THE DECLINE OF TRADITIONALISM AND INDIVIDUALISM.

The short period of the present century has witnessed in this country many legislative and judicial changes in the law. Principles and theories long regarded as sacro-sanct have been repudiated or disregarded, and new ones have been adopted in their places. So pronounced are these changes that their significance and their connection with each other and with other sciences become subjects of pertinent inquiry. An enumeration of some of the recent changes may perhaps furnish a basis for an answer to such an inquiry.

Court procedure is being rapidly simplified and robbed of much of its formalism both by direct legislative enactment and by delegating to courts the power to make rules of procedure. Massachusetts has a statute providing for simple forms of indictments in place of the highly technical requirements of the common law. Under this statute an indictment for larceny, for instance, is sufficient which alleges that A. B. did steal the coat of C. D. of the value of five dollars. England has just passed a similar statute, and proposals of the same character are being urged in some of our states. An example of simplified procedure is found in the act creating the new Municipal Court of Philadelphia, where it is provided that: "All civil actions in said municipal court shall be begun by filing a statement of the plaintiff's claim, without the issuance of any formal writ. The said statement shall consist of a concise recital of the facts which the plaintiff claims give rise to his cause of action." The new equity rules of the United States Supreme Court have greatly modified equity pleading, one of the rules being: "Unless otherwise prescribed by statute or these rules, the technical forms of

---

1 This paper is an elaboration of a public lecture delivered at the University of Pennsylvania.
2 Rev. Laws, 1902, Ch. 218, Secs. 15-45.
3 53 L. R. Stat. Ch. 90.
4 See report of special committee on criminal procedure of the American Institute of Criminal Law and Criminology, 5 Jour. of Crim. Law and Criminology, 827, March, 1915.
5 Laws of Pa. 1913, No. 399, Sec. 12.
pleadings in equity are abolished.”

It is provided in the equity rules of the Supreme Court of Pennsylvania that: “Every bill shall be expressed in as brief and succinct terms as it reasonably can be.”

This rule is more simple than the former requirement as to the proper degree of certainty necessary for a bill in equity, the obscurity of which requirement and the respect with which it was regarded are well illustrated by the statement of a distinguished English judge:

“Certainty in pleading has been stated by Lord Coke to be of three sorts, viz., certainty to a common intent, to a certain intent in general, and to a certain intent in every particular. I remember to have heard Mr. Justice Aston treat these distinctions as a jargon of words, without meaning. They have however long been made, and ought not altogether to be departed from.”

The long recognized theory of legal liability that there shall be no responsibility without fault has been superseded by the enactment of workmen’s compensation laws which provide that the employer shall compensate workmen for injuries received in the course of their employment in the absence of any fault or wrongdoing on his part. The enactment of these laws indicates a recognition by society that injuries are necessary accompaniments of industry, and that it is better for society that incapacitated workmen be provided for directly than through the indirect medium of charity. In a similar way statutes compelling the establishment of safety and comfort devices for employees and fixing the hours of labor in certain employments indicate an effort to better the condition of society by protecting the health of a large group of its members. The statutes so far enumerated are commonly described by the general term, social legislation.

*Rule 18.

*Rule 15.

*Buller, J., in Dovaston v. Payne, 2 H. Bla. 527, 530.

*The arguments in favor of a compulsory workmen's compensation law were summed up as follows by Mr. Justice Pitney, in New York Cent. R. Co. v. White, 37 Sup. Ct. Rep. 247, 250 (1917): “In support of the legislation, it is said that the whole common-law doctrine of employer's liability for negligence, with its defenses of contributory negligence, fellow-servant's negligence, and assumption of risk, is based upon fictions, and is inapplicable to modern conditions of employment; that in the highly organized and hazardous industries of the present day the causes of accident are often so obscure and
So far as laws relative to business are concerned the principle of laissez faire is giving way to that of regulation. Statutes limiting business activity, and forbidding methods and means formerly perfectly lawful have been recently enacted with great frequency by the Federal Congress and the state legislatures. The Sherman Act, the Hepburn Act, the Child Labor Act, the Clayton Act, the Pure Food Act indicate the trend of federal legislation; and statutes regulating insurance companies, advertisements and moving-picture theaters are examples of the type of laws which the state legislatures are now enacting. In all these instances private activity is being regulated in the public interest.

