/wiki/File:Abiesirish.jpg. *The Cohens and the Kellys* image information available at http://en.wikipedia.org/wiki/File:Poster_of_the_movie_The_Cohens_and_Kellys.jpg.

"Abie's Irish Rose" presents a Jewish family living in prosperous circumstances in New York. The father, a widower, is in business as a merchant, in which his son and only child helps him. The boy has philandered with young women, who to his father's great disgust have always been Gentiles, for he is obsessed with a passion that his daughter-in-law shall be an orthodox Jewess. When the play opens the son, who has been courting a young Irish Catholic girl, has already married her secretly before a Protestant minister, and is concerned to soften the blow for his father, by securing a favorable impression of his bride, while concealing her faith and race. To accomplish this he introduces her to his father at his home as a Jewess, and lets it appear that he is interested in her, though he conceals the marriage. The girl somewhat reluctantly falls in with the plan; the father takes the bait, becomes infatuated with the girl, concludes that they must marry, and assumes that of course they will, if he so decides. He calls in a rabbi, and prepares for the wedding according to the Jewish rite.

Meanwhile the girl's father, also a widower, who lives in California, and is as intense in his own religious antagonism as the Jew, has been called to New York, supposing that his daughter is to marry an Irishman and a Catholic. Accompanied by a priest, he arrives at the house at the moment when the marriage is being celebrated, but too late to prevent it, and the two fathers, each infuriated by the proposed union of his child to a heretic, fall into unseemly and grotesque antics. The priest and the rabbi become friendly, exchange trite sentiments about religion, and agree that the match is good. Apparently out of abundant caution, the priest celebrates the marriage for a third time, while the girl's father is inveigled away. The second act closes with each father, still outraged, seeking to find some way by which the union, thus trebly insured, may be dissolved.

The last act takes place about a year later, the young couple having meanwhile been abjured by each father, and left to their own resources. They have had twins, a boy and a girl, but their fathers know no more than that a child has been born. At Christmas each, led by his craving to see his grandchild, goes separately to the young folks' home, where they encounter each other, each laden with gifts, one for a boy, the other for a girl. After some slapstick comedy, depending upon the insistence of each that he is right about the sex of

the grandchild, they become reconciled when they learn the truth, and that each child is to bear the given name of a grandparent. The curtain falls as the fathers are exchanging amenities, and the Jew giving evidence of an abatement in the strictness of his orthodoxy.

"The Cohens and The Kellys" presents two families, Jewish and Irish, living side by side in the poorer quarters of New York in a state of perpetual enmity. The wives in both cases are still living, and share in the mutual animosity, as do two small sons, and even the respective dogs. The Jews have a daughter, the Irish a son; the Jewish father is in the clothing business; the Irishman is a policeman. The children are in love with each other, and secretly marry, apparently after the play opens. The Jew, being in great financial straits, learns from a lawyer that he has fallen heir to a large fortune from a great-aunt, and moves into a great house, fitted luxuriously. Here he and his family live in vulgar ostentation, and here the Irish boy seeks out his Jewish bride, and is chased away by the angry father. The Jew then abuses the Irishman over the telephone, and both become hysterically excited. The extremity of his feelings makes the Jew sick, so that he must go to Florida for a rest, just before which the daughter discloses her marriage to her mother.

On his return the Jew finds that his daughter has borne a child; at first he suspects the lawyer, but eventually learns the truth and is overcome with anger at such a low alliance. Meanwhile, the Irish family who have been forbidden to see the grandchild, go to the Jew's house, and after a violent scene between the two fathers in which the Jew disowns his daughter, who decides to go back with her husband, the Irishman takes her back with her baby to his own poor lodgings. The lawyer, who had hoped to marry the Jew's daughter, seeing his plan foiled, tells the Jew that his fortune really belongs to the Irishman, who was also related to the dead woman, but offers to conceal his knowledge, if the Jew will share the loot. This the Jew repudiates, and, leaving the astonished lawyer, walks through the rain to his enemy's house to surrender the property. He arrives in great dejection, tells the truth, and abjectly turns to leave. A reconciliation ensues, the Irishman agreeing to share with him equally. The Jew shows some interest in his grandchild, though this is at most a minor motive in the reconciliation, and the curtain falls while the two are in their cups, the Jew insisting that in the firm name for the business, which they are to carry on jointly, his name shall stand first.

It is of course essential to any protection of literary property, whether at common-law or under the statute, that the right cannot be limited literally to the text, else a plagiarist would escape by immaterial variations. That has never been the law, but, as soon as literal appropriation ceases to be the test, the whole matter is necessarily at large, so that, as was recently well said by a distinguished judge, the decisions cannot help much in a new case. When plays are concerned, the plagiarist may excise a separate scene; or he may appropriate part of the dialogue. Then the question is whether the part so taken is "substantial," and therefore not a "fair use" of the copyrighted work; it is the same question as arises in the case of any other copyrighted work. But when the plagiarist does not take out a block in situ, but an abstract of the whole, decision is more troublesome. Upon any work, and especially upon a play, a great number of patterns of increasing generality will fit equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the play is about, and at times might consist only of its title; but there is a point in this series of abstractions where they are no longer protected, since otherwise the playwright could prevent the use of his "ideas," to which, apart from their expression, his property is never extended. Nobody has ever been able to fix that boundary, and nobody ever can. In some cases the question has been treated as though it were analogous to lifting a portion out of the copyrighted work; but the analogy is not a good one, because, though the skeleton is a part of the body, it

pervades and supports the whole. In such cases we are rather concerned with the line between expression and what is expressed. As respects plays, the controversy chiefly centers upon the characters and sequence of incident, these being the substance.

We did not in *Dymow v. Bolton* hold that a plagiarist was never liable for stealing a plot; that would have been flatly against our rulings in *Dam v. Kirk La Shelle Co.*, and *Stodart v. Mutual Film Co.*, neither of which we meant to overrule. We found the plot of the second play was too different to infringe, because the most detailed pattern, common to both, eliminated so much from each that its content went into the public domain; and for this reason we said, "this mere subsection of a plot was not susceptible of copyright." But we do not doubt that two plays may correspond in plot closely enough for infringement. How far that correspondence must go is another matter. Nor need we hold that the same may not be true as to the characters, quite independently of the "plot" proper, though, as far as we know, such a case has never arisen. If Twelfth Night were copyrighted, it is quite possible that a second comer might so closely imitate Sir Toby Belch or Malvolio as to infringe, but it would not be enough that for one of his characters he cast a riotous knight who kept wassail to the discomfort of the household, or a vain and foppish steward who became amorous of his mistress. These would be no more than Shakespeare's "ideas" in the play, as little capable of monopoly as Einstein's Doctrine of Relativity, or Darwin's theory of the Origin of Species. It follows that the less developed the characters, the less they can be copyrighted; that is the penalty an author must bear for marking them too indistinctly.

In the two plays at bar we think both as to incident and character, the defendant took no more—assuming that it took anything at all—than the law allowed. The stories are quite different. One is of a religious zealot who insists upon his child's marrying no one outside his faith; opposed by another who is in this respect just like him, and is his foil. Their difference in race is merely an obbligato to the main theme, religion. They sink their differences through grandparental pride and affection. In the other, zealotry is wholly absent; religion does not even appear. It is true that the parents are hostile to each other in part because they differ in race; but the marriage of their son to a Jew does not apparently offend the Irish family at all, and it exacerbates the existing animosity of the Jew, principally because he has become rich, when he learns it. They are reconciled through the honesty of the Jew and the generosity of the Irishman; the grandchild has nothing whatever to do with it. The only matter common to the two is a quarrel between a Jewish and an Irish father, the marriage of their children, the birth of grandchildren and a reconciliation.

If the defendant took so much from the plaintiff, it may well have been because her amazing success seemed to prove that this was a subject of enduring popularity. Even so, granting that the plaintiff's play was wholly original, and assuming that novelty is not essential to a copyright, there is no monopoly in such a background. Though the plaintiff discovered the vein, she could not keep it to herself; so defined, the theme was too generalized an abstraction from what she wrote. It was only a part of her "ideas."

Nor does she fare better as to her characters. It is indeed scarcely credible that she should not have been aware of those stock figures, the low comedy Jew and Irishman. The defendant has not taken from her more than their prototypes have contained for many decades. If so, obviously so to generalize her copyright, would allow her to cover what was not original with her. But we need not hold this as matter of fact, much as we might be justified. Even though we take it that she devised her figures out of her brain *de novo*, still the defendant was within its rights.

There are but four characters common to both plays, the lovers and the fathers. The lovers are so faintly indicated as to be no more than stage properties. They are loving and fertile; that is really all that can be said of them, and anyone else is quite within his rights if

he puts loving and fertile lovers in a play of his own, wherever he gets the cue. The plaintiff's Jew is quite unlike the defendant's. His obsession is his religion, on which depends such racial animosity as he has. He is affectionate, warm and patriarchal. None of these fit the defendant's Jew, who shows affection for his daughter only once, and who has none but the most superficial interest in his grandchild. He is tricky, ostentatious and vulgar, only by misfortune redeemed into honesty. Both are grotesque, extravagant and quarrelsome; both are fond of display; but these common qualities make up only a small part of their simple pictures, no more than any one might lift if he chose. The Irish fathers are even more unlike; the plaintiff's a mere symbol for religious fanaticism and patriarchal pride, scarcely a character at all. Neither quality appears in the defendant's, for while he goes to get his grandchild, it is rather out of a truculent determination not to be forbidden, than from pride in his progeny. For the rest he is only a grotesque hobbledehoy, used for low comedy of the most conventional sort, which any one might borrow, if he chanced not to know the exemplar.

. . . We assume that the plaintiff's play is altogether original, even to an extent that in fact it is hard to believe. We assume further that, so far as it has been anticipated by earlier plays of which she knew nothing, that fact is immaterial. Still, as we have already said, her copyright did not cover everything that might be drawn from her play; its content went to some extent into the public domain. We have to decide how much, and while we are as aware as any one that the line, whereever it is drawn, will seem arbitrary, that is no excuse for not drawing it; it is a question such as courts must answer in nearly all cases. Whatever may be the difficulties a priori, we have no question on which side of the line this case falls. A comedy based upon conflicts between Irish and Jews, into which the marriage of their children enters, is no more susceptible of copyright than the outline of Romeo and Juliet.

The plaintiff has prepared an elaborate analysis of the two plays, showing a "quadrangle" of the common characters, in which each is represented by the emotions which he discovers. She presents the resulting parallelism as proof of infringement, but the adjectives employed are so general as to be quite useless. Take for example the attribute of "love" ascribed to both Jews. The plaintiff has depicted her father as deeply attached to his son, who is his hope and joy; not so, the defendant, whose father's conduct is throughout not actuated by any affection for his daughter, and who is merely once overcome for the moment by her distress when he has violently dismissed her lover. "Anger" covers emotions aroused by quite different occasions in each case; so do "anxiety," "despondency" and "disgust." It is unnecessary to go through the catalogue for emotions are too much colored by their causes to be a test when used so broadly. This is not the proper approach to a solution; it must be more ingenuous, more like that of a spectator, who would rely upon the complex of his impressions of each character.

We cannot approve the length of the record, which was due chiefly to the use of expert witnesses. Argument is argument whether in the box or at the bar, and its proper place is the last. The testimony of an expert upon such issues, especially his cross-examination, greatly extends the trial and contributes nothing which cannot be better heard after the evidence is all submitted. It ought not to be allowed at all; and while its admission is not a ground for reversal, it cumbers the case and tends to confusion, for the more the court is led into the intricacies of dramatic craftsmanship, the less likely it is to stand upon the firmer, if more naïve, ground of its considered impressions upon its own perusal. We hope that in this class of cases such evidence may in the future be entirely excluded, and the case confined to the actual issues; that is, whether the copyrighted work was original, and whether the defendant copied it, so far as the supposed infringement is identical.

Decree affirmed.

Questions:

1.) Think back to the speech of Victor Hugo in Chapter 10. Copyright depends on the ability of law to police the boundary between protectable expression and unprotectable idea. *Nichols* is the leading case on that point. It contains the line "[n]obody has ever been able to fix that boundary, and nobody ever can." Can a property regime survive with boundaries as vague as this? Could we have property in real estate if Blackacre's dimensions were outlined on a surrealist map that changed depending on who viewed it? Property in money if a $10 bill might stand for a range of monetary values from $9.50 to $11? What is Learned Hand's response to this problem?

