The Ontology of Copyright Infringement: Puzzles, Parts, and Pieces

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THE ONTOLOGY OF COPYRIGHT INFRINGEMENT: PUZZLES, PARTS, AND PIECES

I. INTRODUCTION

The law of copyright infringement is fairly simple in structure. At its core is protection against illicit copying of protected expression.1 The details of determining whether the expression was copied2 (the epistemology3 of copyright infringement) and whether the copied expression is protected4 forms much of the remainder of copyright infringement law. The purpose of this Comment is to derive the ontology of American copyright infringement.

Ontology is the study of what is.5 An ontology of copyright infringement categorizes the objects that "exist" or are referred to in copyright infringement law. Such an ontology, by providing a basis for careful analysis of copyright infringement law, is valuable in at least three ways. First, by providing a basic framework for the general kinds of objects discussed in copyright infringement law, it enables us to better understand court deci-

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1 See, e.g., Boisson v. Banian, Ltd., 273 F.3d 262, 267 (2d Cir. 2001).
2 See, e.g., Computer Assocs. Int’l, Inc. v. Altai, Inc., 982 F.2d 693, 701 (2d Cir. 1992) (adopting the requirement that in order to prove infringement an author must prove access to the original work and substantial similarity between the works); Walker v. Time Life Films, Inc., 784 F.2d 44, 48 (2d Cir. 1986) (same).
3 Epistemology is the philosophical study of what is "knowledge" (what it is to know) and how do we come to know (when do we have "knowledge"). See, e.g., 5 THE OXFORD ENGLISH DICTIONARY 338 (2d ed. 1989); D.W. HAMILTON, 3 THE ENCYCLOPEDIA OF PHILOSOPHY 8-9 (Paul Edwards ed., The MacMillan Co. & Free Press 1967); SIMON BLACKBURN, THE OXFORD DICTIONARY OF PHILOSOPHY 123 (1994).
4 See, e.g., Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 571-72 (1993) (holding that a rap group’s parody of the song Pretty Woman was fair use); Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 564-66 (1985) (finding that The Nation had taken too much of “the heart” of President Ford’s memoirs for The Nation’s use to be fair use); Computer Assocs. Int’l, 982 F.2d at 706 (adopting the abstraction and dissection test to determine infringement); Carol Barnhart Inc. v. Economy Cover Corp., 773 F.2d 411, 418 (2d Cir. 1985) (applying the independent existence/separability test to manequins).
sions; in particular, when the court is right or wrong.\textsuperscript{6} Second, an ontology of American copyright infringement law would provide a blueprint for developing countries seeking to build their own copyright law and for cross-cultural comparison of legal systems. Finally, by giving us a better understanding of how copyright infringement works, an ontology of copyright infringement facilitates our analysis of the law to see if it meets logical, legal, and common sense. In essence, an ontology provides a basis for our determination of if, whether, and how we should change the law.

This Comment does not deal directly with these three analyses. Instead, it focuses solely on the first step: Discovering the basic, underlying ontology of copyright infringement law. Throughout this discovery process the Comment strives to first tease out the ontology of copyright infringement from actual case law. With these basic ontological insights in hand, the Comment then seeks further clarification by referencing the philosophical literature. This Comment finds that the abstract work of philosophers in the field of metaphysics provides great insight into the concrete work of judges and legislatures in the field of copyright infringement.

This Comment proceeds in two broad sections. Part II provides the large-scale framework for the ontology of copyright infringement. In Part II.A, the Comment lays out the basic tests used to determine infringement. Part II.B shows that these tests and related copyright statutes rest upon four basic ontological principles. Those principles form the core ontology of copyright infringement law. In Part II.C, the Comment addresses two basic exceptions to this ontology—the fair use exception and the originality exception. The Comment then shows, in Part II.D, that the four principles forming the ontology of copyright infringement provide a practical solution to the philosophical problem of material constitution. An examination of the problem of material constitution, in Parts II.D.1-3, provides deeper insight into the ontology of copyright infringement.

With this core ontology in hand, the Comment turns to an initial fine-tuning. Part III examines how copyright infringement law protects only certain basic elements of any copyrighted work. Part III.A.1 provides a short examination of the kinds of things that copyright law does not protect. Part III.A.2 then provides a discussion of what kinds of the things copyright law generally does protect. As this discussion shows, copyright case law uses very general terms in discussing what elements of a work count in determining infringement. In Part III.B, the Comment shows that

\textsuperscript{6} A related consequence is that an understanding of the ontology of copyright infringement also provides the advocate with an explicit roadmap for arguing that a particular act of copying is or is not infringement because, as the ontology shows, the allegedly infringing work does or does not conform to the ontology of copyright infringement. If the allegedly infringing work conforms to the ontology of copyright infringement then, granted that the epistemological constraints are met, the work is infringing. But, if the allegedly infringing work does not conform to the ontology of copyright infringement, then that work is not a member of the "infringement universe" and no infringement is possible.
this general definition is actually based on a more specific distinction—the distinction between "parts" and "pieces." The Comment then provides an analysis of this distinction that closely follows the distinction as made in the philosophical literature.

The Comment concludes, in Part IV, by providing a formal ontology of copyright infringement based upon the four principles of copyright infringement law, the commonly understood distinction between protected and unprotected elements, and the distinction between "parts" and "pieces." A key feature of this Comment is that it shows how two widely separated fields, abstract metaphysics and pragmatic copyright law, can each throw light on the problems of the other. Philosophy gains by being given a concrete example of one solution to a complex, abstract philosophical problem. Similarly, copyright law gains insight into itself by examining the analysis provided by philosophy in its quest to understand the abstract problem of "identity."

II. COPYRIGHT INFRINGEMENT: A BROAD PERSPECTIVE

In general, the law of copyright infringement relies upon two basic tests—"substantial similarity" and taking "the heart" of a work. Examination of these two tests, in the context of an original work and derivative works, shows that copyright infringement law relies on four basic principles that form the core ontology of the law.

This section demonstrates how these principles can be derived from copyright infringement law. In Part II.A, the Comment outlines the substantial similarity and "heart of the work" tests. It also discusses the concept of a derivative work and how copying, without permission, in a derivative work is forbidden. This provides the groundwork for teasing out, in Part II.B, four basic principles underlying the law of copyright infringement. While these principles apply generally there are two exceptions—fair use and originality—as the Comment shows in Part II.C. In order to provide a deeper understanding of the ontology of copyright infringement law, Part II.D demonstrates that the four ontological principles of copyright infringement are an example of a real-world solution to the philosophical problem of material constitution, thus throwing light upon both the problem of material constitution and copyright infringement law.

A. Substantial Similarity, Copying the Heart of Work, and Protecting Derivative Works

One of the central tests for finding copyright infringement is the "sub-

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7 See discussion infra Parts II.A-B.
stantial similarity” test.8 According to the substantial similarity test, a work W₁ is substantially similar to another work W₂, if the ordinary observer would consider the two works to have the same “aesthetic appeal.”9 This has also been phrased as the ordinary observer recognizing that W₂ was appropriated from W₁.10 In addition, in observing that two works are substantially similar, the ordinary observer must “filter” out those components of the original work (W₁) that are in the public domain or not original to that work.11 In other words, the ordinary observer must compare only those elements of the original work, as found in the copying work, that are protectible under copyright.12

For example, in Boisson v. Banian, Ltd., the Second Circuit found that Banian’s quilts were substantially similar to Boisson’s quilt pattern.13 The court found that Banian’s quilt “ABC Green Version I” was substantially similar to Boisson’s “School Days I” in the following ways: Each quilt “consists of six horizontal rows, each row containing five blocks, with a capital letter or an icon in each block,”14 the sequence of letters in the rows was the same in each quilt, and in each box of the final row each quilt contained an icon (e.g., a cat, a single starred flag, a bear).15 In addition, the color scheme in each quilt pattern was extremely close:

“A” is dark blue on a light blue background; “B” is red on a white background; “D” is made of polka-dot fabric on a light blue background; “F” on plaintiffs’ “School Days I” is white on a pink background, while the “F” on defendants’ “ABC Green” versions is pink on a white background; “G” has a green background; “H” and “L” are each a shade of blue on a white background; “M” in each quilt is a shade of yellow on a white background. “N” is green on a white background; “O” is blue on a polka-dot background; “P” is polka-dot fabric on a yellow background; “Q” is brown on a light background; “R” is pink on a gray/purple background. “S” is white on a red background; “T” is blue on a white background; “U” is gray on a white background; “V” is white on a

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9 Boisson, 273 F.3d at 272 (quoting Folio Impressions, Inc. v. Byer Cal., 937 F.2d 759, 765 (2d Cir. 1991)) (citations omitted).
10 Suntrust Bank, 268 F.3d at 1266 (11th Cir. 2001) (citations omitted).
12 For a detailed discussion of what types of work are protected under copyright, see infra Parts III.A.1-2.
13 Boisson, 273 F.3d at 274.
14 Id. at 273-74.
15 Id.
gray background; "W" is pink on a white background; "X" is purple in all quilts, albeit in different shades, on a light background; "Y" is a shade of yellow on the same light background; and "Z" is navy blue or black, in all the quilts.\textsuperscript{16}

Importantly, the Second Circuit noted that elements in the public domain (e.g., the alphabet) were not to be considered as part of the substantial similarity test.\textsuperscript{17}

Similarly, in Benton v. Decotex, Inc.,\textsuperscript{18} the Sixth Circuit found that "Decotex's 'Eggheads' and 'Potato Heads' designs [were] substantially similar to Mr. Benton's copyrighted [T-shirt] designs."\textsuperscript{19} The court noted that Decotex's designs achieved their effect through "nearly identical means" to that of Mr. Benton.\textsuperscript{20} In particular, "they all tend to use dots for eyes, u-shaped curves for noses, and a few lines to represent hair."\textsuperscript{21} In addition, "arms, hands, and props" are depicted in the same stylized manner in both sets of T-shirts.\textsuperscript{22} Finally, the captions in each collection of T-shirts are printed in nearly identical capitalized letters and many of Mr. Benton's captions are also used in Decotex's T-shirts.\textsuperscript{23}

Direct reference to "substantial similarity" is not necessary for a finding of infringement. Copyright infringement can also be found when one author copies the "heart" of another author's work.\textsuperscript{24} For example, in Harper & Row, Publishers, Inc. v. Nation Enterprises, The Nation published an article containing quotes from President Ford's soon-to-be-published memoirs.\textsuperscript{25} Because these quotes comprised some of the most important and valuable sections of the memoirs, The Nation was found to have diminished the value of the unpublished memoirs and, by taking the heart of the work, to have infringed.\textsuperscript{26}

Similarly, in Folsom v. Marsh, a two-volume "Life of Washington" used letters copied from the plaintiff's "Writings of President Washington," in twelve volumes."\textsuperscript{27} These letters composed one-third of the "Life

\textsuperscript{16}Id. at 273-74.
\textsuperscript{17}See id. at 269.
\textsuperscript{19}Id. at *11.
\textsuperscript{20}Id.
\textsuperscript{21}Id.
\textsuperscript{22}Id.
\textsuperscript{23}Id.
\textsuperscript{24}See, e.g., Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 574 (1994) (holding that but for the fair use defense, Acuff-Rose's parody of the song Pretty Woman would be an infringing use, in part because it took the heart of the original work).
\textsuperscript{25}Id. at 544, 566-67.
\textsuperscript{27}Folsom v. Marsh, 9 F. Cas. 342, 345 (C.C.D. Ma 1841) (No. 4901).
of Washington” and played a key role in telling Washington’s story. As Justice Story noted, because these letters were some of the most valuable components of the plaintiff’s work, copying them undermined the property right in the original work. As result, they diminished the original work’s value and the defendant was found to have infringed.

Thus far, we have focused on copyright infringement in which the copying decreased the market for the original work. Copyright infringement can also occur when the copying is used in a manner that does not compete with the original work. Instead, the copying occurs in a derivative work. A derivative work is:

a work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship is a derivative work.

Such works build upon the market, characters, and structure of the original work. While illicit copying in a derivative work does not directly compete with the market for the original work, it does limit the ability of the original author to sell products based upon that original work. Importantly, it is the owner of the copyright in an original work who has the exclusive right “to prepare derivative works based upon the copyrighted work.”

For example, in Weissmann v. Freeman, the Second Circuit found that Dr. Weissmann’s article was a protectible derivative work that was infringed by Dr. Freeman’s unauthorized use. As the court noted, the article “was derived from previous papers jointly written by the parties.” Nonetheless, the work was protectible because Dr. Weissmann’s selection of subject matter and rearrangement in the article was sufficient to warrant copyright protection.