Courts have recently been as active as legislatures in changing the complexion of the law. Criminal procedure has proved a particularly fertile field, probably because it had attained the highest degree of artificiality. The principle that where an error has been committed in the trial of a case it will be presumed that the defendant was prejudiced is fast being overthrown. An error in the complaint, a failure to arraign the prisoner, the admission of improper evidence, improper remarks by judge or counsel, erroneous instructions to the jury, which were formerly sufficient grounds in themselves for reversing a judgment of conviction, are now frequently held to be such only when actual prejudice to the accused can be shown. The present situation in this regard is well described by a judge of the Supreme Court of complex that in a material proportion of cases it is impossible by any method correctly to ascertain the facts necessary to form an accurate judgment, and in a still larger proportion the expense and delay required for such ascertainment amount in effect to a defeat of justice; that, under the present system, the injured workman is left to bear the greater part of industrial accident loss, which, because of his limited income, he is unable to sustain, so that he and those dependent upon him are overcome by poverty and frequently become a burden upon public or private charity; and that litigation is unduly costly and tedious, encouraging corrupt practices and arousing antagonisms between employers and employees."

Missouri in a late case. He said: "The time has passed, not only in this state but elsewhere, when pure technicalities, in the absence of evidence of well defined injury to the accused, will be permitted to obstruct the enforcement of the criminal law."

A very important case in this connection is Garland v. State of Washington, in which the Supreme Court of the United States held that a failure to arraign the defendant, in the absence of evidence that he was prejudiced thereby, did not amount to a violation of the "due process of law" clause of the Federal Constitution. The court directly overruled the case of Crain v. U. S., decided in 1896. In the Crain case the court said: "The present defendant may be guilty, and may deserve the full punishment imposed upon him by the sentence of the trial court. But it were better that he should escape altogether than that the court should sustain a judgment of conviction of an infamous crime where the record does not clearly show that there was a valid trial."

It is a familiar theory of the law that a corporation is a personality separate and distinct from the individuals who manage it and own the stock. As this theory has been regarded as a basic principle, a large portion of our corporation law has developed from it. Lately courts have displayed a marked willingness to depart from this conception of a corporation when in their opinion its recognition will produce injustice in the particular situation. When the fiction of a separate personality is employed to defeat creditors, to evade an obligation, to protect fraud, to circumvent a statute, to achieve a monopoly or defeat public convenience, it will now be disregarded. A recent writer makes the following pertinent observation:

16 Walker, J., in State v. Flannery, 263 Mo. 579, 588.
17 232 U. S. 642.
18 162 U. S. 625.
19 P. 645.
20 P. 646.
"There could be no better refutation of the charge so frequently made *horis novissimis* that courts are inelastic, unyielding and unwilling to respond to social and economic facts than the adjustment—still in process—of corporate concepts to modern business facts." \(^{21}\)

In determining the value of the property of a public service company for the purpose of computing the proper rate of return, we have been accustomed to hear definite tests laid down, such as "the amount of the original investment," "the cost of reproduction," and "the cost of reproduction less depreciation." In the *Minnesota Rate Cases* decided in 1912 the Supreme Court of the United States said:

"The ascertainment of that value is not controlled by artificial rules. It is not a matter of formulas, but there must be a reasonable judgment having its basis in a proper consideration of all relevant facts." \(^{22}\)

One of the most fundamental doctrines of the common law is that of *stare decisis*, which has been frequently applied even in cases where real injustice resulted. "Hard cases make bad law" is a familiar maxim. Lately a change in the attitude of courts toward precedents is clearly discernible. Their opinions are devoted more to a discussion of the merits of the case and less to a citation of cases. Now and then a vigorous protest against the unreasonable following of precedents is made; for instance, the following picturesque utterance by the Supreme Court of Oklahoma:

"We must confess to want of respect for precedents which were found in the rubbish of Noah's Ark, and which have outlived their usefulness, if they ever had any. When the reason for a rule of law ceases, the rule should cease also. If this be revolution, then we are and will continue to be revolutionary." \(^{23}\)

In *Donnell v. Herring-Hall-Marvin Safe Co.*, 208 U. S. 267, 273 (1908), Mr. Justice Holmes said: "Philosophy may have gained by the attempts in recent years to look through the fiction to the fact and to generalize corporations, partnerships and other groups into a single conception." In *Continental Tyre Co. v. Daimler Co.*, 1 K. B. 893, 903 (1915), Lord Chief Justice Reading said in this connection: "It is undoubtedly the policy of the law as administered in our courts of justice to regard substance and to disregard form. Justice should not be hindered by mere technicality."