2.) "If the defendant took so much from the plaintiff, it may well have been because her amazing success seemed to prove that this was a subject of enduring popularity. Even so, granting that the plaintiff's play was wholly original, and assuming that novelty is not essential to a copyright, there is no monopoly in such a background." How is it that it can be legal to copy aspects of a copyrighted work, for profit, in the hope of reaping some of the success the original enjoyed? How does your answer relate to the notion of "promote the progress"? To Larry and Sergey's punctuality apps?

b.) Copyright Meets Computer Software: The Infringement Edition

James Boyle, A Machine that Contains All Other Machines

Please read The Public Domain *pp 161–168*

Imagine a person staring at an infinite roll of paper tape. On the paper are symbols in some alphabet or number system. The reader carries out simple, operable instructions on the basis of that data. "Add together the next two digits you are presented with and write down the answer. If the answer is odd, go to step 2. If the answer is even, go to step 3." Now replace the person with a mechanical head that can "read" the instructions, carry out the desired operations, and write the answer down. The British mathematician Alan Turing imagined something like this—a little more complicated, perhaps, but fairly similar. What is it? We have the reading head, the set of instructions, the data on which the instructions are to be performed, the record of the result, and some kind of "state table" that tells the machine where it is in the process. These are the component parts of Turing machines—or as we know them better, computers. More accurately, Turing machines are a method of simulating the operation of computers, a metaphor that enables us to imitate their logical processes. In the words of Wikipedia, "despite their simplicity—[they] can be adapted to simulate the logic of any computer that could possibly be constructed." And to give lawyers fits. But that is getting ahead of ourselves.

In Greek mythology, Procrustes had a bed to which he fitted its prospective

occupants, whether they liked it or not. The tall were trimmed down. The short stretched on the rack. Intellectual property lawyers have many similarities to Procrustes. The technologies that are brought before them are made to fit the conceptual boxes the law provides, boxes with names such as "copyright" and "patent." Occasionally, new conceptual boxes are made, but—for very good reasons—most of the time we stick with the boxes we have. As with Procrustes, things do not always fit and the process can be distressing for its subjects.

It is important to realize that the process of trimming and stretching can be done well or badly. If it is done really badly, the technology is stunted, deformed, even destroyed. If it is done well, the law aids the development of the technology in exactly the happy way described in Chapter 1. What did our Procrustean legal system do with computers and computer science? *Read the rest*

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Notes

The next case is long. (Apologies). Why? First, it has some nice, plain English explanations of computer programming—seen through the lens of copyright. You need to understand how computer programming works, at least at the highest, most abstract level. (You began this journey by reading *Lotus* and *Oracle* in the previous chapter; it continues here.) So that part of the decision has been left only mildly edited—it is not "Physics for Poets" but it might be "Coding for Law Student, Humanities Majors." We hope you find it of interest. Resist the inexorable tendency to have your IQ plummet toward zero whenever someone says "parameter," "function call" or "API—(application programming interface)." This is a description of a system of *code*, normally expressed in *a highly technical language most people do not fully understand* (thus needing smart people to decipher it) *that runs a lot of important things.* Guess what you hope to do for a living? Not so different, is it?

The second reason the decision is long is that it is a classic case—maybe *the* classic case together with *Lotus v. Borland* and *Sega v. Accolade*—demonstrating a court wrestling with the incorporation of a new technology into copyright. One could look at the decision as frankly policy-oriented in its concerns about how copyright will affect innovation and competition—and its close tailoring of the doctrine in order to achieve that result. On the other hand, you could see this as a classic example of the common law method. Note how the court uses existing traditional copyright doctrines—the idea-expression distinction, merger, *scènes à faire*—as it deals with this new technology.

Finally, *Computer Associates*, together with other cases you have yet to read, ended up shaping the law of software copyright on the most fundamental level. Ask yourself the following, is it really true now that a copyright over a book or a piece of music is *the same* as a software copyright? Do we really have a different law of copyright for software? Or is it simply that the subject matter's own peculiarities demand different answers to the same questions?

Computer Associates v. Altai, Inc.

982 F.2d 693 (2d Cir. 1992)

WALKER, Circuit Judge.

In recent years, the growth of computer science has spawned a number of challenging legal questions, particularly in the field of copyright law. As scientific knowledge advances, courts endeavor to keep pace, and sometimes—as in the area of computer technology—they are required to venture into less than familiar waters. This is not a new development, though. "From its beginning, the law of copyright has developed in response to significant changes in technology." *Sony Corp. v. Universal City Studios, Inc.* (1984).

Article I, section 8 of the Constitution authorizes Congress "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." The Supreme Court has stated that "[t]he economic philosophy behind the clause . . . is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare. . . ." *Mazer v. Stein* (1954). The author's benefit, however, is clearly a "secondary" consideration. "[T]he ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good." *Twentieth Century Music Corp. v. Aiken* (1975).

Thus, the copyright law seeks to establish a delicate equilibrium. On the one hand, it affords protection to authors as an incentive to create, and, on the other, it must appropriately limit the extent of that protection so as to avoid the effects of monopolistic stagnation. In applying the federal act to new types of cases, courts must always keep this symmetry in mind.

Among other things, this case deals with the challenging question of whether and to what extent the "non-literal" aspects of a computer program, that is, those aspects that are not reduced to written code, are protected by copyright. While a few other courts have already grappled with this issue, this case is one of first impression in this circuit. As we shall discuss, we find the results reached by other courts to be less than satisfactory. Drawing upon long-standing doctrines of copyright law, we take an approach that we think better addresses the practical difficulties embedded in these types of cases. In so doing, we have kept in mind the necessary balance between creative incentive and industrial competition.

BACKGROUND
I. COMPUTER PROGRAM DESIGN

Certain elementary facts concerning the nature of computer programs are vital to the following discussion. The Copyright Act defines a computer program as "a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result." 17 U.S.C. § 101. In writing these directions, the programmer works "from the general to the specific." *Whelan Assocs., Inc. v. Jaslow Dental Lab., Inc.* (3d Cir. 1986).

The first step in this procedure is to identify a program's ultimate function or

purpose. An example of such an ultimate purpose might be the creation and maintenance of a business ledger. Once this goal has been achieved, a programmer breaks down or "decomposes" the program's ultimate function into "simpler constituent problems or 'subtasks,'" which are also known as subroutines or modules. In the context of a business ledger program, a module or subroutine might be responsible for the task of updating a list of outstanding accounts receivable. Sometimes, depending upon the complexity of its task, a subroutine may be broken down further into sub-subroutines.

Having sufficiently decomposed the program's ultimate function into its component elements, a programmer will then arrange the subroutines or modules into what are known as organizational or flow charts. Flow charts map the interactions between modules that achieve the program's end goal.

In order to accomplish these intra-program interactions, a programmer must carefully design each module's parameter list. A parameter list, according to the expert appointed and fully credited by the district court, Dr. Randall Davis, is "the information sent to and received from a subroutine." The term "parameter list" refers to the form in which information is passed between modules (e.g. for accounts receivable, the designated time frame and particular customer identifying number) and the information's actual content (e.g. 8/91–7/92; customer No. 3). With respect to form, interacting modules must share similar parameter lists so that they are capable of exchanging information.

"The functions of the modules in a program together with each module's relationships to other modules constitute the 'structure' of the program." Additionally, the term structure may include the category of modules referred to as "macros." A macro is a single instruction that initiates a sequence of operations or module interactions within the program. Very often the user will accompany a macro with an instruction from the parameter list to refine the instruction (e.g. current total of accounts receivable (macro), but limited to those for 8/91 to 7/92 from customer No. 3 (parameters)).

In fashioning the structure, a programmer will normally attempt to maximize the program's speed, efficiency, as well as simplicity for user operation, while taking into consideration certain externalities such as the memory constraints of the computer upon which the program will be run. . . .

Once each necessary module has been identified, designed, and its relationship to the other modules has been laid out conceptually, the resulting program structure must be embodied in a written language that the computer can read. This process is called "coding," and requires two steps. First, the programmer must transpose the program's structural blue-print into a source code. This step has been described as "comparable to the novelist fleshing out the broad outline of his plot by crafting from words and sentences the paragraphs that convey the ideas." The source code may be written in any one of several computer languages, such as COBAL, FORTRAN, BASIC, EDL, etc., depending upon the type of computer for which the program is intended. Once the source code has been completed, the second step is to translate or "compile" it into object code. Object code is the binary language comprised of zeros and ones through which the computer directly receives its instructions. After the coding is finished, the programmer will run the program on the computer in order to find and correct any logical and syntactical errors. This is known as "debugging" and, once done, the program is complete.

II. FACTS

CA is a Delaware corporation, with its principal place of business in Garden City, New York. Altai is a Texas corporation, doing business primarily in Arlington, Texas. Both companies are in the computer software industry—designing, developing and

marketing various types of computer programs.

The subject of this litigation originates with one of CA's marketed programs entitled CA-SCHEDULER. CA-SCHEDULER is a job scheduling program designed for IBM mainframe computers. Its primary functions are straightforward: to create a schedule specifying when the computer should run various tasks, and then to control the computer as it executes the schedule. CA-SCHEDULER contains a sub-program entitled ADAPTER, also developed by CA. ADAPTER is not an independently marketed product of CA; it is a wholly integrated component of CA-SCHEDULER and has no capacity for independent use.

Nevertheless, ADAPTER plays an extremely important role. It is an "operating system compatibility component," which means, roughly speaking, it serves as a translator. An "operating system" is itself a program that manages the resources of the computer, allocating those resources to other programs as needed. The IBM System 370 family of computers, for which CA-SCHEDULER was created, is, depending upon the computer's size, designed to contain one of three operating systems: DOS/VSE, MVS, or CMS. As the district court noted, the general rule is that "a program written for one operating system, e.g., DOS/VSE, will not, without modification, run under another operating system such as MVS." ADAPTER's function is to translate the language of a given program into the particular language that the computer's own operating system can understand. . . .

A program like ADAPTER, which allows a computer user to change or use multiple operating systems while maintaining the same software, is highly desirable. It saves the user the costs, both in time and money, that otherwise would be expended in purchasing new programs, modifying existing systems to run them, and gaining familiarity with their operation. The benefits run both ways. The increased compatibility afforded by an ADAPTER-like component, and its resulting popularity among consumers, makes whatever software in which it is incorporated significantly more marketable.

Starting in 1982, Altai began marketing its own job scheduling program entitled ZEKE. The original version of ZEKE was designed for use in conjunction with a VSE operating system. By late 1983, in response to customer demand, Altai decided to rewrite ZEKE so that it could be run in conjunction with an MVS operating system.

At that time, James P. Williams ("Williams"), then an employee of Altai and now its President, approached Claude F. Arney, III ("Arney"), a computer programmer who worked for CA. Williams and Arney were longstanding friends, and had in fact been co-workers at CA for some time before Williams left CA to work for Altai's predecessor. Williams wanted to recruit Arney to assist Altai in designing an MVS version of ZEKE.

At the time he first spoke with Arney, Williams was aware of both the CA-SCHEDULER and ADAPTER programs. However, Williams was not involved in their development and had never seen the codes of either program. When he asked Arney to come work for Altai, Williams did not know that ADAPTER was a component of CA-SCHEDULER.

Arney, on the other hand, was intimately familiar with various aspects of ADAPTER. While working for CA, he helped improve the VSE version of ADAPTER, and was permitted to take home a copy of ADAPTER'S source code. This apparently developed into an irresistible habit, for when Arney left CA to work for Altai in January, 1984, he took with him copies of the source code for both the VSE and MVS versions of ADAPTER. He did this in knowing violation of the CA employee agreements that he had signed.

Once at Altai, Arney and Williams discussed design possibilities for adapting ZEKE to run on MVS operating systems. Williams, who had created the VSE version of ZEKE, thought that approximately 30% of his original program would have to be modified in

order to accommodate MVS. Arney persuaded Williams that the best way to make the needed modifications was to introduce a "common system interface" component into ZEKE. He did not tell Williams that his idea stemmed from his familiarity with ADAPTER. They decided to name this new component-program OSCAR.

Arney went to work creating OSCAR at Altai's offices using the ADAPTER source code. The district court accepted Williams' testimony that no one at Altai, with the exception of Arney, affirmatively knew that Arney had the ADAPTER code, or that he was using it to create OSCAR/VSE. However, during this time period, Williams' office was adjacent to Arney's. Williams testified that he and Arney "conversed quite frequently" while Arney was "investigating the source code of ZEKE" and that Arney was in his office "a number of times daily, asking questions." In three months, Arney successfully completed the OSCAR/VSE project. In an additional month he developed an OSCAR/MVS version. When the dust finally settled, Arney had copied approximately 30% of OSCAR's code from CA's ADAPTER program.

The first generation of OSCAR programs was known as OSCAR 3.4. From 1985 to August 1988, Altai used OSCAR 3.4 in its ZEKE product, as well as in programs entitled ZACK and ZEBB. In late July 1988, CA first learned that Altai may have appropriated parts of ADAPTER. After confirming its suspicions, CA secured copyrights on its 2.1 and 7.0 versions of CA-SCHEDULER. CA then brought this copyright and trade secret misappropriation action against Altai.

