4. Examine the text of §102(b) again. Which word or words in the statute exclude facts from copyright protection? As the Court explained in *Feist Publications*, *Inc. v. Rural Telephone Service Co.*, 499 U.S. 340 (1991), section 102(b) treats facts as uncopyrightable "discoveries":

"No one may claim originality as to facts." . . . This is because facts do not owe their origin to an act of authorship. The distinction is one between creation and discovery: The first person to find and report a particular fact has not created the fact; he or she has merely discovered its existence. To borrow from *Burrow-Giles*, one who discovers a fact is not its "maker" or "originator." . . . "The discoverer merely finds and records." Nimmer §2.03[E]. Census takers, for example, do not "create" the population figures that emerge from their efforts; in a sense, they copy these figures from the world around them. Denicola, Copyright in Collections of Facts: A Theory for the Protection of Nonfiction Literary Works, 81 Colum. L. Rev. 516, 525 (1981). . . . Census data therefore do not trigger copyright because these data are not "original" in the constitutional sense. Nimmer §2.03[E]. The same is true of all facts — scientific, historical, biographical, and news of the day. "[T]hey may not be copyrighted and are part of the public domain available to every person."

*Id.* at 347-48. Are historical theories also "discoveries"? Are historians less creative than painters or novelists?

Note that historians are subject to separate ethical norms that prohibit plagiarism and require citation of sources. Do these norms serve the same purposes that copyright law serves?

- 5. Should a work that is held out to the public as a work of historical fiction receive stronger copyright protection for its plot than a work that is held out to the public as a work of history?
- 6. The merger doctrine applies when it is necessary for the secondcomer to use the words of the first because the idea may not be expressed in another way. The doctrine of *scenes à faire* protects a secondcomer's use of literary devices that are not literally necessary to express the idea, but which the audience has come to expect. What are the justifications for these doctrines? Are they equally compelling?

Next, how should the law separate unprotectable systems or processes from copyrightable expression? Many industries develop new methods of classifying information. What part, if any, of such a system, process, or method is copyrightable?

## American Dental Association v. Delta Dental Plans Association 126 F.3d 977 (7th Cir. 1997)

EASTERBROOK, J.: This case presents the question whether a taxonomy is copyrightable. The American Dental Association has created the *Code on Dental Procedures and Nomenclature*. The first edition was published in 1969; the Code has been revised frequently since, in response to changes in dental knowledge and technology. All dental procedures are classified into groups; each procedure receives a number, a short description, and a long description. For example, number 04267 has been assigned to the short description "guided tissue regeneration—nonresorbable barrier, per site, per tooth (includes membrane removal)", which is classified with other surgical periodontic services. The Code made its first appearance in the *Journal of the American Dental Association*, covered by a general copyright notice; the

1991 and 1994 versions were submitted for copyright registration, which was granted by the Register of Copyrights. Delta Dental Association has published a work entitled *Universal Coding and Nomenclature* that includes most of the numbering system and short descriptions from the ADA's Code. In this suit for copyright infringement, Delta . . . argues [inter alia] that the Code is not copyrightable subject matter, and the district court granted summary judgment in its favor on this ground without reaching Delta's other arguments.

The district court held that the Code cannot be copyrighted because it catalogs a field of knowledge—in other words, that no taxonomy may be copyrighted. A comprehensive treatment cannot be selective in scope or arrangement, the judge believed, and therefore cannot be original either. Taxonomies are designed to be useful. The judge wrote that if "nothing remains after the 'useful' is taken away—if the primary function is removed from the form—the work is devoid of even that modicum of creativity required for protection, and hence is uncopyrightable." 39 U.S.P.Q.2d 1714, 1721.... No one would read the ADA's Code for pleasure; it was designed and is used for business (for records of patients' dental history or making insurance claims) rather than aesthetic purposes. The district court added that, as the work of a committee, the Code could not be thought original. Creation by committee is an oxymoron, the judge wrote.