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28 Id.
29 Id. at 349.
30 Id.
31 See, e.g., Castle Rock Entm’t, Inc. v. Carol Publ’g Group, Inc., 150 F.3d 132, 135, 145 (2d Cir. 1998); Weissmann v. Freeman, 868 F.2d 1313, 1315 (2d Cir. 1989).
33 See Castle Rock Entm’t, Inc., 150 F.3d at 145.
35 Weissmann, 868 F.2d at 1316, 1327.
36 Id. at 1316.
37 Id. at 1322.
Similarly, in *Castle Rock Entertainment, Inc. v. Carol Publishing Group, Inc.*, the Second Circuit found that a trivia book based upon the popular *Seinfeld* television show infringed, in part because the trivia book was a derivative work. In essence, because the trivia book was based exclusively on the *Seinfeld* television show, it is "likely to fill a market niche that Castle Rock [owners of the *Seinfeld* television show] would in general develop."

As we can see, infringement can be found in three general settings: (1) if substantial similarity is found; (2) if one work takes the heart of another; or (3) if the later work is a derivative work of the original. It is important to note that these general methods for finding infringement tend to blend together. The central idea underlying each is that the infringing work takes away some of the "audience" for the infringed work either by providing a similar work that will appeal to the tastes of potential purchasers of the infringed work or by providing precisely what is valuable in the infringed work.

B. The Ontological Implications of Copyright Infringement

Having laid out the basic tests for copyright infringement and the basic types of works (original and derivative) that are protected from copyright infringement in the previous section, the Comment can turn to "teasing out" the basic ontological principles of copyright infringement case law. As this shows, the following four basic ontological principles can be derived:

1. Authored works are composed of identifiable sub-elements;
2. If two authored works are composed of exactly the same sub-elements, then one of those works is an infringement of the other;
3. If an authored work $W_1$ is composed of sub-elements and another work $W_2$ copies some of those elements, then $W_2$ may infringe $W_1$; and
4. If $W_2$ infringes $W_1$ by copying sub-elements $\{p_1, p_2, \ldots, p_n\}$, then any work $W_i$ that copies $\{p_1, p_2, \ldots, p_n\}$ within 70 years of the death of the sole author of $W_1$ infringes $W_1$.

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38 *Castle Rock Entm't, Inc.*, 150 F.3d at 135, 145-46.
39 Id. at 145.
In the remainder of this section, the Comment shows how each of these principles may be derived from the case law. In addition, the Comment explains precisely how each principle is an ontological principle.

1. Principle One

The first ontological principle underlying copyright infringements law is that authored works are made up of component elements. The Second Circuit adopts such a view in Computer Associates by modifying the substantial similarity test to deal with the complexities of comparing two computer programs.\(^{41}\) According to the Second Circuit, a court must first “dissect the allegedly copied program’s structure and isolate each level of abstraction . . . within it.”\(^{42}\) For example, one must dissect the program into components at the level of the code, sub-routines, modules, and subprograms.\(^{43}\) The requirement of “abstracting” elements requires seeing the authored work as composed of multiple levels of distinguishable elements.

Once abstraction has been completed, the trier of fact must filter out those components of the work that are not protected by copyright.\(^{44}\) This includes, for example, ideas, utilitarian elements of the program, and elements already in the public domain.\(^{45}\) The separation into protected and unprotected elements is an indication of the court’s recognition that authored works are made up of component elements; in particular, protected and unprotected elements.

Finally, after the part-specific process of abstraction and filtration is complete, the ordinary observer should determine if the two works are substantially similar by comparing only those elements of the work that are protected by copyright.\(^{46}\) Once again, the abstraction-dissection version of the substantial similarity test explicitly adopts a recognition that authored works are made up of identifiable sub-components.

\(^{41}\) Computer Assocs. Int’l, Inc. v. Altai, Inc., 982 F.2d 693, 706 (2d Cir. 1992) (holding that to apply the substantial similarity test the “allegedly infringed program” must be broken “into its constituent structured parts”).

\(^{42}\) Id. at 707.

\(^{43}\) Id. at 707.

\(^{44}\) Id.

\(^{45}\) Id.

\(^{46}\) Id. at 710.
Similarly, the court in Sheldon v. Metro-Goldwyn Pictures Corp., in finding that the movie Letty Lynton had infringed the play Dishonored Lady, adopts the idea that authored works can be broken into component elements.\(^{47}\) In Sheldon, the court focused on similar components of the two works such as the locale, the class of the individuals, the villain, the moral fiber of the heroine, sequences of events, etc.\(^{48}\) In making such a comparison, the court understood "authored works" to be "dissectible" into component elements. So, as Computer Associates and Sheldon make clear, the law of copyright infringement assumes:

Authored works are composed of identifiable sub-elements.

That principle 1 is an "ontological" principle follows from the fact that it limits the kinds of things (what is) to which copyright law can apply. Principle 1 requires that copyrightable works be complex in that they are composed of identifiable sub-elements. This makes sense. The court is reluctant to protect those elements of a work that are fundamentally simple.

For example, copyright regulations do not provide protection for "[w]ords and short phrases such as names, titles, and slogans; familiar symbols or designs; mere variations of typographic ornamentation, lettering or coloring."\(^{49}\) Thus, the alphabet is not protected by copyright.\(^{50}\) Similarly, "fragmentary words and phrases" like "TELEGRAM," "GIFT CHECK," or "PRIORITY MESSAGE" are not protected.\(^{51}\) Importantly, the elements composing the larger work do not, themselves, need to be divisible into further elements.\(^{52}\) The elements that compose a work may be "simple." For example, in Benton v. Decotex, Inc., the Sixth Circuit reversed the district court's finding of non-copyrightability based upon an analysis of T-shirt designs that rested upon very simple components—dots for eyes, "u" for mouths, etc.\(^{53}\)

2. **Principle Two**

The second principle of copyright infringement is that copying all of the components of a protected work is infringement. This principle follows directly from Article I, Section 8, Clause 8 of the United States Constitu-

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\(^{47}\) Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49, 56 (2d Cir. 1936) (reversing the district court's dismissal of plaintiff's action for infringement).

\(^{48}\) Id. at 54-55.


\(^{50}\) Boisson v. Banian, Ltd., 273 F.3d 262, 269 (2d Cir. 2001).


\(^{52}\) Requiring them to be so would make copyright protection impossible as nothing is infinitely divisible into component elements.

tion, which states that Congress shall have the power "[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."\textsuperscript{54} This Article is enacted in the Copyright Act of 1976, which grants the copyright owner the exclusive right "to reproduce the copyrighted work in copies."\textsuperscript{55}

As the Copyright Clause of the United States Constitution and the Copyright Act of 1976 indicate, one author may not, without permission, simply copy the work of another. As principle 1 indicates, works that fall into the domain of copyright are those that are composed of identifiable sub-elements. Thus, copying all of the parts of a work is forbidden because one will have reproduced the original in full. This is a right given explicitly and exclusively to the original author and produces the ontological principle that:

If two authored works are composed of exactly the same sub-elements, then one of those works is an infringement of the other.

Principle 2 is an ontological principle because it tells us about what is included in the universe of copyright infringement (the kinds of things that may be considered infringements of authored works). In particular, it tells us that works that are identical to prior authored works are members of the copyright infringement universe.

3. \textit{Principle Three}

A third principle of copyright infringement law is that an infringing work need not copy all of the original work—all one need copy is "enough." For example, in \textit{Harper & Row}, the United States Supreme Court found that \textit{The Nation} had infringed President Ford's unpublished manuscript by taking somewhere between 300 and 400 words out of an entire book.\textsuperscript{56} Similarly, in \textit{Roy Export Co. Establishment v. Columbia Broadcasting System, Inc.}, the district court found that taking between one to two minutes from various films was sufficient to support a copyright infringement action.\textsuperscript{57} Finally, in \textit{Folsom v. Marsh}, Justice Story found infringement because the plaintiff had copied some 353 pages out of the defendant's twelve-volume collection comprising approximately 7,000

\textsuperscript{54} U.S. CONST art. I, § 8, cl. 8.
\textsuperscript{56} 471 U.S. 539, 548-49 (1985).
\textsuperscript{57} Roy Exp. Co. Establishment v. Columbia Broad. Sys., Inc., 503 F. Supp. 1137, 1145 (S.D.N.Y. 1980). In particular, the court found that taking one minute and forty-five seconds from a one hour and twenty minute movie, three minutes and forty-five seconds of a one hour film, one minute and twenty-five seconds from a one hour and twelve minute movie, and fifty-five seconds from a one hour and twenty-nine minute film were each qualitatively substantial takings. Id. at 1143, 1145, 1147.
Copyright infringement law, as it applies to derivative works, also supports the third principle. As argued immediately below, the law of derivative works shows that the mere addition of new material to illicitly copied material is not sufficient, by itself, to avoid copyright infringement. A derivative work is "a work based upon one or more preexisting works." The author of an original work has the exclusive right to create derivative works based upon the original work. Importantly, the original author's rights regarding a derivative work authored by another extend only to those pieces of the original author's expression that the copying author copied. In other words, if a derivative work has both parts that were illicitly copied from the original work and parts that were added by the infringing author (original expression of the infringing author), the original author may only press for infringement based upon those components of the derivative work that were illicitly copied from the original work.

For example, in Weissmann v. Freeman, the Second Circuit considered Dr. Weissmann's work to be derivative of her joint work with Dr. Freeman. Dr. Weissmann's new work included components of the old, plus:

1. a selection and arrangement of photo illustrations and associated captions; 2. references to recent reports in the pertinent literature; 3. selection, condensation, and description of addition source material; 4. several new textual additions; 5. substantial rearrangement of the manner and order of presentation of material contained in the parties' prior joint works; and 6. the addition of a section on "congenital disorders," a revised treatment of "chronic cholecystitis," and the incorporation of Dr. Freeman's "false positive" studies.

Similarly, in Castle Rock Entertainment, Inc. v. Carol Publishing Group, Inc., the Second Circuit found that a trivia book based upon the popular Seinfeld television show was a derivative work. In so finding, the court noted that (1) every question in the trivia book was based upon "a fictional moment in a Seinfeld episode," (2) "[f]orty-one questions and/or answers contain dialogue from Seinfeld," (3) twenty questions in the book "directly quote between 3.6% and 5.6% of" a particular episode ("The Ci-

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58 Folsom v. Marsh, 9 F. Cas. 342, 345 (C.C.D. Mo. 1841) (No. 4901).
60 Id. § 106(2).
61 Id. § 103(0).
62 Weissmann v. Freeman, 868 F.2d 1313, 1316, 1323 (2d Cir. 1989).
63 Id. at 1322.
64 Castle Rock Entm't, Inc. v. Carol Publ'g Group, Inc., 150 F.3d 132, 145 (2d Cir. 1998).
65 Id. at 136.
66 Id.
gar, Store Indian"), and (4) essentially copied "643 fragments from 84 individual copyrighted Seinfeld episodes."

As these cases make clear, copyright law adopts the position that infringement can occur when only some portion of an original work is copied. Thus we have the principle:

If an authored work W₁ is composed of sub-elements and another work W₂ copies some of those elements, then W₂ may infringe W₁.

The word "some" in principle 2 is used to indicate that the infringing work must take some proportion n/m of the elements of another work in order to be considered an infringement. The difficulty is in determining precisely the value of n/m. The Comment fails to fill in the variables "n" and "m" because the value of n/m seems to change based upon the circumstances and because the determination of the "right" n/m for a particular case falls more squarely in the field of the epistemology of copyright infringement.

Principle 3 expands the universe of things that fall under copyright infringement. While principle 2 allows in any work that copies all of another, principle 3 expands that to include works that copy some portion of another work. Thus, principle 3 is ontological because it tells us when something does or does not belong in the copyright infringement "universe."

Finally, principle 3 also implicitly supports principle 1. Principle 3 requires that an infringing work be composed of some amount of the original work. In order for one work to contain some of another, each work must be capable, in principle, of being divided into component elements, which is precisely what principle 1 requires.