Apparently, it was upon receipt of the summons and complaint that Altai first learned that Arney had copied much of the OSCAR code from ADAPTER. After Arney confirmed to Williams that CA's accusations of copying were true, Williams immediately set out to survey the damage. Without ever looking at the ADAPTER code himself, Williams learned from Arney exactly which sections of code Arney had taken from ADAPTER.

Upon advice of counsel, Williams initiated OSCAR's rewrite. The project's goal was to save as much of OSCAR 3.4 as legitimately could be used, and to excise those portions which had been copied from ADAPTER. Arney was entirely excluded from the process, and his copy of the ADAPTER code was locked away. Williams put eight other programmers on the project, none of whom had been involved in any way in the development of OSCAR 3.4. Williams provided the programmers with a description of the ZEKE operating system services so that they could rewrite the appropriate code. The rewrite project took about six months to complete and was finished in mid-November 1989. The resulting program was entitled OSCAR 3.5.

From that point on, Altai shipped only OSCAR 3.5 to its new customers. Altai also shipped OSCAR 3.5 as a "free upgrade" to all customers that had previously purchased OSCAR 3.4. While Altai and Williams acted responsibly to correct Arney's literal copying of the ADAPTER program, copyright infringement had occurred. . . .

I. COPYRIGHT INFRINGEMENT

In any suit for copyright infringement, the plaintiff must establish its ownership of a valid copyright, and that the defendant copied the copyrighted work. The plaintiff may prove defendant's copying either by direct evidence or, as is most often the case, by showing that (1) the defendant had access to the plaintiff's copyrighted work and (2) that defendant's work is substantially similar to the plaintiff's copyrightable material. For the purpose of analysis, the district court assumed that Altai had access to the ADAPTER code when creating OSCAR 3.5. Thus, in determining whether Altai had unlawfully copied protected aspects of CA's ADAPTER, the district court narrowed its focus of inquiry to ascertaining whether Altai's OSCAR 3.5 was substantially similar to

ADAPTER. Because we approve Judge Pratt's conclusions regarding substantial similarity, our analysis will proceed along the same assumption.

As a general matter, and to varying degrees, copyright protection extends beyond a literary work's strictly textual form to its non-literal components. As we have said, "[i]t is of course essential to any protection of literary property . . . that the right cannot be limited literally to the text, else a plagiarist would escape by immaterial variations." *Nichols v. Universal Pictures Co.* (2d Cir. 1930) Thus, where "the fundamental essence or structure of one work is duplicated in another," 3 Nimmer, § 13.03[A][1], courts have found copyright infringement. See, e.g., *Horgan v. Macmillan* (2d Cir. 1986) (recognizing that a book of photographs might infringe ballet choreography); *Twentieth Century-Fox Film Corp. v. MCA, Inc.* (9th Cir. 1983) (motion picture and television series); *Sid & Marty Krofft Television Prods., Inc. v. McDonald's Corp.* (9th Cir. 1977) (television commercial and television series); *Sheldon v. Metro-Goldwyn Pictures Corp.* (2d Cir.), *cert. denied*, 298 U.S. 669, (1936) (play and motion picture); *accord Stewart v. Abend* (1990) (recognizing that motion picture may infringe copyright in book by using its "unique setting, characters, plot, and sequence of events"). This black letter proposition is the springboard for our discussion.

A. Copyright Protection for the Non-literal Elements of Computer Programs

It is now well settled that the literal elements of computer programs, i.e., their source and object codes, are the subject of copyright protection. Here, as noted earlier, Altai admits having copied approximately 30% of the OSCAR 3.4 program from CA's ADAPTER source code, and does not challenge the district court's related finding of infringement.

In this case, the hotly contested issues surround OSCAR 3.5. As recounted above, OSCAR 3.5 is the product of Altai's carefully orchestrated rewrite of OSCAR 3.4. After the purge, none of the ADAPTER source code remained in the 3.5 version; thus, Altai made sure that the literal elements of its revamped OSCAR program were no longer substantially similar to the literal elements of CA's ADAPTER.

According to CA, the district court erroneously concluded that Altai's OSCAR 3.5 was not substantially similar to its own ADAPTER program. CA argues that this occurred because the district court "committed legal error in analyzing [its] claims of copyright infringement by failing to find that copyright protects expression contained in the non-literal elements of computer software." We disagree.

CA argues that, despite Altai's rewrite of the OSCAR code, the resulting program remained substantially similar to the structure of its ADAPTER program. As discussed above, a program's structure includes its non-literal components such as general flow charts as well as the more specific organization of inter-modular relationships, parameter lists, and macros. In addition to these aspects, CA contends that OSCAR 3.5 is also substantially similar to ADAPTER with respect to the list of services that both ADAPTER and OSCAR obtain from their respective operating systems. We must decide whether and to what extent these elements of computer programs are protected by copyright law. . . .

The Copyright Act affords protection to "original works of authorship fixed in any tangible medium of expression. . . ." 17 U.S.C. § 102(a). This broad category of protected "works" includes "literary works," which are defined by the Act as

> works, other than audiovisual works, expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects, such as books, periodicals, manuscripts, phonorecords, film tapes, disks, or cards, in which they are embodied.

17 U.S.C. § 101. While computer programs are not specifically listed as part of the above statutory definition, the legislative history leaves no doubt that Congress intended them to be considered literary works.

The syllogism that follows from the foregoing premises is a powerful one: if the non-literal structures of literary works are protected by copyright; and if computer programs are literary works, as we are told by the legislature; then the non-literal structures of computer programs are protected by copyright. See *Whelan* ("By analogy to other literary works, it would thus appear that the copyrights of computer programs can be infringed even absent copying of the literal elements of the program."). We have no reservation in joining the company of those courts that have already ascribed [sic] to this logic. However, that conclusion does not end our analysis. We must determine the scope of copyright protection that extends to a computer program's non-literal structure.

As a caveat, we note that our decision here does not control infringement actions regarding categorically distinct works, such as certain types of screen displays. These items represent products of computer programs, rather than the programs themselves, and fall under the copyright rubric of audiovisual works. If a computer audiovisual display is copyrighted separately as an audiovisual work, apart from the literary work that generates it (i.e., the program), the display may be protectable regardless of the underlying program's copyright status. Of course, the copyright protection that these displays enjoy extends only so far as their expression is protectable. See *Data East USA, Inc. v. Epyx, Inc.* (9th Cir. 1988). In this case, however, we are concerned not with a program's display, but the program itself, and then with only its non-literal components. In considering the copyrightability of these components, we must refer to venerable doctrines of copyright law.

1) Idea vs. Expression Dichotomy

It is a fundamental principle of copyright law that a copyright does not protect an idea, but only the expression of the idea. This axiom of common law has been incorporated into the governing statute. Section 102(b) of the Act provides:

> In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.

17 U.S.C. § 102(b). *See also House Report* ("Copyright does not preclude others from using ideas or information revealed by the author's work.").

Congress made no special exception for computer programs. To the contrary, the legislative history explicitly states that copyright protects computer programs only "to the extent that they incorporate authorship in programmer's expression of original ideas, as distinguished from the ideas themselves."

Similarly, the National Commission on New Technological Uses of Copyrighted Works ("CONTU") established by Congress to survey the issues generated by the interrelationship of advancing technology and copyright law, see Pub. L. No. 93-573, § 201, 88 Stat. 1873 (1974), recommended, inter alia, that the 1976 Copyright Act "be amended . . . to make it explicit that computer programs, to the extent that they embody the author's original creation, are proper subject matter for copyright." To that end, Congress adopted CONTU's suggestions and amended the Copyright Act by adding, among other things, a provision to 17 U.S.C. § 101 which defined the term "computer program." CONTU also "concluded that the idea-expression distinction should be used to determine which aspects of computer programs are copyrightable."

Drawing the line between idea and expression is a tricky business. Judge Learned

Hand noted that "[n]obody has ever been able to fix that boundary, and nobody ever can." *Nichols*. Thirty years later his convictions remained firm. "Obviously, no principle can be stated as to when an imitator has gone beyond copying the 'idea,' and has borrowed its 'expression,'" Judge Hand concluded. "Decisions must therefore inevitably be ad hoc." *Peter Pan Fabrics, Inc. v. Martin Weiner Corp.* (2d Cir. 1960).

The essentially utilitarian nature of a computer program further complicates the task of distilling its idea from its expression. In order to describe both computational processes and abstract ideas, its content "combines creative and technical expression." The variations of expression found in purely creative compositions, as opposed to those contained in utilitarian works, are not directed towards practical application. For example, a narration of Humpty Dumpty's demise, which would clearly be a creative composition, does not serve the same ends as, say, a recipe for scrambled eggs—which is a more process-oriented text. Thus, compared to aesthetic works, computer programs hover even more closely to the elusive boundary line described in § 102(b).

The doctrinal starting point in analyses of utilitarian works, is the seminal case of *Baker v. Selden* (1879). In Baker, the Supreme Court faced the question of "whether the exclusive property in a system of bookkeeping can be claimed, under the law of copyright, by means of a book in which that system is explained?" . . .

The Supreme Court found nothing copyrightable in Selden's bookkeeping system, and rejected his infringement claim regarding the ledger sheets. The Court held that:

> The fact that the art described in the book by illustrations of lines and figures which are reproduced in practice in the application of the art, makes no difference. Those illustrations are the mere language employed by the author to convey his ideas more clearly. Had he used words of description instead of diagrams (which merely stand in the place of words), there could not be the slightest doubt that others, applying the art to practical use, might lawfully draw the lines and diagrams which were in the author's mind, and which he thus described by words in his book.
>
> The copyright of a work on mathematical science cannot give to the author an exclusive right to the methods of operation which he propounds, or to the diagrams which he employs to explain them, so as to prevent an engineer from using them whenever occasion requires.

To the extent that an accounting text and a computer program are both "a set of statements or instructions . . . to bring about a certain result," 17 U.S.C. § 101, they are roughly analogous. In the former case, the processes are ultimately conducted by human agency; in the latter, by electronic means. In either case, as already stated, the processes themselves are not protectable. But the holding in *Baker* goes farther. The Court concluded that those aspects of a work, which "must necessarily be used as incident to" the idea, system or process that the work describes, are also not copyrightable. Selden's ledger sheets, therefore, enjoyed no copyright protection because they were "necessary incidents to" the system of accounting that he described. From this reasoning, we conclude that those elements of a computer program that are necessarily incidental to its function are similarly unprotectable.

While *Baker v. Selden* provides a sound analytical foundation, it offers scant guidance on how to separate idea or process from expression, and moreover, on how to further distinguish protectable expression from that expression which "must necessarily be used as incident to" the work's underlying concept. In the context of computer programs, the Third Circuit's noted decision in *Whelan* has, thus far, been the most

thoughtful attempt to accomplish these ends.

The court in *Whelan* faced substantially the same problem as is presented by this case. There, the defendant was accused of making off with the non-literal structure of the plaintiff's copyrighted dental lab management program, and employing it to create its own competitive version. In assessing whether there had been an infringement, the court had to determine which aspects of the programs involved were ideas, and which were expression. In separating the two, the court settled upon the following conceptual approach:

> The line between idea and expression may be drawn with reference to the end sought to be achieved by the work in question. In other words, the purpose or function of a utilitarian work would be the work's idea, and everything that is not necessary to that purpose or function would be part of the expression of the idea. . . . Where there are various means of achieving the desired purpose, then the particular means chosen is not necessary to the purpose; hence, there is expression, not idea.

[*Whelan*]. The "idea" of the program at issue in *Whelan* was identified by the court as simply "the efficient management of a dental laboratory."

So far, in the courts, the *Whelan* rule has received a mixed reception. . . .

Whelan has fared even more poorly in the academic community, where its standard for distinguishing idea from expression has been widely criticized for being conceptually overbroad.

The leading commentator in the field has stated that "[t]he crucial flaw in [*Whelan*'s] reasoning is that it assumes that only one 'idea,' in copyright law terms, underlies any computer program, and that once a separable idea can be identified, everything else must be expression." 3 Nimmer § 13.03(F). This criticism focuses not upon the program's ultimate purpose but upon the reality of its structural design. As we have already noted, a computer program's ultimate function or purpose is the composite result of interacting subroutines. Since each subroutine is itself a program, and thus, may be said to have its own "idea," *Whelan*'s general formulation that a program's overall purpose equates with the program's idea is descriptively inadequate.

Accordingly, we think that Judge Pratt wisely declined to follow *Whelan*. . . . Rightly, the district court found *Whelan*'s rationale suspect because it is so closely tied to what can now be seen—with the passage of time—as the opinion's somewhat outdated appreciation of computer science.