The sweep of the district court's reasoning attracted the attention of many other suppliers of taxonomies. The American Medical Association, the American National Standards Institute, Underwriters Laboratories, and several other groups have filed a brief as amici curiae to observe that they, too, produce catalogs of some field of knowledge and depend on the copyright laws to enable them to recover the costs of the endeavor. Other groups or firms might say the same. The manuals issued by the Financial Accounting Standards Board to specify generally accepted accounting practices could not be copyrighted. Nor could the tests and answers devised by the Educational Testing Service. The district court's reasoning logically removes copyright protection from the West Key Number System, which is designed as a comprehensive index to legal topics, and A Uniform System of Citation (the Bluebook), a taxonomy of legal sources. Very little computer software could receive a copyright if the district judge is correct: no one reads, for pleasure, the source or object code of the word processing program on which this opinion was written, or of the operating system that runs the computer: take away the "useful" elements and these endeavors are worthless. Worse, most commercial software these days is written by committee, and authors receive less public credit than the gaffers on a movie set, whose names at least scroll by at the end after the audience has turned its collective back to head up the aisles. Blueprints for large buildings (more committee work), instruction manuals for repairing automobiles, used car value guides, dictionaries, encyclopedias, maps — all these, and many more, would flunk the district court's test of originality. Yet these items are routinely copyrighted, and challenges to the validity of these copyrights are routinely rejected. E.g., Educational Testing Services v. Katzman, 793 F.2d 533 (3d Cir. 1986) (Scholastic Aptitude Test); CCC Information Services, Inc. v. Maclean Hunter Market Reports, Inc., 44 F.3d 61 (2d Cir. 1994) (list of used-car prices); Lipton v. Nature Co., 71 F.3d 464 (2d Cir. 1995) (terms describing groups of animals). See also 17 U.S.C. §101 (including "architectural plans" within the definition of "pictoral, graphic and sculptural works" that are copyrightable); Paul Goldstein, Copyright: Principles, Law and Practice §2.15.2 (1989) (discussing copyright protection for computer programs). The American Medical Association's copyright in the *Physician's Current Proce*dural Terminology, its catalog of medical procedures, was recently sustained, although against a challenge different from the district court's rationale. Practice Management Information Corp. v. American Medical Association, 121 F.3d 516 (9th Cir. 1997). Maps and globes are not only copyrightable, see Rockford Map Publishers, Inc. v. Directory Service Co., 768 F.2d 145 (7th Cir. 1985), but also constituted two-thirds of the original scope of copyright. The Copyright Act of 1790 specified three protectable items: maps, charts, and books. Act of May 31, 1790, 1 Stat. 124. Like taxonomies, maps are valued to the extent they offer useful organizations of facts; like the Code, maps are produced by committees. (As are opinions of appellate courts, which despite this handicap, and the judges' effort to produce something useful, might occasionally have a modicum of originality.)

Any original literary work may be copyrighted. The necessary degree of "originality" is low, and the work need not be aesthetically pleasing to be "literary." *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340, 345-46. . . . Term papers by college sophomores are as much within the domain of copyright as Saul Bellow's latest novel. *See Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239. . . . Scholarship that explicates important facts about the universe likewise is well within this domain. Einstein's articles laying out the special and general theories of relativity were original works even though many of the core equations, such as the famous  $E = mc^2$ , express "facts" and therefore are not copyrightable. Einstein could have explained relativity in any of a hundred different ways; another physicist could expound the same principles differently.

So too with a taxonomy—of butterflies, legal citations, or dental procedures. Facts do not supply their own principles of organization. Classification is a creative endeavor. Butterflies may be grouped by their color, or the shape of their wings, or their feeding or breeding habits, or their habitats, or the attributes of their caterpillars, or the sequence of their DNA; each scheme of classification could be expressed in multiple ways. Dental procedures could be classified by complexity, or by the tools necessary to perform them, or by the parts of the mouth involved, or by the anesthesia employed, or in any of a dozen different ways. The Code's descriptions don't "merge with the facts" any more than a scientific description of butterfly attributes is part of a butterfly. Cf. Nash v. CBS, Inc., 899 F.2d 1537 (7th Cir. 1990) (discussing the fact-expression dichotomy). There can be multiple, and equally original, biographies of the same person's life, and multiple original taxonomies of a field of knowledge. Creativity marks the expression even after the fundamental scheme has been devised. This is clear enough for the long description of each procedure in the ADA's Code. The long description is part of the copyrighted work, and original long descriptions make the work as a whole copyrightable. But we think that even the short description and the number are original works of authorship.