4. Principle Four

The fourth principle of copyright infringement addresses the problem of time. If copying some of a work today is infringement, is there a time where such copying would no longer be infringement? According to the United States Constitution, copyrights exist only for a limited period of time. This duration of copyright is enacted in § 302 of the Copyright Act of 1976. In general, if a work was created no earlier than January 1,

67 Id.
68 Id. at 138.
69 Congress shall have the power "[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." U.S. Const. art. I, § 8, cl. 8 (emphasis added).
70 17 U.S.C. § 302 (2000). The United States Supreme Court has recently granted a writ of certiorari to a case that argues the current duration of copyright as expanded by the Sonny Bono Copyright Term Extension Act, Pub L. No. 105-298, 112 Stat. 2827 (codified at 17 U.S.C. § 302 (2000)), is un-
1978, copyright protection will last for 70 years after the death of the author.\textsuperscript{71} For joint works, the copyright lasts for 70 years after the death of the last surviving author.\textsuperscript{72} For anonymous or pseudonymous works and works made for hire, the copyright extends for 95 years from the year of first publication or 125 years from its creation (whichever expiration occurs first).\textsuperscript{73}

As the statute and Constitution make clear, copyright protection exists for a limited amount of time. This indicates that the fourth principle of copyright protection is that:

a. If $W_2$ infringes $W_1$ by copying sub-elements \{p_1, p_2, \ldots, p_n\}, then any work $W_i$ that copies \{p_1, p_2, \ldots, p_n\} within 70 years of the death of the sole author of $W_i$ infringes $W_1$.

b. If $W_2$ infringes $W_1$ by copying sub-elements \{p_1, p_2, \ldots, p_n\}, then any work $W_i$ that copies \{p_1, p_2, \ldots, p_n\} within 70 years of the death of the last joint author of $W_i$ infringes $W_1$.

c. If $W_2$ infringes $W_1$ by copying sub-elements \{p_1, p_2, \ldots, p_n\}, then any work $W_i$ that copies \{p_1, p_2, \ldots, p_n\} within the earlier of 95 years from publication or 125 years from creation of the anonymous or pseudonymous work or work for hire $W_i$ infringes $W_1$.

For the purpose of simplicity of prose, the Comment focuses solely on principle 4a and calls it "principle 4."

Principle 4 is an ontological principle because it limits how long a thing may stay in the copyright infringement universe. This dictates what is in that universe. Thus, an illicit copy of this Comment may be in that universe for seventy years from the author's death. After that point in time, any copy of this Comment cannot be in the universe of copyright infringement.

5. A First Summary of the Objects of Copyright Infringement

These four principles roughly describe the basic ontological principles underlying the law of copyright infringement. Furthermore, with these


\textsuperscript{72} 17 U.S.C. § 302(a) (2000).

\textsuperscript{73} Id. § 302(b).

\textsuperscript{73} Id. § 302(c). If the author of an anonymous or pseudonymous work is made known and such author registers the work in the author's name, the duration of the copyright is then controlled by 17 U.S.C. § 302 (a) or (b). Id.
four principles in hand we can begin to develop a rough outline of the types of entities that "exist" in copyright infringement law. For example, these entities may be simple or complex. Complex entities are made up of other (simple or complex) entities. Only complex entities (those divisible into components) are protected from copying or are capable of infringing the copyright of another entity. (My copying your use of the alphabet is not infringement; although, if I copy a string of letters unique to you, then I may have infringed.) Infringing entities include those that take all of a protected work's parts (principle 2), or take some and add (a) nothing, (b) something in the public domain, or (c) something new or novel (principle 3). Finally, something may exist in the copyright infringement universe only for a limited period of time (principles 4a-c).

While this does not, necessarily, give a complete list of the elements and distinctions between elements in copyright infringement law, it does provide a good start which will be completed in Part IV. For the moment, let us turn to two exceptions to these four principles—the fair use exception and the originality exception.

C. Fair Use and Originality

As noted above, there are four basic principles underlying copyright infringement. Interestingly, these principles are sometimes ignored. For example, fair use sometimes permits principle 3 to be violated. While the requirement that a work be original sometimes permits principle 2 to be over-ridden. While these exceptions to the general rule are important in their own right and deserve an in-depth analysis, such analysis is avoided here as outside of the scope of this Comment (to provide a basic, core ontology of copyright infringement law). Instead, the Comment provides a basic overview of the two overriding exceptions to the four principles of copyright infringement.

1. Fair Use and Principle Three

A reproduction of another author's copyrighted work is fair use, and therefore not infringement, if the reproduction is for purposes of "criticism, comment, news reporting, teaching . . . , scholarship, or research."\textsuperscript{74} In determining whether a use is a fair use, the court must focus on four basic factors:

1. The purpose and character of the use,
2. The nature of the copyrighted work,
3. The amount and substantiality of the portion used in

\textsuperscript{74} Id. § 107.
relation to the copyrighted work as a whole, and

4. The effect of the use upon the potential market for or value of the copyrighted work.\textsuperscript{75}

In assessing factor 1, the United States Supreme Court has held that:

the central purpose of this investigation is to see . . . whether
the new work merely supersedes[s] the objects of the original
creation, or instead adds something new, with a further pur-
pose or different character, altering the first with new expres-
sion, meaning, or message; it asks, in other words, whether
and to what extent the new work is transformative.\textsuperscript{76}

In addition, the Court has held that the greater the transformative nature of
the new work, the less important the remaining factors.\textsuperscript{77}

According to principle 3, if an authored work $W_1$ is composed of sub-
elements and another work $W_2$ copies some of those elements, then $W_2$ may
infringe $W_1$. On occasion, this principle is rejected for the purpose of sup-
porting fair use. For example, in Kelly v. Arriba Soft Corp., the Ninth Cir-
cuit found no infringement when a software company used a web-crawler
to locate pictures on the internet, copy them, and reproduce them as low-
resolution "thumbs" on its website.\textsuperscript{78} The court found that the software
company had altered the pictures in a way that was "transformative."\textsuperscript{79}

Similarly, in Nunez v. Caribbean International News Corp., a newspaper
printed photographs of Ms. Puerto Rico Universe, taken by the plain-
tiff, along with editorial commentary.\textsuperscript{80} The plaintiff had originally used
the pictures as part of a modeling portfolio.\textsuperscript{81} The court concluded that the
newspaper's use was transformative and found, as a result, fair use and no
copyright infringement.\textsuperscript{82}

Thus, even though each of these "fair use" works took almost all of the
original work and altered them only slightly (in the case of Arriba Soft
actually by subtracting), no infringement was found.

2. Originality and Principle Two

As Part II.C.1 makes clear, on occasion principle 3 is rejected in order
to support the statutory protection for fair use. In addition, principle 2 may

\textsuperscript{75} Id.
\textsuperscript{76} Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 579 (1994) (internal quotations and citation
omitted).
\textsuperscript{77} Id.
\textsuperscript{78} Kelly v. Arriba Soft Corp., 280 F.3d 934, 938 (9th Cir. 2002).
\textsuperscript{79} Id. at 941.
\textsuperscript{80} Nunez v. Caribbean Int'l News Corp., 235 F.3d 18, 21 (1st Cir. 2000).
\textsuperscript{81} Id.
\textsuperscript{82} Id. at 20, 23.
be overridden in order to support copyright's basic protection of original works.

According to principle 2, if two authored works are composed of exactly the same sub-elements, then one of those works is an infringement of the other. Thus, if I simply take a copy of your copyrighted work and pass it off as my own or sell it without your permission, then I have engaged in copyright infringement. Nonetheless, it is possible, in principle, for two works to be identical, in the way described by principle 2, without there being infringement.

For example, in Sheldon v. Metro-Goldwyn Pictures Corp., Judge Learned Hand noted that "but if by some magic a man who had never known it were to compose anew Keats's Ode on a Grecian Urn, he would be an 'author,' and, if he copyrighted it, others might not copy that poem, though they might of course copy Keats's."83

In essence, even if two works, each by a different author, are precisely identical the later work need not be an infringement of the earlier work. The later work will fail to infringe if it was generated by its author as a pure act of original creativity.

3. Two Exceptions Ignored

While these two exceptions to copyright infringement are vital to the law of copyright, examination of them in the present work would take us far from our central goal—to develop a basic ontological scheme for copyright infringement. Thus, while we must note the exceptions, we must, essentially, ignore them.

D. The Problem of Material Constitution

While it is interesting, in and of itself, to tease out the four basic principles that underlie the law as it applies to copyright infringement, the implications of those principles for both the law and philosophy are even more interesting. This section argues that the four principles of copyright infringement provide an example of a practical solution to a general philosophical problem: The problem of how a thing remains the same thing despite undergoing change. To do so, the Comment first explains the general philosophical problem by reference to two philosophical "puzzles." Next the Comment shows that these puzzles express an underlying problem—the problem of material constitution. Finally, the Comment shows that the principles of copyright infringement are analogous to a particular solution to the problem of material constitution.

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83 Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49, 54 (2d Cir. 1936).
1. *Examples of the Philosophical Problem*

There is a fairly old adage which goes "the more things change, the more they stay the same." Yet, philosophers have struggled for over two thousand years with the problem of how things can undergo change yet remain the same. For example, in a very real sense, each of us is the same person we were as children. Yet, we are radically different from what and who we were those many years ago. In this Part, the Comment provides two basic examples of the puzzles with which philosophers have wrestled in trying to understand how things can remain the same despite change. As these puzzles show, our basic intuitions about change and sameness lead us into self-contradiction. It is the attempt to unravel that self-contradiction that philosophers have focused their analytic efforts for millennia. Furthermore, it is that self-contradiction that this Comment argues the principles of copyright infringement provide a practical method for avoiding.

a. Transitivity of Identity

Central to understanding each of these puzzles is the principle of transitivity of identity ("TI"). According to TI, if two entities are the same as each other, then anything that is the same as one of those entities, is also the same as the other of those identities. For example, assume that George Washington is (the same as) the first President of the United States and that the first President of the United States is the husband of Martha. It then follows, by TI, that George Washington is the husband of Martha. TI can be expressed more formally as: if \( x = y \) and \( y = z \), then \( x = z \).

It follows from TI that when two things are the same and we know that one of those original things is different from a third, then the other original entity is also different from the third. For example, if George Washington is the first President of the United States, and the owner of Monticello (Thomas Jefferson) is *not* the first President of the United States, then George Washington is not the owner of Monticello. More formally, we know that: if \( x = y \) and \( x \neq z \), then \( y \neq z \).

b. The Growing Problem

TI plays an important role in both of the identity puzzles discussed in this Comment. The first identity puzzle is called "the Growing Argument" (hereinafter "the Growing Problem").\(^{84}\) The Growing Problem originated in the fifth century B.C. with the writings of the playwright Epicharmus.\(^{85}\) The scene in Epicharmus' play in which the Growing Problem arises depicts two people—Dave, the debtor, and his friend, Larry, the lender.\(^{86}\)

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85 Id.
86 The version presented here has been modified and expanded, slightly, to make the problem more understandable to the reader. See id. (laying out the philosophical argument).
Larry loaned Dave some money a few days ago. Larry now (today) asks Dave for the money back. Dave replies that he does not owe Larry any money. This confuses Larry and Dave explains, using a philosophical argument, why he (Dave) is not the same person who borrowed the money from Larry and, therefore, is not obligated to repay the money.

Dave’s argument begins by assuming that a person is identical to the sum of his parts. (The aggregate of particles that compose the person.) He then states T1: If $x = y$ and $y = z$, then $x = z$ and its logical consequence that if $x = y$ and $x \neq z$, then $y \neq z$. Dave then states that at time $t_1$, Larry loaned money to someone, call him $d_1$, who was composed of (identical to) the particles $\{p_1, p_2, p_3\}$. Today, at time $t_2$, Larry is asking for repayment from Dave (call him $d_2$), $d_2$ is composed of (identical to) the particles $\{p_1, p_2, p_3, p_4\}$. Dave’s point is that because $\{p_1, p_2, p_3\} \neq \{p_1, p_2, p_3, p_4\}$ it must also be the case that $d_1 \neq d_2$. As a consequence, because $d_1$ borrowed the money and Dave ($d_2$) is not $d_1$, Dave ($d_2$), is not obligated to repay Larry.

We can see this more formally in the following argument:

1. $d_1 = d_2$ Assumption
2. $\{p_1, p_2, p_3\} = d_1$ Definition of $d_1$
3. $\{p_1, p_2, p_3\} = d_2$ By transitivity of identity 1, 2:
If $\{p_1, p_2, p_3\} = d_1$ and $d_1 = d_2$, then $\{p_1, p_2, p_3\} = d_2$
4. $d_2 = \{p_1, p_2, p_3, p_4\}$ Definition of $d_2$
5. $\{p_1, p_2, p_3\} = \{p_1, p_2, p_3, p_4\}$ Transitivity of identity 3, 4
6. But, $\{p_1, p_2, p_3\} \neq \{p_1, p_2, p_3, p_4\}$ Definition of “=” (reductio)

Steps five and six produce a contradiction. Consequently, we have a reductio ad absurdum and our assumption, $d_1 = d_2$, must be false. It must be the case that $d_1 \neq d_2$. In other words, Dave ($d_2$) is not the same person who borrowed the money ($d_1$). Thus, by logic, it is clear that the person who Larry has approached for the repayment of the debt cannot be the same person to whom Larry made the loan. As a result, Larry is asking for his money back from a different person than the one who borrowed it. Assuming that only the person who borrowed the money has a duty to repay it, Dave ($d_2$) has no obligation to repay the money borrowed.

The puzzle, of course, is that Dave ($d_2$) is the same person who borrowed the money from Larry. Yet our intuitions about identity and change lead us to the inconsistency that the person who borrowed the money is not the person who borrowed the money. The question then is: How do we alter our intuitions to avoid the inconsistency?