2) Substantial Similarity Test for Computer Program Structure: Abstraction-Filtration-Comparison

We think that *Whelan*'s approach to separating idea from expression in computer programs relies too heavily on metaphysical distinctions and does not place enough emphasis on practical considerations. As the cases that we shall discuss demonstrate, a satisfactory answer to this problem cannot be reached by resorting, a priori, to philosophical first principals [*sic*].

As discussed herein, we think that district courts would be well-advised to undertake a three-step procedure, based on the abstractions test utilized by the district court, in order to determine whether the non-literal elements of two or more computer programs are substantially similar. This approach breaks no new ground; rather, it draws on such familiar copyright doctrines as merger, *scènes à faire*, and public domain. In taking this approach, however, we are cognizant that computer technology is a dynamic field which can quickly outpace judicial decisionmaking. Thus, in cases where the technology in question does not allow for a literal application of the procedure we outline below, our opinion should not be read to foreclose the district courts of our circuit from

utilizing a modified version.

In ascertaining substantial similarity under this approach, a court would first break down the allegedly infringed program into its constituent structural parts. Then, by examining each of these parts for such things as incorporated ideas, expression that is necessarily incidental to those ideas, and elements that are taken from the public domain, a court would then be able to sift out all non-protectable material. Left with a kernel, or possible kernels, of creative expression after following this process of elimination, the court's last step would be to compare this material with the structure of an allegedly infringing program. The result of this comparison will determine whether the protectable elements of the programs at issue are substantially similar so as to warrant a finding of infringement. It will be helpful to elaborate a bit further.

Step One: Abstraction

As the district court appreciated, the theoretic framework for analyzing substantial similarity expounded by Learned Hand in the *Nichols* case is helpful in the present context. In *Nichols*, we enunciated what has now become known as the "abstractions" test for separating idea from expression:

> Upon any work . . . a great number of patterns of increasing generality will fit equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the [work] is about, and at times might consist only of its title; but there is a point in this series of abstractions where they are no longer protected, since otherwise the [author] could prevent the use of his "ideas," to which, apart from their expression, his property is never extended. *Nichols*.

While the abstractions test was originally applied in relation to literary works such as novels and plays, it is adaptable to computer programs. In contrast to the *Whelan* approach, the abstractions test "implicitly recognizes that any given work may consist of a mixture of numerous ideas and expressions." 3 Nimmer § 13.03[F].

As applied to computer programs, the abstractions test will comprise the first step in the examination for substantial similarity. Initially, in a manner that resembles reverse engineering on a theoretical plane, a court should dissect the allegedly copied program's structure and isolate each level of abstraction contained within it. This process begins with the code and ends with an articulation of the program's ultimate function. Along the way, it is necessary essentially to retrace and map each of the designer's steps—in the opposite order in which they were taken during the program's creation.

Step Two: Filtration

Once the program's abstraction levels have been discovered, the substantial similarity inquiry moves from the conceptual to the concrete. Professor Nimmer suggests, and we endorse, a "successive filtering method" for separating protectable expression from non-protectable material. See generally 3 Nimmer § 13.03[F]. This process entails examining the structural components at each level of abstraction to determine whether their particular inclusion at that level was "idea" or was dictated by considerations of efficiency, so as to be necessarily incidental to that idea; required by factors external to the program itself; or taken from the public domain and hence is nonprotectable expression. See also Kretschmer (arguing that program features dictated by market externalities or efficiency concerns are unprotectable). The structure of any given program may reflect some, all, or none of these considerations. Each case requires its own fact specific investigation.

Strictly speaking, this filtration serves "the purpose of defining the scope of plaintiff's copyright." *Brown Bag Software v. Symantec Corp.* (9th Cir.) (endorsing

"analytic dissection" of computer programs in order to isolate protectable expression). By applying well developed doctrines of copyright law, it may ultimately leave behind a "core of protectable material." 3 Nimmer § 13.03[F][5]. Further explication of this second step may be helpful.

(a) Elements Dictated by Efficiency

The portion of *Baker v. Selden*, discussed earlier, which denies copyright protection to expression necessarily incidental to the idea being expressed, appears to be the cornerstone for what has developed into the doctrine of merger. See *Morrissey v. Proctor & Gamble Co.* (1st Cir. 1967) (relying on *Baker* for the proposition that expression embodying the rules of a sweepstakes contest was inseparable from the idea of the contest itself, and therefore were not protectable by copyright); see also *Digital Communications*. The doctrine's underlying principle is that "[w]hen there is essentially only one way to express an idea, the idea and its expression are inseparable and copyright is no bar to copying that expression." *Concrete Machinery Co. v. Classic Lawn Ornaments, Inc.* (1st Cir. 1988). Under these circumstances, the expression is said to have "merged" with the idea itself. In order not to confer a monopoly of the idea upon the copyright owner, such expression should not be protected. See *Herbert Rosenthal Jewelry Corp. v. Kalpakian* (9th Cir. 1971).

CONTU recognized the applicability of the merger doctrine to computer programs. In its report to Congress it stated that:

> [C]opyrighted language may be copied without infringing when there is but a limited number of ways to express a given idea. . . . In the computer context, this means that when specific instructions, even though previously copyrighted, are the only and essential means of accomplishing a given task, their later use by another will not amount to infringement.

CONTU Report.

Furthermore, when one considers the fact that programmers generally strive to create programs "that meet the user's needs in the most efficient manner," Menell, the applicability of the merger doctrine to computer programs becomes compelling. In the context of computer program design, the concept of efficiency is akin to deriving the most concise logical proof or formulating the most succinct mathematical computation. Thus, the more efficient a set of modules are, the more closely they approximate the idea or process embodied in that particular aspect of the program's structure.

While, hypothetically, there might be a myriad of ways in which a programmer may effectuate certain functions within a program,—i.e., express the idea embodied in a given subroutine—efficiency concerns may so narrow the practical range of choice as to make only one or two forms of expression workable options. . . . It follows that in order to determine whether the merger doctrine precludes copyright protection to an aspect of a program's structure that is so oriented, a court must inquire "whether the use of this particular set of modules is necessary efficiently to implement that part of the program's process" being implemented. If the answer is yes, then the expression represented by the programmer's choice of a specific module or group of modules has merged with their underlying idea and is unprotected.

Another justification for linking structural economy with the application of the merger doctrine stems from a program's essentially utilitarian nature and the competitive forces that exist in the software marketplace. See Kretschmer. Working in tandem, these factors give rise to a problem of proof which merger helps to eliminate.

Efficiency is an industry-wide goal. Since, as we have already noted, there may be

only a limited number of efficient implementations for any given program task, it is quite possible that multiple programmers, working independently, will design the identical method employed in the allegedly infringed work. Of course, if this is the case, there is no copyright infringement.

Under these circumstances, the fact that two programs contain the same efficient structure may as likely lead to an inference of independent creation as it does to one of copying. Thus, since evidence of similarly efficient structure is not particularly probative of copying, it should be disregarded in the overall substantial similarity analysis. See 3 Nimmer § 13.03[F][2].

[The court summarized other cases that dealt with the issue.] We agree with the approach taken in these decisions, and conclude that application of the merger doctrine in this setting is an effective way to eliminate non-protectable expression contained in computer programs.

(b) Elements Dictated By External Factors

We have stated that where "it is virtually impossible to write about a particular historical era or fictional theme without employing certain 'stock' or standard literary devices," such expression is not copyrightable. *Hoehling v. Universal City Studios, Inc.* (2d Cir. 1980). For example, the *Hoehling* case was an infringement suit stemming from several works on the Hindenburg disaster. There we concluded that similarities in representations of German beer halls, scenes depicting German greetings such as "Heil Hitler," or the singing of certain German songs would not lead to a finding of infringement because they were "'indispensable, or at least standard, in the treatment of'" life in Nazi Germany. This is known as the *scènes à faire* doctrine, and like "merger," it has its analogous application to computer programs.

Professor Nimmer points out that "in many instances it is virtually impossible to write a program to perform particular functions in a specific computing environment without employing standard techniques." 3 Nimmer § 13.03[F][3]. This is a result of the fact that a programmer's freedom of design choice is often circumscribed by extrinsic considerations such as

(1) the mechanical specifications of the computer on which a particular program is intended to run;
(2) compatibility requirements of other programs with which a program is designed to operate in conjunction;
(3) computer manufacturers' design standards;
(4) demands of the industry being serviced; and
(5) widely accepted programming practices within the computer industry.

Courts have already considered some of these factors in denying copyright protection to various elements of computer programs. In the *Plains Cotton* case, the Fifth Circuit refused to reverse the district court's denial of a preliminary injunction against an alleged program infringer because, in part, "many of the similarities between the . . . programs [were] dictated by the externalities of the cotton market."

In *Manufacturers Technologies*, the district court noted that the program's method of screen navigation "is influenced by the type of hardware that the software is designed to be used on." Because, in part, "the functioning of the hardware package impact[ed] and constrain[ed] the type of navigational tools used in plaintiff's screen displays," the court denied copyright protection to that aspect of the program. *[C]f. Data East USA* (reversing a district court's finding of audiovisual work infringement because, inter alia, "the use of the Commodore computer for a karate game intended for home consumption

is subject to various constraints inherent in the use of that computer"). Finally, the district court in *Q-Co Industries* rested its holding on what, perhaps, most closely approximates a traditional *scènes à faire* rationale. There, the court denied copyright protection to four program modules employed in a teleprompter program. This decision was ultimately based upon the court's finding that "the same modules would be an inherent part of any prompting program."

Building upon this existing case law, we conclude that a court must also examine the structural content of an allegedly infringed program for elements that might have been dictated by external factors.

(c) Elements taken From the Public Domain

Closely related to the non-protectability of *scènes à faire*, is material found in the public domain. Such material is free for the taking and cannot be appropriated by a single author even though it is included in a copyrighted work. We see no reason to make an exception to this rule for elements of a computer program that have entered the public domain by virtue of freely accessible program exchanges and the like. See 3 Nimmer § 13.03[F][4]; see also *Brown Bag Software* (affirming the district court's finding that "'[p]laintiffs may not claim copyright protection of an . . . expression that is, if not standard, then commonplace in the computer software industry.'"). Thus, a court must also filter out this material from the allegedly infringed program before it makes the final inquiry in its substantial similarity analysis.

Step Three: Comparison

The third and final step of the test for substantial similarity that we believe appropriate for non-literal program components entails a comparison. Once a court has sifted out all elements of the allegedly infringed program which are "ideas" or are dictated by efficiency or external factors, or taken from the public domain, there may remain a core of protectable expression. In terms of a work's copyright value, this is the golden nugget. See *Brown Bag Software*. At this point, the court's substantial similarity inquiry focuses on whether the defendant copied any aspect of this protected expression, as well as an assessment of the copied portion's relative importance with respect to the plaintiff's overall program. See 3 Nimmer § 13.03[F][5]; *Data East USA* ("To determine whether similarities result from unprotectable expression, analytic dissection of similarities may be performed. If . . . all similarities in expression arise from use of common ideas, then no substantial similarity can be found.").

3) Policy Considerations

We are satisfied that the three step approach we have just outlined not only comports with, but advances the constitutional policies underlying the Copyright Act. Since any method that tries to distinguish idea from expression ultimately impacts on the scope of copyright protection afforded to a particular type of work, "the line [it draws] must be a pragmatic one, which also keeps in consideration 'the preservation of the balance between competition and protection. . . .'" *Apple Computer*.

CA and some amici argue against the type of approach that we have set forth on the grounds that it will be a disincentive for future computer program research and development. At bottom, they claim that if programmers are not guaranteed broad copyright protection for their work, they will not invest the extensive time, energy and funds required to design and improve program structures. While they have a point, their argument cannot carry the day. The interest of the copyright law is not in simply conferring a monopoly on industrious persons, but in advancing the public welfare through rewarding artistic creativity, in a manner that permits the free use and development of non-protectable ideas and processes.

In this respect, our conclusion is informed by Justice Stewart's concise discussion of the principles that correctly govern the adaptation of the copyright law to new circumstances. In *Twentieth Century Music Corp. v. Aiken*, he wrote:

> The limited scope of the copyright holder's statutory monopoly, like the limited copyright duration required by the Constitution, reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts. The immediate effect of our copyright law is to secure a fair return for an "author's" creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the general public good. . . . When technological change has rendered its literal terms ambiguous, the Copyright Act must be construed in light of this basic purpose.

Recently, the Supreme Court has emphatically reiterated that "[t]he primary objective of copyright is not to reward the labor of authors. . . ." *Feist Publications, Inc. v. Rural Tel. Serv. Co.* (1991). . . .