\(^{22}\) 230 U. S. 352, 434.

\(^{23}\) Caples v. State, 3 Okl. Crim. Cas. 72, 86.
The attitude of courts of last resort towards regulative and social legislation has lately been undergoing a remarkable change. The emphasis formerly placed on "private property" and "freedom of contract" is now being transferred to the "public interest." Two recent cases decided by the United States Supreme Court indicate the extent to which private property may now be regulated for the public interest. In *German Alliance Insurance Co. v. Kansas*, decided in 1914, this court upheld a Kansas statute that fixed the rate of premium for fire insurance. It was strongly urged by counsel that the statute was an invasion of the rights of private property, and Mr. Justice Lamar in his dissenting opinion forcibly portrayed the effect of such legislation as follows:

"There seems no escape from the conclusion that the asserted power to fix the price to be paid by one private person to another private person or private corporation for a private contract of indemnity, or for his product or his labor, or for his private contracts of any sort, will become the center of a circle of price-making legislation that, in its application, will destroy the right of private property and break down the barriers which the Constitution has thrown around the citizen to protect him in his right of property—which includes his right of contract to make property, his right to fix the price at which his property shall be used by another."  

The court answered the arguments against the constitutionality of the statute with the simple statement: "To the contention that the business is private we have opposed the conception of the public interest."  

During the same year that the Kansas insurance case was decided, the question of taking property without due process of law arose in the *Pipe Line Cases*. The Supreme Court here upheld the provision of the Hepburn Act, making those engaged in piping oil from one state to another common carriers within the provisions of the act, although the oil so piped was owned by the pipe lines, and although no public profession had been made by them. Mr. Justice McKenna vigorously dissented, portray-
ing, as did Mr. Justice Lamar in the insurance case, the extent to which the doctrine might be logically carried, and concluded by asking despairingly: "Under it what attribute of private property is left?" \(^28\) It may be safely answered that under the decisions of the United States Supreme Court private property is subject to legislative regulation when the public interest demands it.

The workmen's compensation acts have required a consideration by the courts of the right to take private property and of freedom to contract. The conservative and radical views regarding these problems are respectively illustrated by \textit{Ives v. South Buffalo Railway Company},\(^29\) decided by the Court of Appeals of New York in 1911, and \textit{New York Central Railroad Company v. White},\(^30\) decided by the United States Supreme Court in March of the present year. In each case the question involved was the constitutionality of a compulsory workmen's compensation act, and it is stated by the court in each case that such acts are radical departures from common law standards. The New York court unanimously declared the statute in the Ives case unconstitutional, chiefly on the ground that it took private property without due process of law, the court saying: "If such economic and sociologic arguments as are here advanced in support of this statute can be allowed to subvert the fundamental idea of property, then there is no private right entirely safe." \(^31\) In the White case the statute was held constitutional. With reference to the taking of private property, the court said: "The close relation of the rules governing responsibility as between employer and employee to the fundamental rights of liberty and property is, of course, recognized. But those rules, as guides of conduct, are not beyond alteration by legislation in the public interest." As regards the violation by the statute of freedom to contract, the language of the court is equally significant:

"It is said the statute strikes at the fundamentals of constitu-

\(^28\) P. 572.
\(^29\) 201 N. Y. 271.
\(^31\) P. 295.
tional freedom of contract. ... We recognize that the legislation under review does measurably limit the freedom of employer and employee to agree respecting the terms of employment, and that it cannot be supported except on the ground that it is a reasonable exercise of the police power of the state. In our opinion it is fairly supportable upon that ground. And for this reason: The subject matter in respect of which freedom of contract is restricted is the matter of compensation for human life or limb lost or disability incurred in the course of hazardous employment, and the public has a direct interest in this as affecting the common welfare." 82

In the consideration of statutes limiting the hours of labor in specified employments, the theory of freedom of contract is yielding to the demand of the public interest. The reasoning of the United States Supreme Court in Muller v. Oregon, 83 1908, as compared with that of Lochner v. New York, 84 in 1905, shows a decided change of attitude on the part of the court, even though the principle of the earlier case is recognized. In the Lochner case the emphasis was placed on a theoretical freedom to contract; in the Muller case the court was chiefly concerned with the question whether the statute was justified from the point of view of the practical situation which it covered. Professor Frankfurter, of Harvard, in an able article in which he analyzes the judicial opinions relative to hours of labor statutes, states that the legislation which was upheld by the courts before 1908 "was sustained as part of the prevailing philosophy of individualism, as an exceptional protection to certain individuals as such, and not as a recognition of a general social interest." 85 In contrast with this he says that in the decisions since 1908, "the emphasis is shifted to community interests."