Number 04267 reads "guided tissue regeneration — nonresorbable barrier, per site, per tooth" but could have read "regeneration of tissue, guided by nonresorbable barrier, one site and tooth per entry." Or "use of barrier to guide regeneration of tissue, without regard to the number of sites per tooth and whether or not the barrier is resorbable." The first variation is linguistic, the second substantive; in each case the decision to use the actual description is original to the ADA, not knuckling under to an order imposed on language by some "fact" about dental procedures. Blood is shed in the ADA's committees about which description is preferable. The number assigned to any one of the three descriptions could have had four or six digits rather than five; guided tissue regeneration could have been placed in the 2500 series rather than the 4200 series; again any of these choices is original to the author of a taxonomy, and another author could do things differently. Every number in the ADA's Code begins with zero, assuring a large supply of unused numbers for procedures to be devised or reclassified in the future; an author could have elected instead to leave wide gaps inside the sequence. A catalog that initially assigns 04266, 04267, 04268 to three procedures will over time depart substantively from one that initially assigns 42660, 42670, and 42680 to the same three procedures. So all three elements of the Code — numbers, short descriptions, and long descriptions, are copyrightable subject matter under 17 U.S.C. §102(a). The Maroon Book and the *Bluebook* offer different taxonomies of legal citations; Wotquenne and Helm devised distinct catalogs of C.P.E. Bach's oeuvre; Delta Dental Association could have written its own classification of dental procedures. . . .

Delta asks us to affirm the judgment on a ground that the district judge did not reach: that the Code is not copyrightable because it is a "system." Section 102(b) tells us that copyright protection even of an original work does not cover "any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work." But what could it mean to call the Code a "system"? This taxonomy does not come with instructions for use, as if the Code were a recipe for a new dish. Cf. *Publications International, Ltd. v. Meredith Corp.*, 88 F.3d 473 (7th Cir. 1996) (holding that recipes are not copyrightable). A dictionary cannot be called a "system" just because new novels are written using words, all of which appear in the dictionary. Nor is word-processing software a "system" just because it has a command structure for producing paragraphs. The Code is a taxonomy, which may be put to many uses. These uses may be or include systems; the Code is not.

Section 102(b) codifies the fact-expression dichotomy, which we have already considered, as well as the holding of Baker v. Selden, 101 U.S. (11 Otto) 99 . . . , that blank forms are not copyrightable, even if the structure of the forms captures the essence of an original work of literature. The book was protected as original literary expression, the Court held, but the form was a means of putting the book's ideas into practice — and copyright law, unlike patent law, covers only expression. Someone who buys a book full of ideas for new machines may build and sell one of the machines without infringing the author's copyright; Baker thought that the use of an accounting system described in a book is pretty much the same thing, even if practice of the system entails use of the author's forms. Baker rearranged Selden's forms, but if the original forms were copyrightable then the rearrangements were derivative works, which the original author had an exclusive right to produce. Protecting variations on the forms could have permitted the author of an influential accounting treatise to monopolize the practice of doubleentry bookkeeping. Yet copyright law does not permit the author to monopolize the revenues to be derived from an improved system of accounting — or of reporting dental procedures. See William M. Landes & Richard A. Posner, An Economic Analysis of Copyright Law, 17 J. Legal Stud. 325, 350-53 (1989).