Feist teaches that substantial effort alone cannot confer copyright status on an otherwise uncopyrightable work. As we have discussed, despite the fact that significant labor and expense often goes into computer program flow-charting and debugging, that process does not always result in inherently protectable expression. Thus, *Feist* implicitly undercuts the *Whelan* rationale, "which allow[ed] copyright protection beyond the literal computer code . . . [in order to] provide the proper incentive for programmers by protecting their most valuable efforts. . . ." *Whelan*. We note that *Whelan* was decided prior to *Feist* when the "sweat of the brow" doctrine still had vitality.

Furthermore, we are unpersuaded that the test we approve today will lead to the dire consequences for the computer program industry that plaintiff and some amici predict. To the contrary, serious students of the industry have been highly critical of the sweeping scope of copyright protection engendered by the *Whelan* rule, in that it "enables first comers to 'lock up' basic programming techniques as implemented in programs to perform particular tasks." Menell; see also Spivack (*Whelan* "results in an inhibition of creation by virtue of the copyright owner's quasi-monopoly power").

To be frank, the exact contours of copyright protection for non-literal program structure are not completely clear. We trust that as future cases are decided, those limits will become better defined. Indeed, it may well be that the Copyright Act serves as a relatively weak barrier against public access to the theoretical interstices behind a program's source and object codes. This results from the hybrid nature of a computer program, which, while it is literary expression, is also a highly functional, utilitarian component in the larger process of computing.

Generally, we think that copyright registration—with its indiscriminating availability—is not ideally suited to deal with the highly dynamic technology of computer science. Thus far, many of the decisions in this area reflect the courts' attempt to fit the proverbial square peg in a round hole. The district court and at least one commentator have suggested that patent registration, with its exacting up-front novelty and non-obviousness requirements, might be the more appropriate rubric of protection for intellectual property of this kind. . . .

In the meantime, Congress has made clear that computer programs are literary works entitled to copyright protection. Of course, we shall abide by these instructions, but in so doing we must not impair the overall integrity of copyright law. While incentive based arguments in favor of broad copyright protection are perhaps attractive from a pure

policy perspective, see *Lotus Dev. Corp.*, ultimately, they have a corrosive effect on certain fundamental tenets of copyright doctrine. If the test we have outlined results in narrowing the scope of protection, as we expect it will, that result flows from applying, in accordance with Congressional intent, long-standing principles of copyright law to computer programs. Of course, our decision is also informed by our concern that these fundamental principles remain undistorted.

B. The District Court Decision

At the outset, we must address CA's claim that the district court erred by relying too heavily on the court appointed expert's "personal opinions on the factual and legal issues before the court."

1) Use of Expert Evidence in Determining Substantial Similarity Between Computer Programs

Pursuant to Fed.R.Evid. 706, and with the consent of both Altai and CA, Judge Pratt appointed and relied upon Dr. Randall Davis of the Massachusetts Institute of Technology as the court's own expert witness on the issue of substantial similarity. Dr. Davis submitted a comprehensive written report that analyzed the various aspects of the computer programs at issue and evaluated the parties' expert evidence. At trial, Dr. Davis was extensively cross-examined by both CA and Altai.

The well-established general rule in this circuit has been to limit the use of expert opinion in determining whether works at issue are substantially similar. As a threshold matter, expert testimony may be used to assist the fact finder in ascertaining whether the defendant had copied any part of the plaintiff's work. See *Arnstein v. Porter* (2d Cir. 1946). To this end, "the two works are to be compared in their entirety . . . [and] in making such comparison resort may properly be made to expert analysis. . . ." 3 Nimmer § 13.03[E][2].

However, once some amount of copying has been established, it remains solely for the trier of fact to determine whether the copying was "illicit," that is to say, whether the "defendant took from plaintiff's works so much of what is pleasing to [lay observers] who comprise the audience for whom such [works are] composed, that defendant wrongfully appropriated something which belongs to the plaintiff." *Arnstein*. Since the test for illicit copying is based upon the response of ordinary lay observers, expert testimony is thus "irrelevant" and not permitted. We have subsequently described this method of inquiry as "merely an alternative way of formulating the issue of substantial similarity." *Ideal Toy Corp. v. Fab-Lu Ltd. (Inc.)* (2d Cir. 1966).

Historically, *Arnstein*'s ordinary observer standard had its roots in "an attempt to apply the 'reasonable person' doctrine as found in other areas of the law to copyright." 3 Nimmer § 13.03[E][2]. That approach may well have served its purpose when the material under scrutiny was limited to art forms readily comprehensible and generally familiar to the average lay person. However, in considering the extension of the rule to the present case, we are reminded of Holmes' admonition that, "[t]he life of the law has not been logic: it has been experience." O.W. Holmes, Jr., THE COMMON LAW 1 (1881).

Thus, in deciding the limits to which expert opinion may be employed in ascertaining the substantial similarity of computer programs, we cannot disregard the highly complicated and technical subject matter at the heart of these claims. Rather, we recognize the reality that computer programs are likely to be somewhat impenetrable by lay observers—whether they be judges or juries—and, thus, seem to fall outside the category of works contemplated by those who engineered the *Arnstein* test. *Cf. Dawson v. Hinshaw Music Inc.* (4th Cir.) ("departure from the lay characterization is warranted only where the

intended audience possesses 'specialized expertise'").

In making its finding on substantial similarity with respect to computer programs, we believe that the trier of fact need not be limited by the strictures of its own lay perspective. Rather, we leave it to the discretion of the district court to decide to what extent, if any, expert opinion, regarding the highly technical nature of computer programs, is warranted in a given case. In so holding, we do not intend to disturb the traditional role of lay observers in judging substantial similarity in copyright cases that involve the aesthetic arts, such as music, visual works or literature. In this case, Dr. Davis' opinion was instrumental in dismantling the intricacies of computer science so that the court could formulate and apply an appropriate rule of law. While Dr. Davis' report and testimony undoubtedly shed valuable light on the subject matter of the litigation, Judge Pratt remained, in the final analysis, the trier of fact. The district court's use of the expert's assistance, in the context of this case, was entirely appropriate.

2) Evidentiary Analysis

The district court had to determine whether Altai's OSCAR 3.5 program was substantially similar to CA's ADAPTER. We note that Judge Pratt's method of analysis effectively served as a road map for our own, with one exception—Judge Pratt filtered out the non-copyrightable aspects of OSCAR 3.5 rather than those found in ADAPTER, the allegedly infringed program. We think that our approach—i.e., filtering out the unprotected aspects of an allegedly infringed program and then comparing the end product to the structure of the suspect program—is preferable, and therefore believe that district courts should proceed in this manner in future cases.

We opt for this strategy because, in some cases, the defendant's program structure might contain protectable expression and/or other elements that are not found in the plaintiff's program. Since it is extraneous to the allegedly copied work, this material would have no bearing on any potential substantial similarity between the two programs. Thus, its filtration would be wasteful and unnecessarily time consuming. Furthermore, by focusing the analysis on the infringing rather than on the infringed material, a court may mistakenly place too little emphasis on a quantitatively small misappropriation which is, in reality, a qualitatively vital aspect of the plaintiff's protectable expression.

The fact that the district court's analysis proceeded in the reverse order, however, had no material impact on the outcome of this case. Since Judge Pratt determined that OSCAR effectively contained no protectable expression whatsoever, the most serious charge that can be levelled against him is that he was overly thorough in his examination.

The district court took the first step in the analysis set forth in this opinion when it separated the program by levels of abstraction. The district court stated:

> As applied to computer software programs, this abstractions test would progress in order of "increasing generality" from object code, to source code, to parameter lists, to services required, to general outline. In discussing the particular similarities, therefore, we shall focus on these levels.

While the facts of a different case might require that a district court draw a more particularized blueprint of a program's overall structure, this description is a workable one for the case at hand.

Moving to the district court's evaluation of OSCAR 3.5's structural components, we agree with Judge Pratt's systematic exclusion of non-protectable expression. With respect to code, the district court observed that after the rewrite of OSCAR 3.4 to OSCAR 3.5, "there remained virtually no lines of code that were identical to ADAPTER." Accordingly, the court found that the code "present[ed] no similarity at all."

Next, Judge Pratt addressed the issue of similarity between the two programs' parameter lists and macros. He concluded that, viewing the conflicting evidence most favorably to CA, it demonstrated that "only a few of the lists and macros were similar to protected elements in ADAPTER; the others were either in the public domain or dictated by the functional demands of the program." As discussed above, functional elements and elements taken from the public domain do not qualify for copyright protection. With respect to the few remaining parameter lists and macros, the district court could reasonably conclude that they did not warrant a finding of infringement given their relative contribution to the overall program. In any event, the district court reasonably found that, for lack of persuasive evidence, CA failed to meet its burden of proof on whether the macros and parameter lists at issue were substantially similar.

The district court also found that the overlap exhibited between the list of services required for both ADAPTER and OSCAR 3.5 was "determined by the demands of the operating system and of the applications program to which it [was] to be linked through ADAPTER or OSCAR. . . ." In other words, this aspect of the program's structure was dictated by the nature of other programs with which it was designed to interact and, thus, is not protected by copyright.

Finally, in his infringement analysis, Judge Pratt accorded no weight to the similarities between the two programs' organizational charts, "because [the charts were] so simple and obvious to anyone exposed to the operation of the program[s]." CA argues that the district court's action in this regard "is not consistent with copyright law"—that "obvious" expression is protected, and that the district court erroneously failed to realize this. However, to say that elements of a work are "obvious," in the manner in which the district court used the word, is to say that they "follow naturally from the work's theme rather than from the author's creativity." 3 Nimmer § 13.03[F][3]. This is but one formulation of the *scènes à faire* doctrine, which we have already endorsed as a means of weeding out unprotectable expression. . . .

CONCLUSION

In adopting the above three step analysis for substantial similarity between the non-literal elements of computer programs, we seek to insure [sic] two things: (1) that programmers may receive appropriate copyright protection for innovative utilitarian works containing expression; and (2) that non-protectable technical expression remains in the public domain for others to use freely as building blocks in their own work. At first blush, it may seem counter-intuitive that someone who has benefitted to some degree from illicitly obtained material can emerge from an infringement suit relatively unscathed. However, so long as the appropriated material consists of non-protectable expression, "[t]his result is neither unfair nor unfortunate. It is the means by which copyright advances the progress of science and art." *Feist*.

Furthermore, we underscore that so long as trade secret law is employed in a manner that does not encroach upon the exclusive domain of the Copyright Act, it is an appropriate means by which to secure compensation for software espionage.

Accordingly, we affirm the judgment of the district court in part; vacate in part; and remand for further proceedings. The parties shall bear their own costs of appeal, including the petition for rehearing.

Questions:

1.) Having read the case, what is your answer—do we have a separate law of copyright

for software?

2.) How would you describe the extent of copyright protection for software after this decision. Copying Windows 7, bit for bit, is clearly illegal. What about writing a competing operating system that borrows all of Windows 7's ideas about how to present and open programs, retrieve information and so on, but does not copy the code. Is that infringing?

3.) Look back at problem 12-1 d.). Has Larry infringed Sergey's copyright?

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c.) Copyright in Characters

Anderson v. Stallone

11 U.S.P.Q.2d 1161 (C.D. Cal. 1989)

WILLIAM D. KELLER, District Judge.

Factual Background

The movies Rocky I, II, and III were extremely successful motion pictures. Sylvester Stallone wrote each script and played the role of Rocky Balboa, the dominant character in each of the movies. In May of 1982, while on a promotional tour for the movie Rocky III, Stallone informed members of the press of his ideas for Rocky IV. Although Stallone's description of his ideas would vary slightly in each of the press conferences, he would generally describe his ideas as follows:

> I'd do it [Rocky IV] if Rocky himself could step out a bit. Maybe tackle world problems. So what would happen, say, if Russia allowed her boxers to enter the professional ranks? Say Rocky is the United States' representative and the White House wants him to fight with the Russians before the Olympics. It's in Russia with everything against him. It's a giant stadium in Moscow and everything is Russian Red. It's a fight of astounding proportions with 50 monitors sent to 50 countries. It's the World Cup—a war between 2 countries.

In June of 1982, after viewing the movie Rocky III, Timothy Anderson wrote a thirty-one page treatment entitled "Rocky IV" that he hoped would be used by Stallone and MGM Registered TM UA Communications Co. (hereinafter "MGM") as a sequel to Rocky III. The treatment incorporated the characters created by Stallone in his prior movies and cited Stallone as a co-author. In October of 1982, Mr. Anderson met with Art Linkletter, who was a member of MGM's board of directors. Mr. Linkletter set up a meeting on October 11, 1982, between Mr. Anderson and Mr. Fields, who was president of MGM at the time. Mr. Linkletter was also present at this October 11, 1982 meeting. During the

meeting, the parties discussed the possibility that plaintiff's treatment would be used by defendants as the script or Rocky IV. At the suggestion of Mr. Fields, the plaintiff, who is a lawyer and was accompanied by a lawyer at the meeting, signed a release that purported to relieve MGM from liability stemming from use of the treatment. Plaintiff alleges that Mr. Fields told him and his attorney that "if they [MGM & Stallone] use his stuff [Anderson's treatment] it will be big money, big bucks for Tim."