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87 Dave could have put on some weight. However, notice that the argument still works if Dave loses weight or simply changes with regard to the set of particles from which he is composed.
c. The Ship of Theseus

The Ship of Theseus puzzle began as a Growing Problem but, through modification, now stands on its own.\textsuperscript{88} Plutarch is the first to describe the (actual) Ship of Theseus and its relation to the growing problem:

The ship on which he [Theseus] sailed with the youths and was kept safe [coming] back, the thirty-oared vessel, the Athenians preserved until the time of Demetrius of Phalerus, removing the old pieces of wood and putting in strong ones, and putting them together so that the ship was a model for the philosophers with respect to the disputed argument about growing, some of them saying it remained the same, some of them saying it did not remain the same.\textsuperscript{89}

This version of the problem clearly relates to the Growing Problem. The problem became more sophisticated (and perhaps more clear) with a modification developed by Hobbes.\textsuperscript{90} On the Hobbesian account, the Ship of Theseus is a wooden ship. Slowly but steadily each plank is removed, piled up, and replaced with a new plank. Only one plank is ever removed and replaced at any one point in time. Our intuitions lead us to believe that the ship survives each individual replacement. In other words, we still have the Ship of Theseus after we replace one plank. Each additional plank replacement seems insufficient to alter our perception that we are dealing with the Ship of Theseus.

At some point, all of the planks have been replaced and we have a pile of planks that formerly composed the Ship of Theseus piled somewhere. At this point, someone comes along and uses those planks to “rebuild” the Ship of Theseus. Our intuitions make us think that this rebuilt ship is the Ship of Theseus. (After all, it is constructed precisely from the planks that made up the original.) But then we have two Ships of Theseus. The puzzle is to determine just which ship is the Ship of Theseus.

More formally, we have a Ship $s_1$ which is originally composed of planks $\{p_1, p_2, ..., p_n\}$. At some later time, we replace $p_1$ with $p_1'$. At this point, $s_1$ is composed of $\{p_1', p_2, ..., p_n\}$. Since $n$ is fairly large and the change to $s_1$ is minor, we assume that $s_1$ still is the same ship as it was originally. The process continues until $s_1$ is composed of $\{p_1', p_2', ..., p_n'\}$. Because each change was minor we consider $\{p_1', p_2', ..., p_n'\}$ to be $s_1$. But now someone takes all of the $p$s and builds $s_2$. $s_2$ is composed of $\{p_1, p_2, ..., p_n\}$. This looks just like the original version of $s_1$. Hence our dilemma.

Once again, let us put this into the form of a formal argument:

\textsuperscript{88} See Rea, supra note 84, at 531.

\textsuperscript{89} Id.

\textsuperscript{90} Id. at 531-32 n.14.
1. \( \{p_1, p_2, ..., p_n\} = s_1 \)  
   \( s_1 = \text{"Ship of Theseus"} \)  
   Definition of \( s_1 \)  

2. \( s_1 = \text{"Ship of Theseus"} \)  
   Definition of Ship of Theseus  

3. \( \{p_1, p_2, ..., p_n\} = \text{"Ship of Theseus"} \)  
   By transitivity of identity 1, 2  

4. \( \{q_1, p_2, ..., p_n\} = s_1 \)  
   Assumption about identity through change  

5. \( \{q_1, q_2, ..., p_n\} = s_1 \)  
   Assumption about identity through change  

6. \( \{q_1, q_2, ..., q_n\} = s_1 \)  
   Assumption about identity through change  

7. \( s_2 = \{p_1, p_2, ..., p_n\} \)  
   Definition of \( s_2 \) (rebuild the ship from discarded planks)  

8. \( s_2 = \text{"Ship of Theseus"} \)  
   By transitivity of identity 3, 7  

9. \( s_1 = s_2 \)  
   By transitivity of identity 2, 8  

10. \( s_1 \neq s_2 \)  
    Because each ship is spatially distinct  

Thus, our beliefs about identity and change lead us into a contradiction once again.

2. The Problem of Material Constitution

As these two problems show, our basic intuitions about how things remain the same throughout change lead us into self-contradiction. Philosophers' attempts to develop a rational solution to this self-contradiction requires that they first identify what intuitions underlie these problems and how those intuitions prove to be self-contradictory. This section of the Comment examines one such approach. According to Professor Rea, both the Growing Problem and the Ship of Theseus can be seen as examples of the Problem of Material Constitution.\(^{91}\)

a. The Problem of Material Constitution Defined

The Problem of Material Constitution arises when two objects are the same as each other, yet they relate differently to their component elements.\(^{92}\) As both the Growing Problem and the Ship of Theseus show, our intuitions about change can lead us to make inconsistent claims.\(^{93}\) According to Professor Rea, these intuitions can be boiled down to five basic assumptions where each of those assumptions is plausible standing alone; but, if we accept all five, then we leave ourselves open to inconsistencies.

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\(^{91}\) id. at 525. Professor Rea also argues that two other types of puzzles, the Body-Minus problem and the Lump/Goliath problem, can be understood to be examples of the problem of material constitution. id. at 525, 537.

\(^{92}\) id. at 527.

\(^{93}\) See discussion supra Parts II.D.1.b-c.
in our reasoning. These five assumptions are:

1. Existence assumption: There are things and they are composed of component elements ("elements");

2. Essentialist assumption: If a thing is composed of elements, then changing (through replacement, removal or addition) enough (perhaps even one) elements will destroy the thing;

3. Principle of alternative compositional possibilities ("PACP"): If a thing is composed of elements, then changing (through replacement, removal, or addition) some (perhaps all) of the elements will not necessarily destroy the thing;

4. Identity assumption: If two things are made of the same elements, then those two things are the same thing;

5. Necessity assumption: If two things are the same thing, then they must always be the same thing.

With these five assumptions we open the door to both the Growing Problem and the Ship of Theseus. But, if we reject any one of the assumptions, then we find a solution to both problems. The question then becomes: Which assumption do we reject?

In order to properly understand the Problem of Material Constitution, we need first to clarify the meaning of each of the assumptions that underlie it. For example, according to the Existence assumption, there are things and they are composed of elements. This assumption reflects our intuitions that there are things in the world (something exists) and that whatever exists is composed of other things (elements). For example, William Shakespeare’s Julius Caesar exists and is composed of five acts, the characters Julius Caesar, Marcus Antonius, Cicero, Publius, Decius Brutus, a plot to kill Julius Caesar, stage directions, and so on.

The second assumption, the Essentialist assumption, holds that if a

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94 Rea, supra note 84, at 526.  
95 Id. at 526-28.  
96 Professor Rea uses the term “part” or “particle” rather than “element.” This Comment prefers the term “element” because of the discussion, infra Part III, of how copyright infringement relies upon copying of parts as opposed to pieces.  
97 Id. at 531, 537.  
98 Id. at 527.  
99 The Existence assumption can be represented formally as: (∃x)(∃es)(∃t) (Fx & esCx,t); where x is the thing F that exists, the es are the elements, and t is time. Id.
thing is composed of elements, then changing (through replacement, removal, or addition) enough (perhaps even one) elements will destroy the thing. This assumption represents our intuition that the thing is simply what makes it up. So, if we change what makes it up, then we have destroyed the thing. In other words, the identity relationship between the parts of a thing and the thing itself is such that alteration of the parts destroys that identity relationship.

For example, the five acts (that make up *Julius Caesar*) are all and only necessary for (something to be) *Julius Caesar*. According to the Essentialist assumption, if you make any change to those acts (e.g., remove one), then while you have something, you do not have *Julius Caesar*. This makes sense for *Julius Caesar*: After all, would the play make sense if we lost any one of the acts? Would it be the same play, if we added an act or replaced it with an act from *Macbeth*?

According to the third assumption, PACP, if a thing is composed of elements, then changing (through replacement, removal, or addition) some (perhaps all) of the elements will not necessarily destroy the thing. PACP represents the countervailing intuition to the Essentialist assumption: That some things can survive changes to the elements that compose it.

For example, even though *Julius Caesar* is composed of all of the words that make it up, *Julius Caesar* would not be destroyed if William Shakespeare had changed a few sentences or replaced some minor character. So PACP rejects the view that the five acts are all and only necessary for *Julius Caesar*.

According to the Identity assumption, if two things are made of the same elements, then those two things are the same thing. On this assumption, things are simply what they are composed of. For example, *Julius Caesar* simply is the same thing as the ordered string of words that make it up. If you have that string of words, then you also have *Julius Caesar*.

Lastly, according to the Necessity assumption, if two things are the same thing, then they must always be the same thing. This assumption

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100 Id.
101 See id. (explaining the Essentialist assumption can be represented formally as: \((\forall x)(\forall y)(\forall t) [\neg(Fx \land esCx,t) \rightarrow (\exists z)(esCz,t \land (\neg \neg (\forall q)(\forall t)(qsCz,t \rightarrow xRqs))]); where esCz,t is the relation, \(z\) is composed of the es at \(t\), and \(xRqs\) is the relation \(z\) requires all and only the qs).
102 Id. at 527-28.
103 See id. at 528 (explaining that PACP can be represented formally as: \((\forall x)(\forall y)(\forall t) [(Fx \land esCx,t) \rightarrow (\exists z)(esCz,t \land 0 (\neg q)(\forall y)(qsCz,t \land \neg (xRqs)))]).
104 Id. at 527-28.
105 See id. at 528 (explaining that the Identity assumption can be represented formally as: \((\forall x)(\forall y)(\forall t)(\forall q)(esCx,t \land esCy,t) \rightarrow x=y)).
106 Id. at 527-28.
strengthens the Identity assumption, by requiring that if two things are identical they are always identical. This assumption makes a lot of intuitive sense, but it has important consequences because of the transitivity of identity.

For example, *Julius Caesar* is the same thing as the ordered string of words that compose it. If we adopt the Necessity assumption, then if you make any change to that string of words, you no longer have *Julius Caesar*. More specifically, assume, for simplicity’s sake, that *Julius Caesar* is identical with that string of words: “Ay, Casca. Tell us what hath chanced today [t]hat Caesar looks so sad.” According to the Necessity assumption, if we make any change to that string of words (say of “sad” to “melancholy”), we get something new—something that is not *Julius Caesar*. It is not *Julius Caesar* because if it were, then, by the transitivity of identity, the two strings of words would have to be the same. In essence, because each string is identical to the same thing, *Julius Caesar*, the strings must be identical to each other. However, we know that the strings are not identical. Thus, any change to the parts makes a new thing.108

Thus far, this Comment has merely stated what the Problem of Material Constitution is and clarified the assumptions it identifies as relevant to the problem. In the next sections, this Comment shows that both the Growing Problem and the Ship of Theseus are instances of the Problem.109

b. The Growing Problem as an Example of the Problem of Material Constitution

The Growing Problem is a version of the Problem of Material Constitution. We can see this by examining just how acceptance of each of our five assumptions is built into the problem and that by elimination of just one of those assumptions resolves the puzzle.110

First, one must examine the Existence assumption. Clearly, the Growing Problem assumes that there are people (Dave and Larry must exist) and that those people are made up of parts that also exist.111 The Essentialist assumption states that given that Dave exists and is composed of parts,
Dave must be the sum of exactly those parts (this is Dave’s view). The PACP states that given that Dave exists and is composed of parts, Dave can continue to exist even if he is composed of different parts (this is Larry’s view). The Identity assumption simply requires that Dave and the parts that make up Dave are the same thing. Finally, if an aggregate of parts is identical to Dave, then Dave and those parts must always be the same (this is the Necessity assumption).

As the argument shows, these five assumptions lead to the view that Dave is identical to two different aggregates of parts, which, by transitivity of identity, requires that those different aggregates of parts be the same. This is, of course, impossible. Two things that are different are not the same.

This contradiction can be avoided in any number of ways. If we reject the Existence assumption, then the whole problem simply disappears. In its most plausible form, this would require us to reject the idea that people are made up of parts. (Perhaps people are best identified by their “souls” or minds.) Thus, it would be impossible for Dave to have a change in parts. Therefore, the Dave that borrowed the money the other day is the same as the Dave who is being asked for it today.

We could reject the Essentialist assumption. In that case, we have rejected the idea that Dave must be composed of a single, unique aggregate of particles. PACP then allows Dave to gain or lose some particles without the destruction of the earlier Dave and his replacement by the later Dave. Thus, Dave today, even with a few more or less parts, is the same as the Dave who borrowed the money before.

Note how this differs from a situation in which we reject PACP. In that case, by the Essentialist assumption, Dave must be identified with a particular set of parts. Any change to those parts and a “new” Dave results. Thus, if we reject PACP, we must agree with Dave who says, “I am not the same person to whom you loaned the money.” While this is not an intuitively pleasant solution, it is a solution to the problem.

