

## The Care and Feeding of Intellectual Property

How much legal protection of "property rights" in ideas is desirable?

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An old cookbook, in telling how to make rabbit stew, starts off with the phrase, "First catch a rabbit." In making that stew, we do not want to be in the situation of the confirmed city dweller who had no difficulty in catching rabbits because they congregated on the fence each night and even disturbed the neighbors by their meowing! We need to know what a rabbit is, what it looks like, where it lives, and, above all, whether or not the jurisdiction recognizes the doctrine of *ferae naturae* (1).

The recent profusion of scholarly articles represents an age-old desire for recognition of one's ideas and one's accomplishments. Even the manuscript itself, as distinguished from the ideas it contains, may be considered an accomplishment. One of the benefits the scholar derives from publishing is the discipline of having to reformulate the problem and his solution. Publishing serves also to give distinction to the publicist and his academic home. We have all heard the expression, "He published first." Publication serves to point out the discoverer or the innovator, his approach, and his conclusion (2). It may even constitute an attempt to reserve to the author a particular domain of inquiry.

It may come as a distinct shock to the publicist to discover that the inscription "Copyright 196—, by ———"

on the title page of a journal serves to protect the contents of the journal from unauthorized use as *literary* works and affords no protection whatsoever to the ideas expressed in that article. The scholar, by publishing, may even be destroying whatever right he might have to his own "intellectual property."

But first we must catch our rabbit. What is an intellectual property? Certainly it is a product of the mind, but it may or may not be the product of extensive investigation. In fact, no research may be involved. From whatever source it is derived, however, be it research or fortuitous event, an intellectual property falls into various categories insofar as protection is concerned. These categories are, (i) patents (3); (ii) copyrights (4, 5); (iii) trade secrets; and (iv) "ideas." The means and methods of protection may vary with the type of property, and protection under one category may well destroy protection which might exist under another (6).

### Statutory Protection

In the category of patents, a quibble exists as to the nature of the thing patented. It may be a device or a formula. In either case it arose from some form of reflection and, in that

sense, may be termed intellectual property (7). The same may be said of items which fall within the protection of copyright, although generally this type of protection is reserved for forms of ideas. In either case, securing protection by either patent or copyright is a matter for specialists and not within the scope of this discussion. Except for what is known as the common-law copyright (8), these types of protections are statutory.

The point in issue in patent litigation is usually one of invention (as opposed to discovery), and priority of invention. In copyright matters the primary concern is infringement on either a literary work or a distinctive design or mark (9).

Whereas the literature defines the area of protection of "trade secrets" and restrictive covenants in industry (10), an unsolved, and possibly unsolvable, problem faces the academic researcher (and the researcher employed by nonprofit organizations), one which concerns the ownership of an idea. The basic theory underlying the protection afforded trade secrets is that the secret is "owned" by the employer and that he thereby has the right to protect what he "owns" by preventing disclosure and use by the employee. Patents and copyrights may be the subject of ownership (11); patents are peculiar in that no patent may be taken out by a corporation even though that corporation may be a nonprofit organization. The patentee must always be an individual or individuals, and herein lies our first problem. In many instances, research today is team research supported by one or more agencies, or sponsors, and conducted at facilities furnished by an eleemosynary institution. The question then becomes, who, among the investigators or among the sponsors, "owns" the "patentable" end product.

This question is particularly troublesome when the host institution has no recognizable patent policy and has not entered into any agreements with its faculty and staff as to patentable results from sponsored investigations.

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The problem does not end here. There may be the additional and complicating factor that the sponsor may desire the patent, as is the case with certain federal agencies (12). Put simply, this means that we are faced with possible multiple claims to a patentable result, which may generate senseless litigation. If, for example, we can say that the researcher is an employee of the non-profit institution, it is possible that the institution may "own" the right to patent through assignment from that individual (13). On the other hand, the patentable product may, under the research agreement from the sponsoring agency, belong to the sponsor, likewise through assignment.

It is statistically correct to say that the majority of patents resulting from group research are taken out by an individual. We must remember, however, that there are patents and *patents*. For example, a patent was issued for a method of shaving with cold water. Really profitable patents today do not stem from the activities of individual tinkerers and solderers; the average faculty residence has a furnace, not a linear accelerator, in its basement!