On April 22, 1984, Anderson's attorney wrote MGM requesting compensation for the alleged use of his treatment in the forthcoming Rocky IV movie. On July 12, 1984, Stallone described his plans for the Rocky IV script on the Today Show before a national television audience. Anderson, in his deposition, states that his parents and friends called him to tell him that Stallone was telling "his story" on television. In a diary entry of July 12, 1984, Anderson noted that Stallone "explained my story" on national television.

Stallone completed his Rocky IV script in October of 1984. Rocky IV was released in November of 1985. The complaint in this action was filed on January 29, 1987.

1. Visually Depicted Characters Can Be Granted Copyright Protection

The precise legal standard this Court should apply in determining when a character may be afforded copyright protection is fraught with uncertainty. The Second Circuit has followed Judge Learned Hand's opinion in *Nichols v. Universal Pictures*, Judge Hand set forth a test, simple in theory but elusive in application, to determine when a character should be granted copyright protection. Essentially, under this test, copyright protection is granted to a character if it is developed with enough specificity so as to constitute protectable expression.

This circuit originally created a more rigorous test for granting copyright protection to characters. In *Warner Bros. Pictures, Inc. v. Columbia Broadcasting System, Inc.*, (hereinafter the "*Sam Spade*" opinion) this circuit held that the literary character Sam Spade was not copyrightable, opining that a character could not be granted copyright protection unless it "constituted the story being told". The *Sam Spade* case has not been explicitly overruled by this circuit and its requirement that a character "constitute the story being told" appears to greatly circumscribe the protection of characters in this circuit.

Subsequent decisions in the Ninth Circuit cast doubt on the reasoning and implicitly limit the holding of the *Sam Spade* case. In *Walt Disney Productions v. Air Pirates*, this circuit held that several Disney comic characters were protected by copyright. In doing so the Court of Appeals reasoned that because "comic book characters . . . are distinguishable from literary characters, the Warner Bros language does not preclude protection of Disney's characters." *Air Pirates* can be interpreted as either attempting to harmonize granting copyright protection to graphic characters with the "story being told" test enunciated in the *Sam Spade* case or narrowing the "story being told" test to characters in literary works. If *Air Pirates* is construed as holding that the graphic characters in question constituted the story being told, it does little to alter the *Sam Spade* opinion. However, it is equally as plausible to interpret Air Pirates as applying a less stringent test for protectability of graphic characters.

Professor Nimmer has adopted the latter reading as he interprets *Air Pirates* as limiting the story being told requirement to word portraits. Further, Professor Nimmer finds that the reasoning of the *Sam Spade* case is undermined by the *Air Pirates* opinion, even as it relates to word portraits. This is true because the use of a less stringent test for protection of characters in the graphic medium casts doubt on the vitality of the more stringent story being told test for graphic characters. As a practical matter, a graphically depicted character is much more likely than a literary character to be fleshed out in

sufficient detail so as to warrant copyright protection. But this fact does not warrant the creation of separate analytical paradigms for protection of characters in the two mediums.

This circuit's most recent decision on the issue of copyrightability of characters, *Olson v. National Broadcasting Corp.* (9th Cir. 1988) does little to clarify the uncertainties in this circuit as to how the *Air Pirates* decision effects the continued viability of the *Sam Spade* test. In *Olson*, the Court of Appeals cited with approval the *Sam Spade* "story being told test" and declined to characterize this language as dicta. The Court then cited *Air Pirates* along with Second Circuit precedent and "recognize[d] that cases subsequent to *Warner Bros* [*Sam Spade*] have allowed copyright protection for characters who are especially distinctive." *Olson* also stated definitively that "copyright protection may be afforded to characters visually depicted in a television series or in a movie." But later in the opinion, the court in *Olson* distanced itself from the character delineation test that these cases employed, referring to it as "the more lenient standards adopted elsewhere."

In an implicit acknowledgment of the unsettled state of the law, in considering the characters at issue in *Olson*, the circuit court evaluates the characters in the suit under both tests.

2. The Rocky Characters Are Entitled To Copyright Protection as a Matter of Law

Olson's evaluation of literary characters is clearly distinguishable from the visually depicted characters of the first three Rocky movies for which the defendant seeks protection here. Thus, the more restrictive "story being told test" is inapplicable to the facts of this case. However, out of an abundance of caution this Court will determine the protectability of the Rocky characters under both tests. As shown below, the Rocky characters are protected from bodily appropriation under either standard.

The Rocky characters are one of the most highly delineated group of characters in modern American cinema. The physical and emotional characteristics of Rocky Balboa and the other characters were set forth in tremendous detail in the three Rocky movies before Anderson appropriated the characters for his treatment. The interrelationships and development of Rocky, Adrian, Apollo Creed, Clubber Lang, and Paulie are central to all three movies. Rocky Balboa is such a highly delineated character that his name is the title of all four of the Rocky movies and his character has become identified with specific character traits ranging from his speaking mannerisms to his physical characteristics. This Court has no difficulty ruling as a matter of law that the Rocky characters are delineated so extensively that they are protected from bodily appropriation when taken as a group and transposed into a sequel by another author. Plaintiff has not and cannot put before this Court any evidence to rebut the defendants' showing that Rocky characters are so highly delineated that they warrant copyright protection.

Plaintiff's unsupported assertions that Rocky is merely a stock character, made in the face of voluminous evidence that the Rocky characters are copyrightable, do not bar this Court from granting summary judgment on this issue. If any group of movie characters is protected by copyright, surely the Rocky characters are protected from bodily appropriation into a sequel which merely builds on the relationships and characteristics which these characters developed in the first three Rocky movies. No reasonable jury could find otherwise.

This Court need not and does not reach the issue of whether any single character alone, apart from Rocky, is delineated with enough specificity so as to garner copyright protection. Nor does the Court reach the issue of whether these characters are protected from less than bodily appropriation. See 1 M. Nimmer, § 2.12 (copyrightability of

characters is "more properly framed as relating to the degree of substantial similarity required to constitute infringement rather than in terms of copyrightability per se").

This Court also finds that the Rocky characters were so highly developed and central to the three movies made before Anderson's treatment that they "constituted the story being told." All three Rocky movies focused on the development and relationships of the various characters. The movies did not revolve around intricate plots or story lines. Instead, the focus of these movies was the development of the Rocky characters. The same evidence which supports the finding of delineation above is so extensive that it also warrants a finding that the Rocky characters—Rocky, Adrian, Apollo Creed, Clubber Lang, and Paulie—"constituted the story being told" in the first three Rocky movies.

3. Anderson's Work is An Unauthorized Derivative Work

Under 17 U.S.C. section 106(2), the holder of a copyright has the exclusive right to prepare derivative works based upon his copyrighted work. In this circuit a work is derivative "only if it would be considered an infringing work if the material which it had derived from a prior work had been taken without the consent of the copyright proprietor of the prior work." *Litchfield v. Spielberg* (9th Cir. 1984).This Court must now examine whether Anderson's treatment is an unauthorized derivative work under this standard.

Usually a court would be required to undertake the extensive comparisons under the *Krofft* substantial similarity test to determine whether Anderson's work is a derivative work. However, in this case, Anderson has bodily appropriated the Rocky characters in his treatment. This Court need not determine whether the characters in Anderson's treatment are substantially similar to Stallone's characters, as it is uncontroverted that the characters were lifted lock, stock, and barrel from the prior Rocky movies. Anderson retained the names, relationships and built on the experiences of these characters from the three prior Rocky movies. 1 M. Nimmer, § 2.12 (copying names of characters is highly probative evidence of infringement). His characters are not merely substantially similar to Stallone's, they are Stallone's characters. As Professor Nimmer stated, "Where there is literal similarity . . . . [i]t is not necessary to determine the level of abstraction at which similarity ceases to consist of an 'expression of ideas' since literal similarity by definition is always a similarity as to the expression of ideas." 3 M. Nimmer, § 13.03[3]. Anderson's bodily appropriation of these characters infringes upon the protected expression in the Rocky characters and renders his work an unauthorized derivative work. By bodily appropriating the significant elements of protected expression in the Rocky characters, Anderson has copied protected expression and his treatment infringes on Stallone's copyrighted work.

4. Since Anderson's Work Is an Unauthorized Derivative Work, No Part of the Treatment Can Be Granted Copyright Protection

Stallone owns the copyrights for the first three Rocky movies. Under 17 U.S.C. section 106(2), he has the exclusive right to prepare derivative works based on these copyrighted works. This Court has determined that Anderson's treatment is an unauthorized derivative work. Thus, Anderson has infringed upon Stallone's copyright.

Nevertheless, plaintiff contends that his infringing work is entitled to copyright protection and he can sue Stallone for infringing upon his treatment. Plaintiff relies upon 17 U.S.C. section 103(a) as support for his position that he is entitled to copyright protection for the non-infringing portions of his treatment. 17 U.S.C section 103(a) reads:

> The subject matter of copyright as specified by section 102 includes compilations and derivative works, but protection for a work employing preexisting material in which copyright subsists does not extend to any

part of the work in which the material has been used unlawfully.

Plaintiff has not argued that section 103(a), on its face, requires that an infringer be granted copyright protection for the non-infringing portions of his work. He has not and cannot provide this Court with a single case that has held that an infringer of a copyright is entitled to sue a third party for infringing the original portions of his work. Nor can he provide a single case that stands for the extraordinary proposition he proposes here, namely, allowing a plaintiff to sue the party whose work he has infringed upon for infringement of his infringing derivative work. . . .

The Court finds that Rocky IV is not substantially similar to Anderson's work. Nor is any portion of Anderson's work entitled to copyright protection under 17 U.S.C. sections 103(a) & 106(2). The Court GRANTS defendants summary judgment on Anderson's claim that they infringed Anderson's copyright.

Questions:

1.) If the characters are under copyright, and Anderson's "treatment" is thus an unauthorized derivative work, not eligible for copyright protection, what does it matter that Stallone had publicly offered ideas similar to the ones Anderson put in the screenplay prior to seeing it? Why does the court mention it? To pose the counterfactual, suppose Stallone had never thought about *any* of these plot twists, had access to a screenplay of Anderson's and taken *all* of it—down to the exact language of the script—does Anderson still lose on the copyright claim?

2.) Should we have copyright over characters? Why? Why not? Think of the blockbuster movies featuring comic book characters. Are these an argument for copyright protection of characters or against it?

3.) Has James infringed copyright with his Hamnet character described in problem 12-1 e.)?

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d.) A Two-Part Test for Copyright Infringement

We have discussed the line courts must draw between idea and expression, the process by which unprotectable elements are filtered from computer software and the reach of copyright over characters. We now turn to the way (actually, the *ways*) that courts assess claims of illicit copying. Portions of this discussion should be familiar from *Computer Associates v. Altai*, but there they were in the specialized context of software.

In the 1946 case *Arnstein v. Porter*, the Second Circuit laid out a seminal two-pronged test for copyright infringement. This was one of many lawsuits brought by songwriter Ira Arnstein, who was convinced that more successful songwriters were stealing his music and made sometimes outlandish allegations of copying. In this case, he claimed that several songs by Cole Porter infringed his works, even though there were few significant similarities. While Arnstein lost his other lawsuits at the summary judgment stage, here the court denied Porter's summary judgment motion and set an unusually high bar for winning these motions. Later cases tempered *Arnstein's* summary judgment standard, and the current requirement is that there is "no genuine issue of material fact." But its bifurcated test endures, and it is excerpted below.

Arnstein v. Porter

154 F.2d 464 (2d Cir. 1946)

FRANK, Circuit Judge.

. . . [I]t is important to avoid confusing two separate elements essential to a plaintiff's case in such a suit: (a) that defendant copied from plaintiff's copyrighted work and (b) that the copying (assuming it to be proved) went to far as to constitute improper appropriation.

As to the first—copying—the evidence may consist (a) of defendant's admission that he copied or (b) of circumstantial evidence—usually evidence of access—from which the trier of the facts may reasonably infer copying. Of course, if there are no similarities, no amount of evidence of access will suffice to prove copying. If there is evidence of access and similarities exist, then the trier of the facts must determine whether the similarities are sufficient to prove copying. On this issue, analysis ('dissection') is relevant, and the testimony of experts may be received to aid the trier of the facts. If evidence of access is absent, the similarities must be so striking as to preclude the possibility that plaintiff and defendant independently arrived at the same result.

If copying is established, then only does there arise the second issue, that of illicit copying (unlawful appropriation). On that issue (as noted more in detail below) the test is the response of the ordinary lay hearer; accordingly, on that issue, 'dissection' and expert testimony are irrelevant.