The Identity assumption requires that we assume that when two things are composed of the same parts, then both of those things are the same thing. Reject this assumption and we can have two things that consist of different parts that are the same. This conforms to our intuitions about people. For example, if I lose a finger, I am still the same person I was prior to the loss of the finger even though that “prior me” and the “current

\[112\] \textit{Id.} 529-30.
\[113\] See \textit{id.} at 531 (explaining how the Essentialist assumption relates to the PACP).
\[114\] \textit{Id.} at 530.
\[115\] \textit{Id.} at 530-31.
\[116\] See discussion supra Part II.D.1.b.
me" do not share the same parts. As a result, Dave still owes Larry the money.

Finally, we could reject the Necessity assumption. According to the Necessity assumption, if two things are equal they must always be equal. Thus, if we assume that Dave is identical to the sum of his parts (this follows from acceptance of the identity assumption), then Dave and those parts must always be identical. If we reject the Necessity assumption we move to a form of temporal identity. Dave at time $t$ may be identical to some set of parts, but that does not require that Dave at some later time be identical to those same parts. Thus, Dave is still Dave even though the later Dave is not made up of the same parts as the earlier Dave. As a result, the later Dave still owes the money to Larry.

c. The Ship of Theseus as an Example of the Problem of Material Constitution

The Ship of Theseus is also an example of the Problem of Material Constitution. Consequently, it must accept all five assumptions and a solution can be found by rejecting any one of those assumptions. In the Ship of Theseus, the Existence assumption is that there is a Ship of Theseus and planks that compose it. The Essential assumption simply requires that the Ship of Theseus be composed of some proportion $n/m$ of the planks that originally composed it. In other words, the Ship of Theseus is the sum of at least $n/m$ of the original parts. PACP states that the Ship of Theseus can undergo a complete replacement of its parts. The Identity assumption requires that if the Ship of Theseus is made up of some set of planks, then that set of planks is identical to the Ship of Theseus. Finally, the Necessity assumption states that if the Ship of Theseus is identical to some set of planks, then the Ship of Theseus can only be made up of those planks.

As shown above, if we accept these five assumptions, then we must conclude that both the ship made up of all replacement planks and the ship made out of the discarded planks are the Ship of Theseus. Because two different ships cannot be the same ship, this is clearly a contradiction. Yet, if we reject any one of these assumptions, the problem will disappear.

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117 Although there is obviously a sense in which I would change. For instance, the loss of a finger might alter my personality in some way; however, we would still want to say that I am the same person.

118 Rea, supra note 84, at 533.

119 Id. at 534.

120 See id.

121 Id.

122 See id. at 535.

123 See id.

124 See discussion supra Part II.D.1.c.
Once again, if we reject the Existence assumption, then we would reject the idea that ships are composite entities—things that are made of their parts. The problem would have to be restated in a fashion that does not assume that ships are the same as the things that make them up. So the problem goes away because it makes no sense to even ask the question.

Rejecting the Essentialist assumption allows us to take PACP seriously—in which case, a thing can survive the complete replacement of its parts. As a result, the ship that has undergone complete repair is the Ship of Theseus. On the other hand, rejecting PACP entails that a thing can only survive so much replacement of its parts. Thus, the Essentialist assumption comes into play and the ship of Theseus is the Plank Hoarder’s ship (the ship built from the discarded planks).

If we reject the Identity assumption then we are led to the idea that there were at least two ships located in the same space. One of these ships was dismantled and rebuilt and the other survived the slow but steady replacement of its parts. This resolves the problem because there is no single Ship of Theseus. Finally, if we reject the Necessity assumption, then we move to the concept of temporal identity. This concept assumes that some object $O_1$ is identical to some other object $O_2$ at time $t$; yet at some other time $t'$, $O_1$ is distinct from $O_2$. In other words, a thing can remain the same even if its parts change over time.

Thus far, this section has laid out the Problem of Material Constitution through two philosophical puzzles about change over time. We have found that these puzzles can be resolved by rejecting any one of five plausible assumptions that we hold. In the next section, the Comment examines copyright law in light of these five assumptions in order to show that copyright law provides a particular answer to the Problem of Material Constitution.

3. The Principles of Copyright Infringement as a Practical Solution to the Problem of Material Constitution

Thus far this Comment has argued that four basic principles underlie the law of copyright infringement. In this section, the Comment shows that those four basic principles are analogous to four of the assumptions under-
lying the Problem of Material Constitution (the Existence assumption, the Identity assumption, PACP, and the Necessity assumption). Consequently, this Part argues that copyright infringement law provides an actual example of a solution to the problem of material constitution in which the Essentialist assumption is rejected.

a. The Four Principles Are the Four Assumptions

As argued above, copyright law adopts four basic principles: 135

1. Authored works are composed of identifiable sub-elements;

2. If two authored works are composed of exactly the same sub-elements, then one of those works is an infringement of the other;

3. If an authored work \( W_1 \) is composed of sub-elements and another work \( W_2 \) copies some of those elements, then \( W_2 \) may infringe \( W_1 \); and

4. If \( W_2 \) infringes \( W_1 \) by copying sub-elements \( \{ p_1, p_2, \ldots, p_n \} \), then any work \( W_1 \) that copies \( \{ p_1, p_2, \ldots, p_n \} \) within 70 years of the death of the sole author of \( W_1 \) infringes \( W_1 \).

These four principles correspond, respectively, to the Existence assumption, the Identity assumption, PACP, and the Necessity assumption of the Problem of Material Constitution. Those assumptions are:

1. Existence assumption: There are things and they are composed of component elements ("elements");

2. Identity assumption: If two things are made of the same elements, then those two things are the same thing;

3. PACP: If a thing is composed of elements, then changing (through replacement, removal, or addition) some (perhaps all) of the elements will not necessarily destroy the thing;

4. Necessity assumption: If two things are the same thing, then they must always be the same thing.

Principle 1 of copyright infringement law (authored words are com-

135 See discussion supra Parts II.B.1-4.
posed of identifiable sub-elements) is analogous to the Existence assumption (there are things and they are composed of component elements). The Existence assumption contains two claims: First that there are things (this is the existence part) and second that the things that exist are composed of component elements. Principle 1 implies that there are things—the authored works and their parts. This is analogous to the first claim in the existence assumption. Principle 1 also restricts the universe of things to those that are made up of sub-elements. This is analogous to the second claim of the Existence assumption. Thus, because principle 1 contains both elements of the Existence assumption it should be understood as an analogue to the Existence assumption.

Principle 2 is analogous to the Identity assumption. Principle 2 requires that if two authored works are composed of the same sub-elements, then one of them is an infringement of the other. The Identity assumption requires that when two things are composed of the same elements, then they are the same thing. The antecedent in both principle 2 and the Identity assumption is the same. Each requires that two things be composed of elements and that both things be composed of the same elements. The central difference between the principle and the assumption is in the consequent. The assumption states that identity of elements entails identity of things. The principle states that identity of elements entails infringement by one of the works. While these are different consequents, they are analogous. Principle 2 can be understood as saying when we find two works that have identical elements, one is a copy of the other: In essence, the works are the “same.” Thus, principle 2 can be seen as saying the same thing as the identity assumption. Both find “identity” of the wholes when there is identity of the elements.

Principle 3 is also analogous to the PACP. Both principles weaken their respective identity principles. Principle 3 weakens principle 2 (which finds infringement only in cases of exact copying of all the elements), finding infringement when one copies only some of the elements. PACP weakens the identity assumption (which finds two things identical only if they have exactly the same parts) in precisely the same manner—allowing two things to be identical even if they do not share all of the same component elements (e.g., myself and myself with the loss of a finger). In essence, both principle 3 and PACP adopt the view that a change to the elements that compose a thing does not necessarily destroy the “identity” relationship between the elements and the whole.

Finally, principle 4 is analogous to the Necessity assumption. Both principle 4 and the Necessity assumption discuss the “staying power” of an identity relationship across time. The central difference is that the Neces-

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136 When a statement takes the form “if A, then B”, clause A is called the antecedent and the clause B is called the consequent.
sity assumption holds that once an identity relationship is established, it can never be broken while principle 4 holds that once an identity (infringement) relationship is established, it lasts for seventy years after the death of the author. While these two differ in the scope (length of time) of the identity relationship, both do, roughly, the same thing—determine how long the identity relationship lasts. Thus, while principle 4 and the Necessity assumption are not as close as other principle-assumption pairs, principle 4 is, roughly, analogous to the Necessity assumption.

b. Rejecting Essentialism

As noted above, the four principles of copyright infringement are analogous to four of the assumptions underlying the Problem of Material Constitution. As this section shows, it is by rejecting the fifth assumption (the Essentialist assumption) that copyright infringement law avoids the self-contradictions implicit in Problem of Material Constitution.

According to the Essentialist assumption, if a thing is composed of parts, then changing some of the parts will destroy the thing. Based on the model provided by principle 3, we can state an analogous “fifth” principle of copyright law:

If an authored work \( W_1 \) is composed of sub-elements and another work \( W_2 \) copies some and changes (through addition or alteration) some of those elements, then \( W_2 \) does not infringe \( W_1 \).

As our discussion of principle 3 indicates, copyright law, in general, rejects this principle.

For example, in Harper & Row, the United States Supreme Court found that The Nation had infringed President Ford’s unpublished manuscript by taking only 300 words from a book and inserting them into a Comment of 2,250 words. Similarly, taking very short (one to two minute) excerpts from a variety of films and combining them into a single product is also infringement. As these and other cases show, copyright infringement law does not, in general, hold that making minor or major alterations to original works is necessarily sufficient to avoid infringe-

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137 Interestingly, one could have a copyright system in which the author never loses his or her exclusive rights to the work. While such a copyright system is inconsistent with the United States Constitution, it is a possible system.

138 Although when fair use trumps principle 3, it would seem as if principle 5 is in play.


Consequently, copyright infringement law, as a general rule, rejects the Essentialist assumption.

E. An Interim Conclusion

Thus far this Comment has argued that the law of copyright infringement rests upon four basic principles. These principles can be seen as analogous to some of the assumptions underlying the Problem of Material Constitution. Furthermore, the law of copyright infringement can be seen as rejecting one of those assumptions—the Essentialist assumption—thereby providing a real-world example of a particular solution to the Problem of Material Constitution.

The Problem of Material Constitution is really about the ontology of the world. As such, because our four principles of copyright infringement are analogous to the assumptions implicit in the Problem of Material Constitution, they provide a basic ontology for the law as it applies to copyright infringement. In the next Part, this Comment attempts to clarify this ontology by showing that copyright infringement is focused on a distinction between "parts" and "pieces".

III. PARTS AND PIECES

In Part II, this Comment argued that the law of copyright infringement could be understood as supported by four basic ontological principles:

1. Authored works are composed of identifiable sub-elements;

2. If two authored works are composed of exactly the same sub-elements, then one of those works is an infringement of the other;

3. If an authored work \( W_1 \) is composed of sub-elements and another work \( W_2 \) copies some of those elements, then \( W_2 \) may infringe \( W_1 \); and

4. If \( W_2 \) infringes \( W_1 \) by copying sub-elements \( \{p_1, p_2, \ldots, p_n\} \), then any work \( W_1 \) that copies \( \{p_1, p_2, \ldots, p_n\} \) within 70 years of the death of the sole author of \( W_1 \) infringes \( W_1 \).

In this Part, the Comment focuses on developing one of the central concepts contained within each of these principles—the concept of an ele-

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141 See, e.g., Castle Rock Entm't, Inc. v. Carol Publ'g Group, Inc., 150 F.3d 132, 137-38 (2d Cir. 1998); Weissman v. Freeman, 868 F.2d 1313, 1322-23 (2d Cir. 1989); Folsom v. Marsh, 9 F. Cas. 342, 345 (C.C.D. Ma. 1841) (No. 4901).
Elements of an authored work may be divided into two kinds—parts and pieces. Only parts (and not all parts) are relevant to copyright infringement. The copying of either an unprotected part or a piece is not sufficient to generate infringement.

This Part is broken into two broad sections. First, in Part III.A.1, the Comment lays out the basic kinds of elements of an authored work for which copyright law is understood to deny protection. This includes ideas, unoriginal elements, elements in the public domain, scenes a faire, and utilitarian elements. In Part III.A.2 the Comment discusses the idea of the "heart of the work," which forms the basis for the part-piece distinction. Elements of a work that are "the heart" of a work are protected. Next, Part III.B contends that the law of copyright infringement makes a distinction between elements that are parts and pieces—protecting only parts, not pieces. In Parts III.B.1 and 2, the Comment lays out a philosophical distinction between parts and pieces and provides four basic principles distinguishing parts from pieces. Next, in III.B.3, the Comment provides three cases of exemplars of case law that distinguish between parts and pieces.