We are not here concerned with either patents or copyrights as such; we are concerned with this phase of statutory monopoly in that it is normally associated with practical commercial applications of an idea, not with the idea itself. So far as the courts are concerned, intellectual property is tied to something patentable or copyrightable. In the jurist's view, the property is commercially exploitable. Otherwise, why should anyone take the matter to court? (14).

Galileo could not patent his findings on falling bodies; Einstein could not protect  $E = mc^2$ , although he could and did protect a refrigeration system; Newton would have failed in any effort to patent the law of gravity, or any of his laws of motion. These are discoveries of *natural* laws and not protectable.

The scholar is interested in learning for learning's sake; a corporate sponsor, in the commercial aspect of the learning—that is, in exploitation of the learning. Perhaps the term *exploitation* has an unsavory connotation and a better term is *commercialization of ideas* (15).

How does the law operate to protect one individual as opposed to the other, and is there any difference in the legal protection afforded? In patents and copyrights there is a protect-

able property interest, but what of trade secrets and know-how, of ideas as such? In patents and copyrights it is the end product of the idea that has been protected. In other words, the idea is immaterial. It is only after the idea has been packaged that the *package* will be protected.

### Protection of the Pure Idea

As for property in an idea as such, as distinguished from the package resulting, the law seems to be moving in the direction of recognizing a relational harm—that is, harm from the damage resulting from the breach of confidence caused by the disclosure of information revealed in confidence. It is here that the case law is so voluminous. Numerous past opinions support the proposition that an employee is not free to disclose or to utilize for his personal advantage information passed to him in confidence in his capacity as an employee. Even in cases where the information was later disclosed through the medium of a patent the employee would have been so restricted, if he had secured the information prior to patent via the avenue of a confidential relationship. In *Atlas Bradford Company v. Tuboscope Company* (16), for example, the court stated: "Since Unger [the discloser] received the information while it was still a 'trade secret' and disclosed same in what amounts to an abuse of confidence, (as well as his own agreement not to do so), Tuboscope is entitled to the relief granted as to him." The relief in question was injunctive, to prevent use of the information secured, through breach of confidence, from Unger, whose status as an employee of Tuboscope was never in doubt.

In *Head Ski Company, Inc. v. Kam Ski Company, Inc.* (17), the persons enjoined were not employees of the Head Company in the usual sense of the term. In effect, they were co-workers. Indeed, the court said (17), "the defendants continued to work part-time for Head, deferring payment of wages, and keeping an informal log of hours on the shop wall. [They] also worked with their hearts as well as their heads and hands. Many of the ideas and techniques which culminated in a successful metal and plastic ski were theirs, conceived and applied during their employment by Head." The court used "employed" generically, and the decision of the case appears to hinge

on the fact that defendants *later* accepted compensation for their long hours of labor, rather than demanding recognition as co-discoverers. It is true that an employer has a "work product interest" in the developments initiated by his employees on employer time during the course of employment, but that work product interest results from the employment—that is, from the relationship between the parties, which, in turn, hinges upon the acceptance of wages for the work done.

A recent ruling in a Texas case (18), stated that the owner of a trade secret, in disclosing it, loses his right to it unless the disclosure is made on condition that the individual to whom it is disclosed keep it confidential and not use it. This is not to say that an employee is free to disclose confidential data in the absence of such a specific agreement. The general rule is that the mere fact of employment implies such an agreement. In *Schulenburg v. Signatrol Inc.* (19) there was no particular agreement as to nondisclosure, yet injunctive relief was granted where the former employees attempted to utilize trade secrets secured during their employment.

Even where the disclosure is made to an independent contractor specially employed to further developments to improve existing processes—that is, when the disclosure is made to a hired co-developer—this contractor cannot disclose the so-called secret to others without violating the confidential relationship. The ruling in *Carter Products v. Colgate-Palmolive Co.* (20), supports the proposition that a co-inventor may not disclose to anyone other than his associates in the venture confidential information to the detriment of the other co-inventors. In this case the information in question concerned a formula for pressurized shaving soap which was to be dispensed from an aerosol-like container. Granted, the idea of aerosol sprays had long been known, and, in fact, somewhat related items had been patented abroad; nevertheless, it was held that the *particular* idea and formula had not been (20).