Perhaps the most significant statement regarding the relation of private rights to the public interest is that of Chief Justice White in Wilson v. New, 86 1917, the case in which the Adamson

82 P. 254.
83 208 U. S. 412.
84 198 U. S. 45.
85 Hours of Labor and Realism in Constitutional Law, 29 Harv. L. Rev. 353, 363.
Act was declared to be constitutional. After setting forth the right of Congress to regulate the carrier engaged in interstate commerce the chief justice said:

"Whatever would be the right of an employee engaged in a private business to demand such wages as he desires, to leave the employment if he does not get them, and, by concert of action, to agree with others to leave upon the same condition, such rights are necessarily subject to limitation when employment is accepted in a business charged with a public interest and as to which the power to regulate commerce possessed by Congress applied."

To answer the question, suggested when beginning the discussion of the present legal situation, as to the significance of the changes which are now taking place, it would seem safe to say that they strongly indicate a well defined movement, the trend of which is away from reverence for fixed principles towards consideration of the economic, industrial and social merits of the particular controversy, away from artificiality towards simplicity, and from an individualistic towards a collectivistic attitude.

Jurisprudence is now undergoing an evolution similar to that of the law. In place of the analytical, historical and philosophical systems of jurisprudence which had their vogue in the last century, sociological jurisprudence is now being developed, the chief exponent of which in this country is Professor Pound, of Harvard. He points out that the older schools of jurisprudence are chiefly concerned with the pursuit of principles, in which pursuit he says:

". . . there is a tendency to forget that law is a practical matter. The desire for formal perfection seizes upon jurists. Justice in concrete cases ceases to be their aim. Instead, they aim at thorough development of the logical content of established principles through rigid deduction, seeking thereby a certainty which shall permit judicial decision to be predicted in detail with absolute assurance."

Under this view of jurisprudence the administration of the law consists of the logical application of abstract principles of

---

law to concrete facts. The two necessary qualities for a judge are considered to be a knowledge of rules and principles and a logical mind. The conditions underlying the facts before him are no concern of his. Our courts of last resort are constituted on this principle, the effect of which is most noticeable in those of our states which contain large cities. Although a large percentage of the cases argued before the court arise in the great cities and are the result of conditions there, it is not regarded as essential that the judges should be at all familiar with such conditions.

The same attitude is often manifested with regard to legislation. Laws are enacted, based on a theory, without regard to their fitness to meet the actual situation and even without any consideration of the question whether they can or will be enforced. Thus the statutes providing for the sterilization of imbeciles and criminals are the direct result of the theory that imbecility and criminality are inheritable. This theory, so far at least as it applies to criminality, is now discredited and the laws are not enforced. The laws against prostitution, fornication and contraception were enacted to vindicate an abstract standard of morality, the legislators failing or even refusing to determine whether or not public sentiment will permit the enforcement of such laws, and if not, what will be the results of such non-enforcement.\(^9\)

The sociological jurists are more concerned with the purposes of law and with its results than they are with the working out or vindication of fixed principles.\(^{40}\) Professor Pound thus compares the attitude of these jurists with that of jurists of the other schools:


\(^{40}\) Professor W. M. Geldart, of Oxford, in his introduction to the English translation of von Ihering's Law as a Means to an End, says of the author: "His repudiation of a 'jurisprudence of concepts' and of the 'written reason' of the Roman Law as the last word in legal and legislative theory led him to respect the individualism of the early and middle nineteenth century, and the stress which he laid on social utility gave an impulse and a justification to the 'collectivism' (to use the word in the wide sense with which Professor Dicey has used it), which has been the most characteristic tendency of our own time and the force of which is not yet spent."
They look more to the working of the law than to its abstract content. 2. They regard law as a social institution which may be improved by intelligent human effort, and hold it their duty to discover the best means of furthering and directing such effort. 3. They lay stress upon the social purposes which law sub-serves rather than upon sanction. 4. They urge that legal precepts are to be regarded more as guides to results which are socially just and less as inflexible molds." 