A. Copying Only Matters If You Copy the Right Things

As Part III.B argues, the law of copyright infringement protects only those elements of a work that constitute "parts" of that work. Before turning to that analysis, this section explores the general kinds of elements of a work that the copyright law does and does not protect.

1. Unprotected Components of Authored Works

Copyright law does not consider all copying from an authored work to be infringement. As discussed in this section, it is not infringement to copy an idea, scenes a faire, utilitarian aspects of a work, components of work taken from the public domain, and components of a work that lack the requisite minimum of originality. In essence, copyright does not protect components of a work that belong or should belong in the public domain.

For example, copyright law protects only the expression of an idea, not the idea itself. In Baker v. Seldon, the United States Supreme Court re-

142 See, e.g., Waite v. Patch Prods., Inc., Nos. 00-1292, 00-1333, 2001 U.S. App. LEXIS 13379, at *10-*11 (6th Cir. June 12, 2001) (holding that the idea of a word game is not copyrightable and that only the actual word game is copyrightable), cert. denied, 534 U.S. 1021 (2001); Benton v. Decotex, Inc., No. 99-1538, 2000 U.S. App. LEXIS 26779, at *6-*7, *12-*13 (6th Cir. Oct. 18, 2000) (reversing the district court's finding that no jury could find substantial similarity between competing T-shirt designs); Lotus Dev. Co. v. Borland Int'l, Inc., 49 F.3d 807, 815-17 (1st Cir. 1995) (holding that Lotus' menu structure and expression were not protected under copyright because it is a method of operation); Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49, 54 (2d Cir. 1936) (holding that the plot of a play can never be copyrighted).
fused to use copyright to protect the idea of a system of accounting expressed in a copyrighted book. As the Court noted:

[where the truths of a science or the methods of an art are the common property of the whole world, any author has the right to express the one, or explain and use the other, in his own way. As an author, Selden explained the system in a particular way. It may be conceded that Baker makes and uses account-books arranged on substantially the same system; but the proof fails to show that he has violated the copyright of Selden’s book, regarding the latter merely as an explanatory work; or that he has infringed Selden’s right in any way, unless the latter became entitled to an exclusive right in the system.

In other words, copyright protects only the way an idea is expressed, not the expression of that idea.

For example, in Sheldon v. Metro-Goldwyn Pictures Corp., the Second Circuit found that the defendants had, in the movie Letty Lynton, taken not merely the idea behind the original play Dishonored Lady, but also the expression. The picture had taken the city, social class, a South American villain, a wanton heroine, “the same weakness as in the murder scene of the play,” an inherited “waywardness” of the heroine, redemption by a noble love, similar sequence of events, a nearly identical death scene, the presence of a “Gaucho song” as an aphrodisiac, and an examination by a district attorney that is resolved through a lie from another man that the heroine spent the night with. The court found infringement because the picture had clearly taken too much of the expression of the original.

Similarly, in Waite v. Patch Products, Inc., the Sixth Circuit held that the idea of a word game called “Tribond” is not protected. In Waite, the plaintiff had created a word game, “Common Ground,” which focused on finding commonalities between words. The defendant also developed a word game based on the same premise. Despite the similarity of premise, the games differed substantially in their execution.

144 Id. at 100-101.
145 Sheldon v. Metro-Goldwyn Pictures Corp., 81 F.2d 49, 55-56 (2d Cir. 1936).
146 Id. at 54-55.
147 Id. at 55-56.
149 Id. at *2.
150 Id. at *4-*5, *11.
151 Id. at *11.
Sixth Circuit was unwilling to find infringement.\textsuperscript{152}

In addition, copyright protects only those components of a work that are original to the author.\textsuperscript{153} Originality requires only that the work was "independently created by the author . . . and that it possesses at least some minimal degree of creativity."\textsuperscript{154} For example, in \textit{Feist Publications}, the Supreme Court denied copyright protection to the plaintiff's telephone white pages because the directory is "entirely typical" of such directories.\textsuperscript{155} As a result, the directory fails to provide the threshold amount of originality necessary for protection.\textsuperscript{156} Compare this to \textit{Key Publications, Inc. v. Chinatown Today Publishing Enterprises}, where the Second Circuit found that a directory was copyrightable because the author, who carefully chose who to exclude from the directory, had infused the directory with sufficient originality.\textsuperscript{157}

In \textit{Golding v. R.K.O. Pictures, Inc.}, the Supreme Court of California noted that the author of a work had protection for all, and only, elements of the work that were original to the author.\textsuperscript{158} This includes "the entire plot, the unique dialogue, the fundamental emotional appeal or theme of the story, or merely certain novel sequences or combinations of otherwise hackneyed elements."\textsuperscript{159}

Similarly, a work that is in the public domain is not protected by copyright.\textsuperscript{160} This issue was determinative in \textit{Boisson v. Banian}, where the court held that an arrangement of blocks in a quilt pattern was protected only after deciding that the design was not in the public domain.\textsuperscript{161} The Second Circuit determined that while there was evidence that a "circa 1900 quilt" used letters and icon block arrangement like that issue in the \textit{Boisson} case, the arrangement of the \textit{Boisson} quilts required "some minimum

\textsuperscript{152} \textit{Id.} at *12-*13.

\textsuperscript{153} \textit{See, e.g., Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.,} 499 U.S. 340, 359-60 (1991) (rejecting the "sweat of the brow" theory of copyright protection and reaffirming the need for originality for copyright protection); \textit{Computer Assocs. Int'l Inc. v. Altai, Inc.}, 982 F.2d 693, 703 (2d Cir. 1992) (noting that only those components of a computer program original to the programmer are subject to protection under copyright); \textit{Golding v. R.K.O. Pictures, Inc.}, 221 F.2d 95, 101 (Cal. 1950) (applying a dissection test in upholding finding that the defendant's movie infringed plaintiff's stage play).

\textsuperscript{154} \textit{Feist}, 499 U.S. at 345 (citation omitted).

\textsuperscript{155} \textit{Id.} at 362.

\textsuperscript{156} \textit{Id.}

\textsuperscript{157} \textit{Key Publ'ns, Inc. v. Chinatown Today Publishing Enters}, 945 F.2d 509, 513-14 (2d Cir. 1991) (noting that Ms. Wang's decision to exclude certain business she did not believe likely to survive long provided sufficient originality in the classified section of the directory to warrant copyright protection).

\textsuperscript{158} \textit{Golding}, 221 F.2d at 97.

\textsuperscript{159} \textit{Id.}

\textsuperscript{160} \textit{Folio Impressions, Inc. v. Byer California}, 937 F.2d 759, 763-64 (2d Cir. 1991) (upholding a decision that a background fabric design was not original to the author because there was sufficient evidence to conclude that it had been copied from a public domain source).

\textsuperscript{161} \textit{Boisson v. Banian}, Ltd., 273 F.3d 262, 269 (2d Cir. 2001).
degree of creativity."162 This minimal creativity, in light of the existence of a certificate of copyright registration, created a presumption of originality that the defendant had failed to overcome.163

Scenes a faire, those parts of a book, play, or movie "that necessarily result from the choice of a setting or situation," are not protected under copyright.164 For example, in Walker v. Time Life Films, the Second Circuit stated that "drunks, prostitutes, vermin and derelict cars" are necessary for "any realistic work" that depicts police work in the South Bronx.165 In addition, the court refused to grant protection to "stock themes" like "[F]oot chases, . . . morale problems of policemen, . . . [and] the familiar figure of the Irish cop."166 Similarly, in Reyher v. Children's Television Workshop, the court found that two works both discussing the theme that "to a lost child, the familiar face of the mother is the most beautiful face, even though the mother is not, in fact, beautiful to most," had similarities because the works arose out of the use of the same basic theme or situation.167 As such, those similarities are scenes a faire which are not protected under copyright.168

Lastly, like scenes a faire, those aspects of a work that are needed to produce the work—utilitarian aspects of a work—are also not protected by copyright.169 For example, in Carol Barnhart Inc. v. Economy Cover Corp., the Second Circuit concluded that a mannequin design was such that its aesthetic elements could not be separated from its utilitarian aspects.170 As a result, it was not infringement to directly copy the mannequin design.171 On the other hand, in Mazer v. Stein, the Supreme Court found that statuettes used as the base for lamps was protected by copyright precisely because the aesthetic elements (the statuettes themselves) were separable

162 Id.
163 Id.
164 Walker v. Time Life Films Inc., 784 F.2d 44, 46, 50 (2d Cir. 1986) (affirming district court's holding that defendant's movie was not substantially similar to plaintiff's book and therefore the movie did not infringe the book).
165 Id. at 50.
166 Id.
167 Reyher v. Children's Television Workshop, 533 F.2d 87, 92 (2d Cir. 1976).
168 Id.
169 See, e.g., Mazer v. Stein, 347 U.S. 201, 218 (1954) (holding that the aesthetic components of an authored work are protectable under copyright so long as those components are separable from the utilitarian aspects of the work); Carol Barnhart Inc. v. Econ. Cover Corp., 773 F.2d 411, 418 (2d Cir. 1985) (finding that the plaintiff's mannequins were not protected under copyright because their aesthetic elements could not be separated from their utilitarian elements). See also 17 U.S.C. §101 (2000) (stating that "the design of a useful article shall [receive copyright protection] only to the extent that [it contains] pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article").
170 Carol Barnhart Inc., 773 F.2d at 418.
171 See id.
from the utilitarian aspect of the lamps. In other words, you could sell the statuettes as statuettes and not simply as part of lamps.

Each of these unprotected elements of a work (ideas, scenes a faire, utilitarian elements, public domain elements, non-original elements) underscores a central theme: Copyright law does not protect elements of a work that are or should be in the public domain. Elements that are in the public domain are elements that have fallen out of copyright protection or are not original to the author. Elements that should be in the public domain include anything not already clearly in the public domain that is necessary to produce a work in the same genre as the original work. This clearly includes ideas, scenes a faire, and utilitarian elements.

2. Protected Components of Authored Works

Thus far this Comment has examined what components of an authored work are not protected by copyright. In this section, the Comment discusses what components of an authored work are offered protection from copying.

The central premise of copyright infringement is that the infringer has borrowed too much and in such a way as to replace the original work. This is alternatively know as “taking the heart” of the work. For example, in Harper & Row, The Nation published an article based on President Ford’s soon to be published memoirs. Thirteen percent of the article in The Nation was composed of quotes from President Ford’s memoirs. But, as the Supreme Court noted, these quotes comprised some of the most important and valuable sections of President Ford’s memoirs. As a result, the value of those memoirs was significantly diminished. Thus, the Supreme Court found that The Nation had infringed.

Similarly, in Folsom a two-volume “Life of Washington” used letters copied from the plaintiff’s “Writings of President Washington in twelve volumes.” These letters composed one third of the “Life of Washington” and played a key role in telling Washington’s story. As Justice Story

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172 Mazer, 347 U.S. at 218.
174 Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 587 (1994) (reversing circuit court’s holding that parody of the song Pretty Woman by taking the heart of the work was infringing).
175 Harper & Row, 471 U.S. at 542-43.
176 Id. at 549.
177 Id. at 566.
178 Id. at 566-67.
179 Id. at 569.
180 Folsom v. Marsh, 9 F. Cas. 342, 345 (C.C.D. Ma. 1841) (No. 4,901).
181 Id.
noted, because these letters were some of the most valuable components of the plaintiff’s work, they undermined the property right in the original work. As result, they diminished the original work’s value and the defendant was found to have infringed.

In essence, copyright infringement requires that the infringing work contain a copy of an important component of the original work. Unfortunately, the courts have not provided criteria for determining whether a component of a work is important or not. In response, in Part III.B, this Comment clarifies this notion of “importance” through an examination of the philosophical distinction between “parts” and “pieces.”

B. Parts vs. Pieces

As noted above, the courts indicate that when certain components of a work fall, roughly, into the public domain, those components are not relevant to the infringement analysis. Instead, what matters are those remaining components of the work that constitute the “heart” of the work. Despite identifying the relevant components as the “heart,” the courts do not provide a clear basis for determining when a component is a heart of the work. In this section, the Comment explains the philosophical distinction between parts and pieces. It then contends that only parts are relevant to the infringement analysis. In other words, one can infringe by taking parts, but not by taking pieces.

1. “Parts are not pieces”

Copyrightable works are composite works. For example, a play or movie can be thought of as composed of characters, plot, music, strings of words, etc. In addition, not all of these components are of equal importance. Some are mere “pieces” while others are “parts.” In this Part, the Comment first describes Charles A. Krecz’s analysis of the distinction between parts and pieces. The Comment then shows how this analysis enables us to more clearly understand when one work has impermissibly copied from another.