### Confidential Disclosures

Thus, the information available to the discloser was considered, despite possible disclosure of general information through foreign patents, to be confidential. This ruling is consistent with that in the *Tuboscope* case (16).

Both underscore the reluctance of the courts to allow defaulting employees to raise the question of whether or not the information disclosed was already in the public domain. The courts seemingly considered it sufficient that the information had been disclosed to the employee in confidence, and considered the question of whether or not the information was a secret at the time of disclosure a matter of unimportance. True, in order for the employer to secure injunctive relief preventing the employee from working for others or otherwise making use of the "secret" information, it must be shown that the information which might be disclosed by the ex-employee was, in fact, kept secret by the employer, that it was not well known in the trade, and that the employer would be damaged by the disclosure (21).

The case of *Arthur Murray Dance Studios of Cleveland, Inc. v. Witter* (10), involved a covenant on the part of the employee that he would not disclose secret information. Such a clause is not uncommon in industrial research employment contracts, but it is generally not utilized by educational and other nonprofit research organizations. To quote the Court (10, p. 687):

When the defendant (Witter) . . . waltzed out of the employment of the plaintiff . . . into the employment of the Fred Astaire Dancing Studios, the plaintiff waltzed [him] into court. . . . At the time Witter took his contentious step, Arthur Murray had a string attached to him—a certain contract prohibiting Witter, after working for Arthur Murray no more, from working for a competitor. That Arthur Murray and Fred Astaire are rivals in dispensing Terpsichorean erudition is not disputed. Now Arthur Murray wants the court to pull that string and yank Witter out of Fred Astaire's pedagogical pavilion.

What was involved is clearly a covenant—a contract if you will—calling for noncompetition in a particular area. Murray would not have objected to Witter's working for a drive-in restaurant, or working as a plumber.

Violations of covenants of this character have been regarded as akin to the pirating of ideas and are, in a sense, a form of unfair competition. Litigation involving such covenants has been limited to business, industry, and commerce. We have found no cases involving educational or nonprofit research corporations. We do not know the reason for this lack of protection for the employing entity; it may be an extension of the idea of traditional academic freedom, or it may be that

these institutions do not regard themselves as being in competition.

Actually, many educational institutions rate their educators on a competitive basis. Also, they raid other institutions for researchers and scholars considered (on a competitive basis) to be of top quality. Educational institutions are conscious of their "posture" and strive to come up with developments in some area ahead of their sister institutions. How, then, in this skirmish for prestige and talent, may an educational institution protect itself and, at the same time, allow scholars freedom of movement?

Here again we face the problem of group research and a multiplicity of sponsors (22). Often the sponsorship agreement—for example, a government research contract—may stipulate that underlying know-how becomes the property of the sponsor. Except in government-sponsored research, this type of stipulation is not common, and the problem is one of failure to anticipate the problem. If there is, in fact, any underlying know-how belonging to the institution or the sponsor it is customarily disclosed to the project director or principal investigator. From him that confidential information filters down, through his assistants, to the graduate students assisting in the study.

It may be that no one subordinate investigator has all the know-how in question; each may have a small segment, and investigators on levels below the very top probably have not been informed of the confidential nature of the information they receive or of the confidential relationship existing with respect to that information. The *Schulenberg* case (19), mentioned above, involved a group of employees each of whom came into possession of a portion of the requisite know-how. Those employees later consolidated their knowledge and entered into competition with their former employer. This action was held to be a breach of the previously existing confidential relationship, and an injunction was granted.

It should be obvious that, if disclosure of confidential information be made to an employee, the exact nature of that information—that is, its confidentiality—should be stressed and some attempt should be made to keep the information segregated. This need calls for more diligence on the part of the institution's research administrator and of the principal investigator. The same ground rules apply in the case

of individual researchers and their student assistants; each of these assistants may on occasion need confidential background information (23).

Thus far we have progressed in this discussion from an area where protection may be statutory to a somewhat more hazy area where protection is based on a relationship. We come now to the last area, one not of haziness but of complete uncertainty: the protection of "ideas" as such.

We know that an idea, as distinguished from a device based on that idea, is not afforded statutory protection. If we consider the idea as indistinguishable from its originator, any dilution of the idea is automatically an injury to the originator, particularly if the product is known by the discoverer's name. Thus, marketing an inferior product or making false claims with respect to the product's worth may do irreparable injury to the profession or name of the originator.