Few "how-to" works are "systems" in Baker's sense. If they were, architectural blueprints could be freely copied, although the Berne Convention Implementation Act of 1988, Pub. L. 100-567, 102 Stat. 2854, adds protection for "architectural plans" to the statute. Descriptions of how to build or do something do not facilitate monopoly of the subjectmatter being described, so the concern of Baker is not activated. Again consider blueprints: other architects can imitate the style of the completed building; they just can't copy the plans. What is more, a form that contains instructions for its completion is copyrightable in part (the instructions) and in the public domain in part (the lines and boxes). Edwin K. Williams & Co. v. Edwin K. Williams & Co. East, 542 F.2d 1053, 1061 (9th Cir. 1976); Goldstein at §2.15.1.b. So far as the ADA is concerned, any dentist, any insurer, anyone at all, may devise and use forms into which the Code's descriptions may be entered. The ADA encourages this use; standardization of language promotes interchange among professionals. (The fact that Delta used most of the Code but made modifications is the reason ADA objects, for variations salted through a convention impede communication.) Section 102(b) precludes the ADA from suing, for copyright infringement, a dentist whose office files record treatments using the Code's nomenclature. No field of practice has been or can be monopolized, given this constraint. Section 102(b) permits Delta to disseminate forms inviting dentists to use the ADA's Code when submitting bills to insurers. But it

does not permit Delta to copy the Code itself, or make and distribute a derivative work based on the Code, any more than Baker could copy Selden's book. . . .

## **NOTES AND QUESTIONS**

- 1. Was this case correctly decided? How did Delta Dental's conduct differ from that of Baker in *Baker v. Selden*? What did Delta Dental do wrong? Can you think of another, non-copyright-based legal theory that the ADA might have asserted?
- 2. Does the classification method developed by the ADA fall within any of the other categories listed in \$102(b)? Might it be an unprotectable "process" or "method of operation"? How would the *ADA* court respond to such an argument?
- 3. Did the *ADA* court hold that the ADA's taxonomy is copyrightable because there exists a large number of possible variations on such a taxonomy? If so, is that reasoning sound? Consider, again, whether there could be subject matter that qualifies for copyright protection under \$102(a)—because it is "original"—but is nevertheless barred from such protection under \$102(b). Might there be such a thing as noncopyrightable originality? Is the ADA's taxonomy an example of that sort of originality?
- 4. According to the *ADA* court, *Baker* is a case holding "that blank forms are not copyrightable." Do you agree with that characterization of *Baker*? Read the following excerpt from the Copyright Office's regulations:

## §202.1 Material not subject to copyright

The following are examples of works not subject to copyright and applications for registration of such works cannot be entertained:

- (a) Words and short phrases such as names, titles, and slogans; familiar symbols or designs; mere variations of typographic ornamentation, lettering or coloring; mere listing of ingredients or contents;
- (b) Ideas, plans, methods, systems, or devices, as distinguished from the particular manner in which they are expressed or described in a writing;
- (c) Blank forms, such as time cards, graph paper, account books, diaries, bank checks, scorecards, address books, report forms, order forms and the like, which are designed for recording information and do not in themselves convey information;
- (d) Works consisting entirely of information that is common property containing no original authorship, such as, for example: Standard calendars, height and weight charts, tape measures and rulers, schedules of sporting events, and lists or tables taken from public documents or other common sources.
  - (e) Typeface as typeface.

## 37 C.F.R. §202.1. Are these rules dictated by Baker? By some other principle?

A number of cases address blank forms. Compare, e.g., Bibbero Sys., Inc. v. Colwell Sys., Inc., 893 F.2d 1104 (9th Cir. 1990) (holding billing forms that doctors used to obtain reimbursement from insurance companies were uncopyrightable blank forms), with, e.g., Harcourt Brace & World, Inc. v. Graphic Controls Corp., 329 F. Supp. 517, 524 (S.D.N.Y. 1971) (holding test answer sheets copyrightable because they were "designed to guide the student in recording his answer" and therefore conveyed information).

5. Compare the different types of subject matter at issue in the three cases in this section. Is the ADA's taxonomy more creative than Selden's system of bookkeeping or Hoehling's