According to Professor Krecz, the difference between parts and pieces can be seen by looking at two features of parts and pieces. First, we need to look at the effect a change in the way one “cuts” out a component from a whole determines whether that component is considered a part or a piece. Next, we need to examine how changes to the whole affect the

182 Id. at 349.
183 Id.
184 Charles A. Krecz, Parts and Pieces, 46 PHIL. & PHENOMENOLOGICAL RES. 381, 381 (1986).
185 Id.
186 See id. at 382-83.
187 Id.
component.\textsuperscript{188} Professor Krecz uses the heart in a living body as an example of a part.\textsuperscript{189} The heart in a living body has a distinct location and spatial extent.\textsuperscript{190} If we "cut" in the wrong place, we will either get something that is not a heart (if we cut too little or in the wrong location) or something that is partially a heart and partially something else (if we cut too much or outside of the spatial extent of the heart). In other words, the cut of a heart is location specific (as Professor Krecz states, "its cut is \textit{locus-specific}"\textsuperscript{191}). We must be very precise in locating the heart in order to separate it (figuratively or literally) from the remainder of the body. Otherwise we will not end up with the part "heart" but rather some arbitrary piece of the body.

In addition, the heart plays a role in the body that requires that the heart maintain a specific relation, subject to minor changes in certain parameters, to the other parts of the body.\textsuperscript{192} "For example, it must, through the circulation of blood, supply nutrients to these other parts."\textsuperscript{193} What is key to recognize here is that if we alter the relation of the heart to those parts either by altering the heart or those other parts, the whole may be destroyed.\textsuperscript{194} For example, disconnecting the veins that transport blood to the heart will result in death of the organism and of the heart. Thus, parts, like the heart, are inter-related and inter-dependent upon other parts in the whole.

Professor Krecz uses a shard of a broken wineglass as an example of piece.\textsuperscript{195} We can distinguish (at least) three parts to a wineglass: the bowl, the stem, and the base.\textsuperscript{196} Each of these parts are \textit{locus-specific} and are inter-related. Destruction or severe alteration of any one, has an immediate effect on the other's character as a part of the whole. For example, if we remove the bowl, then while we have a stem and a base left, neither of these are parts of a whole "wineglass."

Pieces, unlike parts, are arbitrary cuts of the whole.\textsuperscript{197} If we throw the wineglass against the wall, and it shatters, every component of the wineglass that we find is a piece of the wineglass.\textsuperscript{198} Further, we can continue to subdivide those pieces and still have pieces of the wineglass.\textsuperscript{199} Impor-
tantly, this is the case even though the wineglass itself no longer exists as a whole. In other words, we can have pieces of something without regard to the thing as a whole.200

Compare the shard of a wineglass to a heart in a living body. The shard is any arbitrary component of the original glass. The heart is a very specific and *locus specific* component of the original body. Furthermore, cutting the shard (arbitrarily) in half produces two pieces. On the other hand, an arbitrary division of the heart is unlikely to provide two parts. Although the heart can be divided into other parts (e.g., valves, chambers, etc.), the segregation of those parts requires specific and well-defined cuts of the original heart-part.

In addition, the shard is still a piece of the wineglass regardless of what happens to the wineglass. If the shard came from the bowl and we later destroy (melt down) the stem, the shard will still be a piece of a wineglass. But, if we remove the lungs from a living body, the heart will be effectively destroyed as a part.201 The heart, because it is a part, relies upon the other components of the whole for its "partness."202 Destruction or proper alteration of those other components can destroy the "part-like" nature of the part and convert it into a mere piece of the whole.203 This is the case when the body dies.204 While it is true that we can still distinguish the heart in a dead body, the heart plays no special role in the body.205 It is like any other component of the body. As such, it is a piece rather than a part.206

2. *Principles Distinguishing Parts from Pieces*

Professor Krecz believes that parts and pieces can be distinguished in two general ways:

1. Parts are locus-specific, pieces are locus-arbitrary, and

2. Parts can not survive, as parts, given certain types of changes to other components of the whole, pieces can survive, as pieces, any change to the whole.207

Recognition of these differences leads Professor Krecz to posit four principles:

200 See id.
201 Id. at 383.
202 Id.
203 Id.
204 Id. at 383-84.
205 Id.
206 Id.
207 Id.
208 See id. at 387.
1. Parts stand in relations which codetermine each part's properties;

2. Codetermination renders the part/whole relation elliptical;

3. Codetermination provides for the unity of the parts in a whole; and

4. The part/whole relation admits a certain value as to the relative dominance of any part in any whole.\textsuperscript{209}

In the remainder of this section, the Comment clarifies these four principles.

As noted earlier, parts exist in an interdependent relation with other parts of a whole.\textsuperscript{210} (For example, the heart is a part of a living body.) A change to the heart will affect other parts in the body. At the same time, a change to other parts will affect the heart. In other words, parts are interrelated such that they codetermine each other's properties. For example, the core of an apple is a part of the apple only so long as it remains within the apple. Thus, its prerogative to move is limited or codetermined by the movement of the skin and flesh of the apple.\textsuperscript{211}

If we change a part in a substantial fashion, then the nature of the remaining parts will also change. Think of moving the core without moving the skin. We can only do so by tearing the core from the rest of the apple. In so doing, we destroy the apple. The spatial relation between the parts (skin, flesh, and core) is codetermined such that certain changes to the location of one of those parts destroys the whole. Similarly, if we simply move the skin (by rolling the apple down a hill), because of the relation of the skin to the flesh and the core, they too must move.

This codetermination of parts applies both to physical objects like an apple and copyrightable works. As Professor Krecz notes:

Consider a character in novel. Certainly a novel may be a whole and a character a part of that whole. The character Huckleberry Finn is certainly part of the novel \textit{Huckleberry Finn}. Further, for Huckleberry Finn to be the character or part that it is, it must be sensitive to the remainder of that novel; it must stand in a relation of codetermination to the other parts of that novel; . . . If we were to vary substantially, for example, the character of Jim, the character of Huck Finn

\textsuperscript{209} See id.
\textsuperscript{210} Id. at 383.
\textsuperscript{211} Id. at 387.
would be significantly changed as well.212

Not only are parts inter-related in a way that changes to one will affect another, this codetermination indicates that the part-whole relation is "elliptical."213 In order to determine that the heart is a part of the living body, you must determine the heart’s relation to other parts of the body (e.g., the liver, lungs, brain, veins, arteries, etc.). Similarly, you cannot determine if, for example, the lungs are a part of the living body without looking at the lungs’ relation to the other parts, including the heart. Finally, it is only by looking at all of the parts that we can determine what is the whole.214

It immediately follows from this inter-relatedness—this codetermination—that the unity of the whole is a function of the codetermination of the parts that compose the whole.215 It is the limits that each part places on the other parts that make it a whole. The heart must provide the lungs, the liver, the kidneys, and the brain with blood. The lungs must expose the blood to oxygen and facilitate the exchange of carbon dioxide and oxygen; otherwise, the heart muscle will not be able to engage in respiration and energy production. In other words, without the oxygen provided by the lungs the heart will die. At the same time, without the circulation of the blood, the lungs will cease to be able to perform their function. Each hangs together as a unified whole because of each part’s interdependence and codetermination of properties.

Finally, the part-whole relation admits of a value as to the relative dominance of any part to any whole.216 Consider again the novel Huckleberry Finn. Changes to the character of Huckleberry Finn would have more dramatic effects on the novel than a relatively less important character. Furthermore, “[d]ominant parts tend to be replacement-resistant.”217 You destroy the novel Huckleberry Finn by removing either of the two central characters—Huck or Jim. As Professor Krecz notes:

The greater the tendency of a part to dominate the greater is the likelihood that that part identifies the whole in which it is located. This is why those who regard man as a moral agent will think of man simply as the moral agent. If there is a moral agent, that agent dominates the whole man so very thoroughly that it is difficult to distinguish the agent as a part.218

212 Id. at 391-92.
213 Id. at 387.
214 See id.
215 Id.
216 Id. at 393.
217 Krecz, supra note 184, at 394 (emphasis in original).
218 Id.
In sum, this section has contended that parts can be distinguished from pieces in four basic ways: (1) parts stand in relations which codetermine each part’s properties; (2) codetermination renders the part/whole relation elliptical; (3) codetermination provides for the unity of the parts in a whole; and (4) the part/whole relation admits a certain value as to the relative dominance of any part in any whole.

3. Parts and Pieces in Infringement

In the previous two sections, this Comment has argued that parts are to be distinguished from pieces and provided a set of criteria by which to determine when something is a part as opposed to a piece. In this section, this Comment examines three cases to verify that the analysis provided makes sense.

a. Example One: The Nation and President Ford’s Memoirs

The Supreme Court’s analysis in Harper & Row, Publishers, Inc. v. Nation Enterprises\(^{219}\) provides a good basis for determining whether the analysis of parts and pieces presented in this Comment is consistent with current copyright law. In Harper, The Nation had published excerpts taken, without permission, from President Ford’s soon-to-be-published memoirs.\(^{220}\) The Court found that this was an infringement of President Ford’s copyright.\(^{221}\) In particular, the Court noted that by taking “the most interesting and moving parts of the entire manuscript” and “the most powerful passages in [the] chapters,” The Nation had taken “the heart of the book.”\(^{222}\)

What is interesting about the Court’s analysis is that it provides examples of direct copying by The Nation where the excerpts that are copied can be best described as parts of President Ford’s memoirs—not pieces. These excerpts conform to the four properties of parts as described in the previous section: The parts codetermine the properties of each other, the parts and the whole are defined in terms of each other (the relationship between the parts and the whole is elliptical), the unity of the whole (the memoirs) is a function of the codetermination of the parts, and some parts dominate others.

In order to show that these excerpts have the properties of parts (as opposed to pieces), let us examine a few of the quotes taken. The Nation quoted President Ford’s justification for granting a pardon to President Nixon as not flowing from “compassion for Nixon as an individual . . .”; instead, President Ford had pardoned President Nixon in order “to get the

\(^{219}\) 471 U.S. 539 (1985).
\(^{220}\) Id. at 542-43.
\(^{221}\) Id. at 542.
\(^{222}\) Id. at 565.
monkey off my back one way or the other." The Nation also quoted President Ford's view of the impact of a long-term investigation into Watergate on a Ford Presidency. In particular, President Ford believed that President Nixon "would not spend time quietly in San Clemente" and "it would be virtually impossible for me [President Ford] to direct public attention on anything else."

In order to show that these quotes are parts, not pieces, this Comment must show that each quote has the four characteristics of parthood described above. This must be done in the context of the whole (the memoir). President Ford's memoirs were sold on the premise that they would "contain significant hitherto unpublished material concerning the Watergate crisis, President Ford's pardon of former President Nixon and President Ford's reflections on this period of history, and the morality and personalities involved." Let us, for the moment, narrow this to simply a description of President Ford's view of the Watergate scandal.

The two quotes presented above are parts of the whole. First, the quotes codetermine each other's properties. President Ford's concern that he "get this monkey off [his] back" is clarified, focused, and limited by his concern that the public would never get its mind off of the scandal as long as the court case continued. Similarly, President Ford's recognition of the impact of a lengthy Watergate trial is also clarified and limited by the need to "get this monkey off [his] back." It is one thing to recognize that the public will be entranced by a trial, it is another to see such focus as hindering one's ability to be President.

Further, the two quotes, as parts, bear an elliptical relation to each other. Each clarifies the other and makes it apparent that the other is part of a coherent whole—the telling of President Ford's story. In addition, the inter-relationship of these quotes both is unified and unifies the story. Finally, one could argue that the "public attention" quote dominates the "monkey" quote because one cannot understand why President Ford needs to get the monkey off of his back without understanding why he is worried about the trial. Thus, these two quotes pass the test for being parts of Ford's memoirs.

On the other hand, if we assume that President Ford's memoirs are essentially about the Watergate crisis, then some of the quotes are not parts of the memoirs. In particular, quotes of President Ford's remembrance of White House photographer Kennerly's view about bombing in Cambodia

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223 Id. at 572-73.
224 Id. at 573.
225 Id. at 542 (internal quotations omitted) (citation omitted).
226 This is not the case. As the Supreme Court notes, President Ford's memoirs were also about a broader period in history. Id.
is a piece, not a part. The quote is: "[m]assive airstrikes would constitute overkill . . . It would be far better to have Navy jets from the Coral Sea make surgical strikes against specific targets in the vicinity of Kompong Som." This assertion has nothing to do with Watergate-related quotes. As such, it does not affect the properties of quotes about Watergate, does not define those quotes, nor does it help in the creation of a unity. Furthermore, it plays no dominance-related role with the parts because there is no relation at all between the Watergate-related quotes and the Cambodia quote. Consequently, given our assumptions about the scope of President Ford’s memoirs, The Nation could have copied this quote without infringing on President Ford’s memoirs.\textsuperscript{228}

b. Example Two: Tribond and Common Ground

The Sixth Circuit’s analysis in \textit{Waite v. Patch Products, Inc.} provides additional support for the view that courts intuitively adopt a notion of the part-piece distinction consistent with the analysis provided in this Comment.\textsuperscript{229} In \textit{Waite}, the Sixth Circuit concluded that the word game “Tribond” did not infringe upon a similar word game “Common Ground.”\textsuperscript{230} The games are similar in that both are word games and both require players to find common characteristics shared by sets of words printed on cards.\textsuperscript{231}

Despite this similarity, the Sixth Circuit determined that the later game, Tribond, did not infringe on the earlier game, Common Ground. The court’s analysis focused on differences in two features of the games—the goals of the games and the design of the games.\textsuperscript{232} It is the contention of this Comment that each of these two features pick out parts of their respective games. Furthermore, since the parts of Tribond differ from the related parts of Common Ground, the games are, in fact, different, and, as the Sixth Circuit correctly concluded, no infringement should have been found.