The difficulty when pure "ideas" are dealt with is that the courts have traditionally held that there is no "property" right in an idea. It is true that the opinion in the leading case of *International News Service v. Associated Press* (24), appears to hold otherwise. In that case, plaintiff was a news-gathering agency and complained (24, p. 231) that defendant was pirating its ideas, "first, by bribing employees of newspapers published by complainant's members to furnish Associated Press news to defendant before publication, for transmission by telegraph and telephone to defendant's clients for publication by them; second, by inducing Associated Press members to violate its by-laws and permit defendant to obtain news before publication; and third, by copying news from bulletin boards and from early editions of complainant's newspapers and selling this, either bodily or after rewriting it, to defendant's customers."

The court sustained an injunction prohibiting defendant from pirating the "property" of plaintiff, at least until such property (news) had lost its commercial value. Justice Brandeis vigorously dissented, contending that news dispatches were not "property" of the kind previously recognized as entitled to protection and inviting attention to the fact that, under the copyright laws, it was the *form* of the idea which was entitled to protection, not the idea itself. He stated (24), that "the rule for which the plaintiff contends [and which was sustained] would effect an

important extension of property rights and a corresponding curtailment of the free use of knowledge and of ideas."

The point of disagreement was obviously the question of property rights in ideas and knowledge. Perhaps the decision does stand for the proposition that there is a property right in ideas, but the case involved so many elements of overt fraud and interference with business relationships that it is difficult to know just what the case means in a present-day setting. If there is actually a property right in knowledge and ideas there is no logical reason why such right should not be protected to the same extent, and in the same manner, as any other property.

The other side of the coin is the proposition that to protect ideas and knowledge in this manner would enable a researcher to stake a site and file a claim to his own private mining preserve. This would certainly, it seems, have a disastrous effect on the advancement of knowledge and would seriously hamper research as a whole.

It is frequently very difficult to distinguish the basic idea from the resulting product (25). Someone years ago conceived the idea that a pin with some sort of guard would be commercially acceptable. This idea was and is not patentable, but the resulting product, the safety pin, was, or could have been. The idea could not be protected—the device could be. The line of demarcation is faint; even Harvard found it necessary to insist that ideas are not the subject of protection. In *Irizarry v. President and Fellows of Harvard College* (26), such was the holding. A reading of the case indicates what has previously been noted: an idea is not patentable or subject to protection, despite the opinion in *International News Service v. Associated Press*. It has to be packaged, and the package may be protected by patent or copyright.

### Secrecy versus Disclosure

In the absence of statutory protection, various schemes have been advanced to enable the originator of an idea to protect what he regards as his "property." Unfortunately, the only completely effective protection for an idea is secrecy. This includes nondisclosure to one's wife and colleagues and, of course, renders the idea completely unusable except as a means of raising one's self-esteem.

Once an idea has been disclosed, only the form in which it is expressed is subject to protection via existing common-law and statutory routes. This situation focuses attention on the importance of the method or means of disclosure rather than on the basic idea, and we are immediately faced with the question of whether an idea, as distinguished from its form, ought to be protected. As noted, the disadvantages of idea protection may outweigh the advantages. Were ideas, as such, protectable, novelists would be hard put to devise new plots and comedians would have to seek other employment. The law has not, of course, gone this far; it has required the idea to be put in some recognizable, concrete form before protection is afforded—afforded not the idea but the form.

This form may be either a synopsis for an article, an outline for a play, or a pilot kinescope for a television series (27, 28). The mere idea for a radio play based on the conflict between law and organized crime under some such title as "Mr. District Attorney" was held not to be protectable.

Most litigation in this area has been generated from claims that the plaintiff's literary ideas have been appropriated; the researcher, unless he is doing his research with the intention of producing a literary work, is in even worse position than the literary man so far as the protection of ideas is concerned. He is concerned with the advancement of knowledge, and to permit a scientist to wall off an area of study as his particular province would be a deterrent to scientific advance. Even where the idea concerns a device, if that device is not patentable (as may be the case for a number of reasons), a competitor is at liberty to simulate it. Thus, in *Sears, Roebuck & Co. v. Stiffel Co.* (29), the highest court of the land, speaking through Justice Black, stated that, in the absence of a patent, an article or device is in the public domain and may be freely imitated despite common-law sanctions designed to give the originator protection similar to patent protection. Justice Harlan dissented, stating (29, p. 233):

... If copying is found, other than by an inference arising from the mere act of copying, to have been undertaken with the dominant purpose and effect of palming off one's goods as those of another or of confusing customers as to the source of such goods, I see no reason why the State may not impose reasonable restrictions on future "copying" itself.