In some cases, the similarities between the plaintiff's and defendant's work are so extensive and striking as, without more, both to justify an inference of copying and to prove improper appropriation. But such double-purpose evidence is not required; that is, if copying is otherwise shown, proof of improper appropriation need not consist of similarities which, standing alone, would support an inference of copying. . . .

Assuming that adequate proof is made of copying, that is not enough; for there can be 'permissible copying,' copying which is not illicit. Whether (if he copied) defendant unlawfully appropriated presents, too, an issue of fact. The proper criterion on that issue is not an analytic or other comparison of the respective musical compositions as they appear on paper or in the judgment of trained musicians. The plaintiff's legally protected interest is not, as such, his reputation as a musician but his interest in the potential financial returns from his compositions which derive from the lay public's approbation of his efforts. The question, therefore, is whether defendant took from plaintiff's works so much of what is pleasing to the ears of lay listeners, who comprise the audience for whom such popular music is composed, that defendant wrongfully appropriated something which belongs to the plaintiff. . . .

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Notes

"[There are] two separate elements essential to a plaintiff's case in such

a suit:

> "a) that defendant copied from plaintiff's copyrighted work and
> b) that the copying (assuming it to be proved) went too far as to constitute improper appropriation."

This two-part test from *Arnstein* has served as a basic template for copyright infringement tests in many other Circuits. The general contours of each prong are as follows.

First, there is the question of whether the defendant copied from the plaintiff's work *at all*, as opposed to independently creating her own work. This is a factual rather than legal question. It is easily resolved if the defendant admits to copying; in cases of digital music sampling, for example, there is no debate over whether the defendant copied, just whether she took enough for that copying to be unlawful. Often there is no such admission, however, and courts turn to analyzing whether circumstantial evidence of similarities between the works, often called "probative similarity," and evidence of "access" are together enough to suggest copying.

Probative Similarity: At this stage, similarities are being assessed to answer the initial question of whether there was copying, not the legal question of whether there was infringement. Thus courts look at the question of similarity broadly, even including similarities in unprotected material such as ideas. (Courts look at all the similarities because they may show that I did copy from you as a factual matter, even if they do not show that I infringed as a legal matter.) Do you agree with this technique? Obviously, it poses the danger that juries will later conflate both protectable and unprotectable similarities when judging infringement.

Access: A full exploration of access is beyond the scope of this chapter, but, generally, there must be a "reasonable possibility" that the defendant had access to the plaintiff's work, either through a chain of events (my producer met you at a bar where you gave her a demo of a song that you now claim I copied), or widespread dissemination of the plaintiff's work (your song was played so often that I must have heard it). As we saw in *Computer Associates*, programmers try to devise "clean room" programming techniques, in which coders are kept away from the code to be emulated functionally, precisely to preclude access. However, few of us create in hermetically sealed environments, and courts will sometimes presume access even in the absence of any evidence if similarities between the works are so "striking" as to make independent creation implausible. These evidentiary questions are complex. As *Arnstein* suggests, analytical dissection and expert testimony about the nature of those similarities (and thus the likelihood that they are accidental) are appropriate to resolve them.

In this chapter, we have focused on the second question: whether the copying "went so far as to constitute improper appropriation"—that is, copyright infringement. *Arnstein* provides two general guidelines with regard to this inquiry:

- unlawful appropriation should be determined by the "lay listener" or observer, and
- analytical dissection and expert testimony are "irrelevant."

What is the court's reasoning here? Why leave this determination to the lay juror, without the aid (or distraction) of dissection and expert testimony? Should expert testimony be permitted to assist the jury with certain discrete determinations, such as distinguishing between protectable and unprotectable material? More broadly, do you agree with *Arnstein* that "improper appropriation" should turn on whether the defendant has unduly impinged on the plaintiff's market interest "in the potential financial returns from his compositions which derive from the lay public's approbation of his efforts"?

The Ninth Circuit has adopted and reformulated *Arnstein v. Porter*'s two-part test. It refers to the first prong—whether the defendant copied—as the "extrinsic" or "objective" inquiry. Here external criteria, analytic dissection, and expert testimony are permissible.

The second prong—whether the copying went so far as to violate the plaintiff's copyright—is referred to as the "intrinsic" or "subjective" inquiry, and the proper lens here is the response of the ordinary reasonable person. *See Sid & Marty Krofft v. McDonald's* (9th Cir. 1977) (adopting "extrinsic" and "intrinsic" terminology; finding McDonald's had infringed copyrightable elements of the "H.R. Pufnstuf" children's television shows and merchandise); *Shaw v. Lindheim* (9th Cir. 1990) (adopting "objective" and "subjective" terminology; finding triable issue of fact regarding substantial similarity where plaintiff claimed that his script entitled "The Equalizer" was infringed by defendants' pilot script for its "Equalizer" television series). Do you find the Ninth Circuit's nomenclature helpful?

The following case engages with the "ordinary observer" test as introduced in *Arnstein* and developed in other Circuits, and suggests a limited modification.

Dawson v. Hinshaw Music

905 F.2d 731 (4th Cir. 1990)

[In this case, the plaintiff claimed that the defendant had infringed his musical arrangement of the spiritual "Ezekiel Saw De Wheel". The court held that applying the ordinary lay observer test was inappropriate, and adopted an "intended audience" test. Here, the intended audience for the spiritual arrangements could be "choral directors who possess specialized expertise relevant to their selection of one arrangement instead of another."]

MURNAGHAN, Circuit Judge.

. . .

Arnstein v. Porter provides the source of modern theory regarding the ordinary observer test. *Arnstein* involved the alleged infringement of a popular musical composition. Writing for the panel, Judge Jerome Frank first explained that "the plaintiff's legally protected interest is not, as such, his reputation as a musician but his interest in the potential financial returns from his compositions which derive from the lay public's approbation." This initial observation gave force to the recognized purpose of the copyright laws of providing creators with a financial incentive to create for the ultimate benefit of the public.

Consistent with its economic incentive view of copyright law, the *Arnstein* court concluded that "the question, therefore, is whether defendant took from plaintiff's works so much of what is pleasing to the ears of lay listeners, *who comprise the audience for whom such popular music is composed,* that defendant wrongfully appropriated something which belongs to plaintiff." (emphasis added). Thus, under *Arnstein,* a court should look to the reaction of "lay listeners," because they comprise the audience of the

plaintiff's work. The lay listener's reaction is relevant because it gauges the effect of the defendant's work on the plaintiff's market.

Although *Arnstein* established a sound foundation for the appeal to audience reaction, its reference to "lay listeners" may have fostered the development of a rule that has come to be stated too broadly. Under the facts before it, with a popular composition at issue, the *Arnstein* court appropriately perceived "lay listeners" and the works' "audience" to be the same. However, under *Arnstein*'s sound logic, the lay listeners are relevant only because they comprise the relevant audience. Although *Arnstein* does not address the question directly, we read the case's logic to require that where the intended audience is significantly more specialized than the pool of lay listeners, the reaction of the intended audience would be the relevant inquiry. In light of the copyright law's purpose of protecting a creator's market, we think it sensible to embrace *Arnstein*'s command that the ultimate comparison of the works at issue be oriented towards the works' intended audience.

Our reading of *Arnstein* brings our analysis into line with *Sid & Marty Krofft Television v. McDonald's Corp*. (9th Cir. 1977), another landmark case involving questions of substantial similarity. *Krofft* announced that the test for determining substantial similarity in the expression of ideas of two works "shall be labeled an intrinsic one-depending on the response of the ordinary reasonable person." When applying its intrinsic test, the *Krofft* court noted the particular audience to which the works in question were directed. The court wrote:

> The present case demands an even more intrinsic determination because both plaintiff's and defendants' works are directed to an audience of children. This raises the particular factual issue of the impact of the respective works upon the minds and imaginations of young people.

Thus, the *Krofft* court believed that the perspective of the specific audience for which the products were intended (children) was the relevant perspective for the ordinary observer test.

We suspect that courts have been slow to recognize explicitly the need for refining the ordinary observer test in such a way that it would adopt the perspective of the intended audience because, in most fact scenarios, the general lay public fairly represents the works' intended audience. As a result, "a considerable degree of ambiguity exists in this area; courts have not always made it apparent whether they were using a member of a specific audience, or simply an average lay observer as their spectator." Fortunately, the advent of computer programming infringement actions has forced courts to recognize that sometimes the non-interested or uninformed lay observer simply lacks the necessary expertise to determine similarities or differences between products. In *Whelan Associates v. Jaslow Dental Laboratory* (3d Cir. 1986), the Third Circuit concluded that the ordinary observer arm of the substantial similarity test was not appropriate for the complex computer program copyright case before it. Writing for a unanimous panel, Judge Becker reasoned that the complexity of computer programs, combined with the general public's unfamiliarity with such programs, rendered the ordinary observer test senseless. He further reasoned that where the finder of fact is the same for both the extrinsic and intrinsic tests, it seems silly to ask the finder of fact to "forget" the expert testimony when considering similarity of expression. Judge Becker relied also on Federal Rule of Evidence 702, which permits expert testimony where it will be useful to a trier of fact.

We believe the *Whelan* analysis further supports our view. As *Whelan* reveals, only a reckless indifference to common sense would lead a court to embrace a doctrine that requires a copyright case to turn on the opinion of someone who is ignorant of the relevant differences and similarities between two works. Instead, the judgment should be

informed by people who are familiar with the media at issue. . . .

Under the foregoing logic, we state the law to be as follows. When conducting the second prong of the substantial similarity inquiry, a district court must consider the nature of the intended audience of the plaintiff's work. If, as will most often be the case, the lay public fairly represents the intended audience, the court should apply the lay observer formulation of the ordinary observer test. However, if the intended audience is more narrow in that it possesses specialized expertise, relevant to the purchasing decision, that lay people would lack, the court's inquiry should focus on whether a member of the intended audience would find the two works to be substantially similar. Such an inquiry may include, and no doubt in many cases will require, admission of testimony from members of the intended audience or, possibly, from those who possess expertise with reference to the tastes and perceptions of the intended audience. . . .

. . . [I]n any given case, a court should be hesitant to find that the lay public does not fairly represent a work's intended audience. In our opinion, departure from the lay characterization is warranted only where the intended audience possesses "specialized expertise." We thereby pay heed to the need for hesitancy when departing from the indiscriminately selected lay public in applying the test. To warrant departure from the lay characterization of the ordinary observer test, "specialized expertise" must go beyond mere differences in taste and instead must rise to the level of the possession of knowledge that the lay public lacks.

Questions:

1.) Why does the court believe that the audience for the work is also the relevant audience to determine substantial similarity? Because they would have the relevant levels of expertise? Or because they are the relevant purchasers? Imagine a contemporary jazz composer who writes a song riffing on the styles of prior jazz greats, from Bird to Coltrane, in a way that knowledgeable jazz audiences would have realized was merely a tip of the hat to his predecessors, common among sophisticated jazz musicians. Then imagine a few themes of his work are included in a massively popular hip hop song, which also—and independently—refers back to the same greats in jazz history. To the ear of someone unfamiliar with jazz the two sound strikingly similar. To the ear of an *aficionado*, the similarities are revealed to be independent references to the same cultural store. The jazz composer sues the hip hop artist. Which is the relevant audience?

2.) Though many observers have agreed that *Arnstein*'s test may sweep in too much in assessing infringement, the "intended audience" test has not commanded much support from courts. Should that change?

3.) Apply the *Arnstein* test to Jennifer's summaries of airport self-help and business books. What result?

4.) Apply what you have read so far to the diet books in Problem 12-1 c.). Do you think that James' abridged diet book or Anthony's blog infringe Jennifer's copyright?

Notes

Whether determined by the lay juror or intended audience, the basic test for illicit copying is whether there is *substantial similarity* between *protectable* elements in the plaintiff's and defendant's works. Assessing substantial similarity requires numerous

exercises in line-drawing, and to quote Judge Hand in *Nichols*, "the line, wherever it is drawn, will seem arbitrary." What elements are protected by copyright, and what elements are unprotectable facts, ideas, *scènes à faire*, unoriginal material, or instances of merger? At what point does copying become "substantial" and therefore unlawful? The legal standards vary from Circuit to Circuit, and have changed over time. They also vary medium to medium: assessing similarities becomes very different depending on whether one is considering music (melody, harmony, rhythm, instrumentation, etc.), or novels (plot, dialogue, setting, sequence, characters, etc.), or computer programs (as you saw in *Computer Associates*).

Consider the difference between the following tests for substantial similarity:

- The jury is asked to decide whether the "total concept and feel" of the original and allegedly infringing works is substantially similar.
- The jury is asked to focus exclusively on substantial similarities between *protected* materials.

How might these tests be over- or under-inclusive?