In order to show that the games’ design and goals are parts of the games (as opposed to pieces), we must first explain the games and the respective parts. The Comment then shows that each of these components conforms to the four criteria of parts. As a result, these components must be parts.

\textsuperscript{227} \textit{id.} at 577 n.23.
\textsuperscript{228} This conclusion is incorrect because President Ford’s memoirs were designed to cover a broader range of topics than just Watergate. As such, the Kennerly quote is probably a part as opposed to a piece. Nonetheless, by artificially limiting the goal of the book we are able to come to a better understanding of when a component of a work is a piece as opposed to a part.
\textsuperscript{230} \textit{id.} at *1-*2.
\textsuperscript{231} \textit{id.} at *2, *4-*5.
\textsuperscript{232} \textit{id.} at *11.
Common Ground is designed as, essentially, a card game. The goal of the game is to find commonalities between two of the words that the third word does not share. For example, if the card lists "mouse, duck, snake" we can find the following commonality-dissimilarity pairs. Both Mickey mouse and Donald duck are Disney cartoon characters. There is no similar snake-based Disney character. In addition, both ducks and snakes lay eggs. Mice do not. To win the game one must find enough commonality-dissimilarity pairs.

The design of the game and the goal are parts of the game. First, the parts codetermine the properties of the other parts. Common Ground's design is to have three words on each card. The goal is to find what two of the words have in common but also do not have in common with the third. This goal dictates what words can be used (one must eliminate word sets where all three words have commonalities and no dissimilarities or where the words lack any commonalities). Thus, the goal controls the words on the card. At the same time, the decision to put three words on a card, in the context of finding a commonality, controls what goals one can set. Either one must decide to choose a set of words where all the words have something in common (this is the rule for Tribond), some of the words have something in common while those words lack that commonality with the remaining word (this is the rule for Common Ground), or all of the words have nothing in common (not a useful rule for a game meant to develop recognition of common characteristics of entities picked out by words). So, the design of the cards controls the choice of goals for the game. Thus, each part determines the properties of the other part.

The second feature of a part is that the parts and the whole are defined in terms of each other (the relationship of the parts to each other and the whole is elliptical). The game design and goals of the game satisfy this criterion. One cannot understand why the game has three words on each card if one does not understand the goals of the game. Furthermore, one cannot understand the overall goal if one does not have an understanding of how to achieve that goal—of the design of the game. If one eliminates either the goal of the game or the cards, then the game itself is destroyed. On one hand you have lost the instruction sheet, and on the other you have lost the physical manifestation of the game (the "playing pieces"). Without

233 Id. at *2-*3.
234 Id. at *2.
235 Id.
236 Id. at *2-*3.
237 Id. at *3.
238 Id. at *5.
239 Id. at *2-*3.
either, one can not have the whole, nor understand the whole. Thus, our second (the part/whole relation is elliptical) and third (the codetermination of the parts generates the unity of the whole) criteria of parthood is met by the game goals and game design.

Finally, we can see that some of the parts are dominant over other parts. For example, the goal of finding a commonality between words that are dissimilar from the remaining word dictates that each card have at least three words on it. Change the goals and you can more easily alter the other parts. Keep the goal the same and you may not easily modify the other parts. Thus, the goal of the game dominates the structure of the game (the cards).

As the example of the game Common Ground shows, a game’s design and goals are parts, in our technical sense, of the game. What is important for our understanding of parts is that the Sixth Circuit noted what components of the games were parts and, after determining that they differed in each game, concluded that Tribond did not infringe upon Common Ground. This supports both our description of what it is to be a part and our inference that parts play a substantial role in the determination of infringement.

c. Example Three: Crichton, Dinosaurs, and Children’s Books

Finally, in Williams v. Crichton, the Second Circuit’s analysis of an infringement suit brought by the author of children’s books, George T. Williams, against Michael Crichton provides further evidence of the court’s implicit adoption of a parts/pieces distinction. In Williams, the Second Circuit upheld a summary judgment against the plaintiff on the ground that the plaintiff’s work was not substantially similar to the defendant’s work.

Williams is the author of a series of four children’s books centered around a dinosaur “zoo.” Crichton is the author of the book Jurassic Park (from which a movie was made), also centered on a type of dinosaur zoo. In determining that Crichton did not infringe upon Williams’ work, the Second Circuit focused first on the books’ total concept and feel and then upon the similarities between the themes, settings, characters, time sequence, plot, and pace of the two works.

The Second Circuit found that the two books do not have the same

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240 Id. at *11.
241 84 F.3d 581 (2d Cir. 1996).
242 Id. at 582, 590.
243 Id. at 582-83.
244 Id. at 582, 589.
245 Id. at 588-89.
concept and feel. "The Jurassic Park works are high-tech horror stories with villainous characters and gruesome bloodshed...[I]he threats and danger...arise because of the evils of humans...[and] the total concept and feel of the Jurassic Park works is of a world out of control." Williams' Dinosaur World books are quite different:

[They] are adventure stories and, although suspenseful in places, have happy endings. The threats and danger...exist because of the wild nature of dinosaurs and are intended to educate children about the behavior of these now-extinct creatures. The total concept and feel of...William's Dinosaur World is [of a world] well under control.

The Second Circuit also found that similarities in the settings are the result of scenes a faire arising from the choice of a story centered on a dinosaur zoo. It also found that the themes and time sequence of the two works differ. There was no infringement in the use of characters because the children in the Williams' book are too underdeveloped. Finally, while the court noted that there are similarities in the plot of some of the works, these similarities do not create substantial similarity because they are scattered in an unconnected manner (a "scattershot approach") throughout the works.

As we can see, the court's analysis in Crichton closely follows the analysis of parts and pieces found in this Comment. First, the look and feel, theme, setting, character, time sequence, plot, and pace are parts of any book, novel, or movie. Thus, the court's analysis turns on the similarities (or lack thereof) of the parts of the works. The court also eliminates from analysis those aspects of the work that are in the public domain: Scenes a faire and elements necessary for expressing the unprotected idea of a dinosaur park.

Perhaps most important to our analysis is the court's analysis of the characters in the children's novels and the similarities between the plots of the two works. The court noted that the brother and sister in Williams' third book are similar to those in Crichton's work. But, the court also noted that Williams' siblings are developed in only a limited fashion. If we think of this in terms of the part-piece distinction, we see that the chil-

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246 Id. at 589.
247 Id.
248 Id.
249 Id.
250 Id. at 589-90.
251 Id. at 589.
252 Id. at 590.
253 Id. at 589.
254 Id.
dren in Williams’ books are pieces because we could make any number of substantial changes to the children’s “personas” without altering the book. This is the central problem with under-developed characters. They are pieces because they can be changed substantially without altering the rest of the work. In essence, they do not codetermine the properties of the rest of the work.

We can also see the implicit use of the part-piece distinction in the court’s response to similarities in the plots of each work. The court rejected these similarities because they are “scattershot.”255 In essence, similarities between the works are few and spread in an unconnected manner throughout the works.256 Thus, these similar-pieces do not, together, play a significant role in unifying either work. As we noted, the codetermination of parts provides for the unity of the whole. But, in Crichton the similar pieces of plot do not tie together in a way that generates either a unity between those pieces or that supports the unity of the whole.257 In essence, they are pieces, not parts.

4. Summing Up Parts and Pieces

As we have shown, the courts have traditionally and intuitively adopted a parts-piece distinction in its analysis of copyright infringement. It is only in the copying of parts that a work may potentially engage in infringement. The Comment has also provided four criteria for determining when a component of a work is a part rather than a piece: (1) parts stand in relations which codetermine each part’s properties; (2) codetermination renders the part/whole relation elliptical; (3) codetermination provides for the unity of the parts in a whole; and (4) the part/whole relation admits a certain value as to the relative dominance of any part in any whole.

IV. AN ONTOLOGY OF THE LAW OF COPYRIGHT INFRINGEMENT

As argued above, the law of copyright infringement can be seen as resting on four basic principles. In addition, the law of copyright infringement distinguishes between parts and pieces. In this final Part, the Comment draws together these two threads (parts and principles) in order to provide a unified, basic ontology for copyright infringement.

As noted in Part II, four ontological principles underlay the law of copyright infringement:

1. Authored works are composed of identifiable sub-elements;

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255 Id. at 590.
256 See id.
257 See id.
2. If two authored works are composed of exactly the same sub-elements, then one of those works is an infringement of the other;

3. If an authored work $W_1$ is composed of sub-elements and another work $W_2$ copies some of those elements, then $W_2$ may infringe $W_1$; and

4. If $W_2$ infringes $W_1$ by copying sub-elements $\{p_1, p_2, \ldots, p_n\}$, then any work $W_1$ that copies $\{p_1, p_2, \ldots, p_n\}$ within 70 years of the death of the sole author of $W_1$ infringes $W_1$.

Central to these principles is the concept of a “sub-element”. The discussion in Part III helps us to understand precisely what a sub-element is by defining it within the part-piece distinction. Parts are protected while pieces are not.

Part III.A tells us that a protected element does not include ideas, unoriginal expression, expression already in the public domain, scenes a faire, and utilitarian expression. Part III.B also tells us that a protected element are parts of the whole where a part has four basic characteristics:

1. Parts stand in relations which codetermine each part’s properties;

2. Codetermination renders the part/whole relation elliptical;

3. Codetermination provides for the unity of the parts in a whole; and

4. The part/whole relation admits a certain value as to the relative dominance of any part in any whole.

When we combine the four principles with our understanding of the concept of sub-element our ontology of copyright becomes:

1. Authored works are composed of identifiable parts.

2. An entity is a part if and only if

   A. the entity is not in the public domain

      1. where an entity is in the public domain if it is an idea, not original to the author, already in the public domain, a scenes a faire, or utilitarian;

   B. the entity must stand in relations, with the other
parts of the whole, that codetermine each part's properties.

C. the codetermination of the parts renders the part/whole relation elliptical,

D. the codetermination of the parts creates the unity of the parts in the whole, and

E. the part/whole relation admits certain value as to the relative dominance of any part in any whole;

3. If two authored works are composed of exactly the same parts, then one of those works is an infringement of the other;

4. If an authored work \( W_1 \) is composed of parts and another work \( W_2 \) copies some of those parts, then \( W_2 \) may infringe \( W_1 \); and

5a. If \( W_2 \) infringes \( W_1 \) by copying parts \( \{p_1, p_2, \ldots, p_n\} \), then any work \( W_1 \) that copies \( \{p_1, p_2, \ldots, p_n\} \) within 70 years of the death of the sole author of \( W_1 \) infringes \( W_1 \).

5b. If \( W_2 \) infringes \( W_1 \) by copying parts \( \{p_1, p_2, \ldots, p_n\} \), then any work \( W_1 \) that copies \( \{p_1, p_2, \ldots, p_n\} \) within 70 years of the death of the last joint author of \( W_1 \) infringes \( W_1 \).

5c. If \( W_2 \) infringes \( W_1 \) by copying parts \( \{p_1, p_2, \ldots, p_n\} \), then any work \( W_1 \) that copies \( \{p_1, p_2, \ldots, p_n\} \) within the earlier of 95 years from publication or 125 years from creation of the anonymous, pseudonymous, or work for hire \( W_1 \) infringes \( W_1 \).

In concluding, the Comment should note that these five ontological principles are sometimes over-ridden (as noted in Part II.C). In particular, principles 3 and 4 may be temporarily suspended in order to support fair use. Similarly, principle 3 may be ignored if the subsequent work is as original to the author as the earlier work was to the earlier work's author.

With this ontology in hand, it should become easier to predict when copying is infringement, to understand court decisions regarding infringement, to develop a new system of copyright modeled on the American Copyright Law, and to determine the merits and detriments of the American system. It is also a first step in developing both a complete ontology
and epistemology for copyright law in general. Finally, it provides a framework for developing a unified ontology for intellectual property in general. It is to these tasks that the author turns in the near future.

SCOTT DEVITO, PH.D.*

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