In another case decided the same day, the Supreme Court declined to follow Justice Harlan even where the copying was for the purpose of competing with an identical or confusing device (30).

Litigation involving the alleged misappropriation of ideas has been generated on the basis of several arguments: (i) that the defendant had specifically agreed not to appropriate (that is, breach of contract); (ii) that the defendant by appropriating impliedly promised to pay for use of the idea (quasi contract or *quantum meruit*; (iii) that the idea had been disclosed to the defendant in confidence and the resulting use by defendant was a breach of that confidence, much like disclosure of "trade secrets"; (iv) that use of the idea by the defendant constituted some sort of unfair trade practice; and (v) that access to the idea had been secured by fraudulent practices, as in the *International News* case (24, p. 39). Except where litigation was based on the last of these arguments, litigants have been remarkably unsuccessful (27, 31). Indeed, originators of ideas have had considerable difficulty in finding prospective defendants willing to enter into a binding contract regarding an as yet undisclosed idea. No prospective purchaser wants to get a pig in a poke, and, so far as the purchaser is concerned, the particular idea may be worthless or already in his possession. Similar difficulties have been encountered in attempts to invoke other theories of attempted protection.

### Conclusion

What can the researcher do to protect his ideas? Here the saying "It is a wise father that knows his own child" is applicable. Can a present-day researcher be sure that an idea is really his brain child? Let us assume, for the sake of argument, that this is possible; then his safest procedure is to keep that idea to himself until it can be submitted in a protectable package. Most universities and other non-profit research institutions lack patent policies sufficiently broad to be of much assistance to either the researcher or the institution. Possibly the first needed step in increasing the protection of research is a broadening of institutional patent policies to embrace property in ideas, even though ideas may not at present be patentable. Secondly, information regarding what in-

stitutions can do to assist in achieving protection of ideas should be disseminated as widely as possible. Thirdly, liaison should be established between the institution and Research Incorporated (32), or some similar nonprofit organization serving the educational community, in order that the developmental aspect of the idea may be guided at an early stage, so that when it is presented for commercial evaluation it will be in a protectable package and appropriately wrapped.