Questions:

Apply the tests for substantial similarity to the following fact patterns. How do these come out under a "total concept and feel" test? How about a targeted comparison of only the protected material?

1.) Hallmark creates a romantic greeting card showing an original arrangement of a cute puppy with a bouquet of flowers and balloons under a rainbow with the superimposed text "i wuv you." American Greetings creates a card with an almost identical arrangement of its own cute puppy with flowers and balloons, and a generic rainbow that also reads "i wuv you."

2.) DJ JJ samples the catchy four-note hook from your song and includes it in the introduction to her song, which is otherwise entirely different from your work.

3.) A fan develops a South Park trivia game that contains multiple-choice questions about the key characters and events in all of the episodes to date, duplicating fragmentary details from the series in an entirely different (text-only) format.

4.) Revisit James's novel about Hamnet. Under which test is he most likely to win?

In practice, tests have evolved and overlapped over time, and courts have tried to fine-tune them so that they converge on a reasonable, fact-specific analysis of whether there has been appropriation sufficient to amount to infringement.

One final wrinkle. Because copyright is a strict liability system, infringement may result even when one *subconsciously* copies another's work. In the words of Learned Hand: "Everything registers somewhere in our memories, and no one can tell what may evoke it. . . . The author's copyright is an absolute right to prevent others from copying his original collocation of words or notes, and does not depend upon the infringer's good faith. Once it appears that another has in fact used the copyright as the source of his production, he has invaded the author's rights. It is no excuse that in so doing his memory has played him a trick." *Fred Fisher, Inc. v. Dillingham* (S.D.N.Y. 1924); *see also Bright Tunes Music v. Harrisongs Music* (S.D.N.Y. 1976), *aff'd*, *ABKCO Music, Inc. v. Harrisongs Music, Ltd.* (2d Cir. 1983). Do you agree? What are the dangers of holding

creators liable for subconscious copying? How about the dangers of limiting infringement to instances of intentional copying? How does this doctrine fit with the idea that independent creation—us both coming up with the same sonnet independently—is not copyright infringement?

e.) "*De minimis*" Copying

When is copying not copying? When it is *de minimis*. It is hornbook law that trivial or "*de minimis*" copying does not constitute actionable copyright infringement. This is a copyright specific embodiment of the general common law principle that "*de minimis non curat lex"*—the law does not concern itself with trifles. (Any first year law student could tell you that the law *frequently* concerns itself with trifles, but the principle is a general one.)

Before we begin: Please note that it's *de minimis*, not de minimUS, a common misspelling.

Many people assume that there is an accepted quantitative threshold for *de minimis* copying, and that—depending on the medium—any use of fewer than 10 seconds, 2 sentences, 6 notes, or the like is non-infringing. As you will see below, there is no bright-line rule, and the inquiry is much more complex and fact-specific.

Newton v. Diamond

388 F.3d 1189 (9th Cir. 2004)

SCHROEDER, Chief Judge.

[This case involved an intricate performance by an avant-garde flutist, and included much debate about what musical elements within that performance should be considered part of the *musical composition*, as opposed to the *sound recording* of that composition, because compositions and sound recordings are covered by two different copyrights. The copyright claim in this case only involved the composition because the defendants had properly licensed the sound recording. Therefore, the scope of the composition copyright mattered—the less the composition included, the more likely its copying would be *de minimis*. This extraneous discussion is not included in the excerpt below, which focuses on the application of the *de minimis* doctrine. Eds.]

. . .

Background and Procedural History

The plaintiff and appellant in this case, James W. Newton, is an accomplished avant-garde jazz flutist and composer. In 1978, he composed the song "Choir." . . .

The defendants and appellees include the members of the rap and hip-hop group Beastie Boys, and their business associates. In 1992, Beastie Boys obtained a license from ECM Records to use portions of the sound recording of "Choir" in various

renditions of their song "Pass the Mic" in exchange for a one-time fee of $1000. Beastie Boys did not obtain a license from Newton to use the underlying composition.

The portion of the composition at issue consists of three notes, C—D flat—C, sung over a background C note played on the flute. . . . Beastie Boys digitally sampled the opening six seconds of Newton's sound recording of "Choir." . . .

Whether Defendants' Use was De Minimis

. . .

For an unauthorized use of a copyrighted work to be actionable, the use must be significant enough to constitute infringement. This means that even where the fact of copying is conceded, no legal consequences will follow from that fact unless the copying is substantial. The principle that trivial copying does not constitute actionable infringement has long been a part of copyright law. Indeed, as Judge Learned Hand observed over 80 years ago: "Even where there is some copying, that fact is not conclusive of infringement. Some copying is permitted. In addition to copying, it must be shown that this has been done to an unfair extent." This principle reflects the legal maxim, *de minimis non curatlex* (often rendered as, "the law does not concern itself with trifles").

A leading case on *de minimis* infringement in our circuit is *Fisher v. Dees*, where we observed that a use is *de minimis* only if the average audience would not recognize the appropriation. ("[A] taking is considered *de minimis* only if it is so meager and fragmentary that the average audience would not recognize the appropriation."). This observation reflects the relationship between the *de minimis* maxim and the general test for substantial similarity, which also looks to the response of the average audience, or ordinary observer, to determine whether a use is infringing. To say that a use is *de minimis* because no audience would recognize the appropriation is thus to say that the use is not sufficiently significant. . . .

The high degree of similarity between the works here (i.e., "Pass the Mic" and "Choir"), but the limited scope of the copying, place Newton's claim for infringement into the class of cases that allege what Nimmer refers to as "fragmented literal similarity." Fragmented literal similarity exists where the defendant copies a portion of the plaintiff's work exactly or nearly exactly, without appropriating the work's overall essence or structure. Because the degree of similarity is high in such cases, the dispositive question is whether the copying goes to trivial or substantial elements. Substantiality is measured by considering the qualitative and quantitative significance of the copied portion in relation to the plaintiff's work as a whole. This focus on the sample's relation to the plaintiff's work as a whole embodies the fundamental question in any infringement action, as expressed more than 150 years ago by Justice Story: whether "so much is taken[] that the value of the original is sensibly diminished, or the labors of the original author are substantially to an injurious extent appropriated by another." Courts also focus on the relationship to the plaintiff's work because a contrary rule that measured the significance of the copied segment in the defendant's work would allow an unscrupulous defendant to copy large or qualitatively significant portions of another's work and escape liability by burying them beneath non-infringing material in the defendant's own work, even where the average audience might recognize the appropriation. Thus, as the district court properly concluded, the fact that Beastie Boys "looped" the sample throughout "Pass the Mic" is irrelevant in weighing the sample's qualitative and quantitative significance.

On the undisputed facts of this record, no reasonable juror could find the sampled portion of the composition to be a quantitatively or qualitatively significant portion of the composition as a whole. Quantitatively, the three-note sequence appears only once in

Newton's composition. It is difficult to measure the precise relationship between this segment and the composition as a whole, because the score calls for between 180 and 270 seconds of improvisation. When played, however, the segment lasts six seconds and is roughly two percent of the four-and-a-half-minute "Choir" sound recording licensed by Beastie Boys. Qualitatively, this section of the composition is no more significant than any other section. Indeed, with the exception of two notes, the entirety of the scored portions of "Choir" consist of notes separated by whole and half-steps from their neighbors and is played with the same technique of singing and playing the flute simultaneously; the remainder of the composition calls for sections of improvisation that range between 90 and 180 seconds in length. . . .

Conclusion

. . . We hold that Beastie Boys' use of a brief segment of that composition, consisting of three notes separated by a half-step over a background C note, is not sufficient to sustain a claim for infringement of Newton's copyright in the composition "Choir". We affirm the district court's grant of summary judgment on the ground that Beastie Boys' use of the composition was de minimis and therefore not actionable.

GRABER, Circuit Judge, dissenting.

. . . [O]n the record before us, a finder of fact reasonably could find that Beastie Boys' use of the sampled material was not *de minimis*. Therefore, summary judgment is inappropriate.

. . . Even passages with relatively few notes may be qualitatively significant. The opening melody of Beethoven's Fifth Symphony is relatively simple and features only four notes, but it certainly is compositionally distinctive and recognizable. . . .

Because Newton has presented evidence establishing that reasonable ears differ over the qualitative significance of the composition of the sampled material, summary judgment is inappropriate in this case. Newton should be allowed to present his claims of infringement to a factfinder. I therefore dissent from the majority's conclusion to the contrary.

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Notes

We would like to be able to give you a succinct description of the *de minimis* doctrine but we cannot. Consider three possibilities.

1.) There is a certain level of copying—in either amount taken or impact produced on the market—that is just too little for the law to worry about. Yes, there is copying in the factual sense, identifiable copying, but the law will not concern itself with such a trifle—for reasons of judicial economy, or the preservation of a sphere of individual liberty, or protection of a certain degree of cultural reference, or all three.

2.) A related but separate point: The test for infringement is "substantial similarity." If I have taken only a little, then the works are not substantially similar, because most of yours went un-copied and most of mine is not taken from yours. But this now requires us to enter into the similarity analysis. We move away from the prospect of a bright line *de minimis* rule that stops the analysis before it even gets started. And the substantial similarity inquiry implicitly focuses us on the amount question (both as a quantitative and qualitative matter), not the market impact question—perhaps appropriately so, because impact can be considered under fair use.

3.) *De minimis* is conflated into some of the 4 factors in the fair use analysis, making it effectively a subdivision of fair use. This could be true *either* because very little was copied or because that copying had no real impact on the plaintiff.

Which of these represents the *de minimis* doctrine as the law currently stands? Elements of all three versions can be found.

The *Newton* case situates the *de minimis* analysis within the context of substantial similarity: "To say that a use is *de minimis* . . . is thus to say that the works are not substantially similar." But what about instances where there *is* substantial similarity, but the copying is nevertheless too insignificant or inconsequential to merit adjudication? What if I copy your photograph for my law school collage, but never show it to anyone? Should the principle that "the law does not concern itself with trifles" have a more general application to copyright claims, as it does in other areas of law? Consider this quote from Judge Pierre Leval in *Davis v. Gap, Inc*. (2d Cir. 2001):

> "The *de minimis* doctrine is rarely discussed in copyright opinions because suits are rarely brought over trivial instances of copying. Nonetheless, it is an important aspect of the law of copyright. Trivial copying is a significant part of modern life. Most honest citizens in the modern world frequently engage, without hesitation, in trivial copying that, but for the *de minimis* doctrine, would technically constitute a violation of law. We do not hesitate to make a photocopy of a letter from a friend to show to another friend, or of a favorite cartoon to post on the refrigerator. Parents in Central Park photograph their children perched on Jose de Creeft's Alice in Wonderland sculpture. We record television programs aired while we are out, so as to watch them at a more convenient hour. Waiters at a restaurant sing "Happy Birthday" at a patron's table. When we do such things, it is not that we are breaking the law but unlikely to be sued given the high cost of litigation. Because of the *de minimis* doctrine, in trivial instances of copying, we are in fact not breaking the law. If a copyright owner were to sue the makers of trivial copies, judgment would be for the defendants. The case would be dismissed because trivial copying is not an infringement."

Notice that Judge Leval (whose own articles on fair use have been very influential) conflates multiple types of copying here, some of them clearly—as in the case of home taping—covered not by *de minimis* but fair use. Do Judge Leval's assertions about mundane copying—the cartoon on the fridge—still hold in the internet age, where trivial copying is both a more "significant part of modern life," and more detectable and preventable by copyright holders? Do they hold even more strongly? Think back to *MAI v. Peak*. Should that RAM copy have been deemed the type of "trivial" copying that Judge Leval is discussing?

In *Davis v. Gap*, the court did not ultimately find the *de minimis* doctrine applicable. There, The Gap had run an advertising campaign in which one of the models wore the plaintiff's "nonfunctional" eyeware jewelry. The court found that The Gap's use of the copyrighted eyeware was too noticeable to qualify for *de minimis* protection. Another famous case rejecting a *de minimis* argument was *Ringgold v. Black Entertainment TV* (2d Cir. 1997). There, a poster of a copyrighted artwork appeared in the background of a TV show in nine scenes ranging from 1.86 to 4.16 seconds and totaling 26.75 seconds. The court ruled that the use was not *de minimis*. Sound? What would you have to think, to think this a good result? What is the vision of copyright's role or reach?

As mentioned above, some courts have further confused the meaning of *de minimis* in the copyright context by applying it to yet another inquiry: fair use. Judge Leval's quote above suggests the same tendency. They tend to use the term "*de minimis*" when discussing either of two fair use factors that you will encounter in the upcoming readings: the "amount and substantiality" of the defendant's use and the degree of "market harm" to the plaintiff.

Bottom line, there may be coherence to the doctrine, but if there is . . . it is *de minimis*.