#### References and Notes

1. According to this doctrine, a wild animal is possessed by its captor and is not "owned" by the person on whose land it is found. When applied to intellectual property, the doctrine is complicated by the fact that more than one person can have the same idea. Can two people own the same rabbit?
2. Publication has implications in both patent and copyright fields. In the case of patents, publication may support a claim of priority of invention, or priority of discovery. Thus, in the case of patent infringement actions or copyright infringement, the prior publication may establish failure to contribute to the art, or lack of originality.
3. Title 35, *U.S. Code Annotated*, sect. 1-293.
4. Title 17, *U.S. Code Annotated*, sect. 1-216.
5. See, "General Information on Copyrights," *Circular 35* (Aug. 1963).
6. Trademarks, the modern-day counterpart of the Guild Mark of the 14th Century, are outside the scope of this article. It should be noted, however, that they play an important part in protecting the identity of manufactured articles. See A. H. Seidel, *What The General Practitioner Should Know About Trademarks and Copyrights* (American Law Institute, Philadelphia, Pa., 1959).
7. See also, A. H. Seidel, *What The General Practitioner Should Know About Patent Law and Practice* (American Law Institute, Philadelphia, Pa., 1956).
8. Common-law copyright represents a right to the form of the author's expression, an exclusive right until such time as the work is published or otherwise enters the public domain.
9. Certain works are not afforded protection. See "General Information on Copyrights" (5).
10. *Arthur Murray Dance Studios of Cleveland, Inc. v. Witter*, 105 *Northeastern Repr. ser.* 2 685 (Court of Common Pleas, Ohio, 1952), contains an exhaustive list.
11. A patent or copyright is, actually, only a license to exploit, with the right to protect (successfully) against someone else "trespassing" on the area. It is, in effect, a license giving the holder, and none other, the right to hunt a particular form of rabbit.
12. Existing federal statutes and regulations forbid the issuance of certain patents concerning atomic energy; the patent must be issued to the government.
13. The basic assumption is that the constitutional authority to issue patents was intended to protect inventors. As a corporation is an artificial entity it obviously can invent nothing; invention is the prerogative of the individual, but the corporation can buy the right—that is, the patent rights—from the individual.
14. Reduced to its elements, the situation is this: protective laws are interpreted by the judges, and, naturally, the judges are influenced by traditional views on what constitutes intellectual property.
15. Actually, the views of the scholar and the corporate sponsor are not far apart: the former wants protection for his reputation and for his rights as a discoverer; the latter wants protection that will enable it to control the use of the "property."
16. 378 *Southwestern Repr. ser.* 2 147 (Court of Civil Appeals, Tex., 1964).
17. 158 *Federal Suppl.* 919 (District Court, Maryland, 1958).
18. *Furr's Inc. v. United Specialty Advertising Co.*, 385 *Southwestern Repr. ser.* 2 456 (Court of Civil Appeals, Texas, 1964).
19. 200 *Northeastern Repr. ser.* 2 615 (Illinois Court of Appeals, 1964).
20. 130 *Federal Suppl.* 554 (District Court, Maryland, 1955).
21. J. H. Munster, Jr., and J. C. Smith, 145 *Science* 1276 (1964).
22. It must be remembered that institutional research organizations are not limited to a single sponsor. The institutional research organization may be involved in research for competing sponsors who may not even be aware they are patronizing a single source of ideas. So far as the research organization is concerned the result may be a conflict of interest.
23. Where confidential information is so disclosed, the fact of confidentiality should be disclosed, preferably in writing.
24. 248 *U.S. Repts.* 215 (1918).
25. It has frequently been said that mere extension of the existing state of affairs is not enough to render the idea patentable. This is not quite a true generalization. There are extensions and extensions, and patentability will depend on the "size" of the extension. After all, each advance in knowledge is an extension of prior knowledge.
26. 248 *Federal Repr. ser.* 2 799 (1st Circuit Court, 1957).
27. H. R. Olsson, "Dreams for sale," 23 *Law & Contemporary Problems* 34 (1958).
28. H. C. Havighurst, "The right to compensation for an idea," 49 *Northwestern Univ. Law Rev.* 295 (1954).
29. 376 *U.S. Repts.* 225 (1964).
30. *Compco Corp. v. Day-Bright Lighting, Inc.*, 376 *U.S. Repts.* 234 (1964).
31. "The unsolicited creative idea: A copyright perplexity," 28 *Albany Law Rev.* 108 (1964). See also, 9 *Cleveland-Marshall Law Rev.* 1 (1960).
32. Research Incorporated, 405 Lexington Ave., New York, N.Y., is an organization which services the needs of the academic community in the development and promotion of intellectual properties.

## Escape to the Endless Frontier

How can science be related to our political purposes and to our economic and constitutional system?

Don K. Price

The United States was founded at a time when philosophers were beginning to believe in the perfectibility of mankind. Ever since Benjamin Franklin and Thomas Jefferson, Americans have been inclined to put their faith in a combination of democracy and science as a sure formula for human progress.

Today that faith burns much less bright. Since the Second World War it has seemed to many, and especially

to scientists, that the faith was dimmed by the mushroom cloud of the atomic bomb. The scientists who found themselves, to their great surprise, caught up in the political troubles of the contemporary world are tempted to blame their fate on their success in discovering nuclear fission: they see their tragedy, like that of Prometheus, as the result of seizing the secrets of the gods. But it seems more realistic to remind them that their own faith in

inevitable progress had been dampened before Hiroshima—during the Great Depression or even before.

The earlier creed of progress had two main articles of faith, one relating to the progress of science, the other to the progress of society. The first was that men's desire for material benefits would lead society to support the advancement of science and technology, just as the profit motive would encourage the development of the economy. The second was the corollary that the advancement of science would lead society toward desirable purposes, including political freedom.

The depression gave the general public reason to doubt these beliefs, as many scientists and philosophers had already come to do. After economists and politicians lost their confidence that the individual profit motive would automatically guarantee

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