The method of the sociological jurists is largely pragmatic and it has been suggested that the American philosophy of law will be pragmatism.

The effect of the new juristic thought is already being seen in this country. Public commissions have been appointed in some states to study and report upon conditions in advance of legislation. Courts in certain instances have decided cases on their economic merits, even though an abstract legal theory was contravened. The most notable of these cases is Muller v. State of Oregon, in which the Supreme Court of the United States held constitutional the Oregon statute limiting the hours of labor for women. Such a statute was apparently a violation of the principle of freedom of contract as defined in former cases, but the court based its decision upon the physical structure and social condition of women. It is now impressively argued that courts of last resort should take into consideration the social and economic conditions underlying the cases that come before them and should not base their decisions entirely upon abstract rules. The new type of juristic thought may well be described as pragmatic and sociological.

After noting the innovations and tendencies which now characterize law and jurisprudence, the question naturally sug-
gests itself: Are they isolated phenomena or do they constitute part of a general movement? In the history of former periods, notably the fourteenth and sixteenth centuries, it may be noted how closely the development of the law and of legal thought were connected with and how greatly they were affected by the changes in other fields of learning and activity. In a similar way modern legal doctrines have resulted from the pressure of economic and philosophical theories. It also has been pointed out in this paper that courts are now being influenced by conditions outside the sphere of law. These facts justify an investigation of other departments of scientific thought, for the purpose of comparing them with the present state of law and jurisprudence. This will now be attempted, beginning with philosophy.

Rationalism, with its enthronement of human reason as the final criterion and chief source of knowledge, and idealism, with its teaching that knowledge is a source of being, were the prevailing types of philosophy in the nineteenth century. Closely associated with these were metaphysics, with its search after first principles, and absolutism, the doctrine, "that some truths are indubitable, i.e., capable of being established dialectically, and not subject to correction by experience." All of these types of philosophic thought may be included in the one term intellectualism, with deduction as the common method of reasoning. Their chief concern is principles, not facts, and they regard theories as ends in themselves. Their by-products are formalism and dogmatism. Against this whole intellectualistic school there has been a well marked revolt within recent years. There has been a revival of positivism, relativism and empiricism. The most significant, however, of the anti-intellectualistic groups are the pragmatists and the Bergsonian intuitionists. These groups discredit "the human intellect as an absolute truth teller and conceive it as a fashioner of fictions, symbols, or conventions . . . or they concede to it only a limited scope as a function of knowledge."
Pragmatism is concerned with the workability of theories and institutions. Professor James, one of the chief exponents of pragmatism, thus described the attitude of the pragmatist:

“A pragmatist turns his back resolutely and once and for all upon a lot of inveterate habits dear to professional philosophers. He turns away from abstraction and insufficiency, from verbal solutions, from bad a priori reasons, from fixed principles, closed systems and pretended absolutes and origins. He turns towards concreteness and adequacy, towards facts, towards action and towards power. That means the empiricist temper regnant and the rationalist temper sincerely given up. It means the open air and possibilities of nature, as against dogma, artificiality and the pretence of finality in truth.”

Like pragmatism, the philosophy of Bergson is a method rather than a system, and like pragmatism again it refuses to recognize the intellect as the sole or last source of knowledge. The basis of Bergson's philosophy is his method of intuition. "Philosophising," he says, "just consists in placing one's self, by an effort of intuition, in the interior of concrete reality." Bergson contends that knowledge gained by sensation is profounder than intellectual knowledge, and he denies the validity of logic, on which the intellectualists placed so much confidence. Under the new philosophic trend facts are assuming an importance greater than that occupied by theories, and the reasoning is inductive rather than deductive. A closer connection between philosophy and sociology is developing. Bergson says: "The philosophy of the future must break through the mathematical categories and take account of the sciences of biology, psychology and sociology." A recent volume by the late Professor Sidgwick, of Cambridge University, is largely devoted to the relation of philosophy and sociology. Two years' attendance at the Conference on Legal and Social Philosophy convinced the present writer that the teachers of philosophy in this

---

4 James, Pragmatism, 5.
4 Stewart, Critical Exposition of Bergson's Philosophy, 5.
4 James, Pluralistic Universe, 252.
40 Ibid. 243.
41 Stewart, Critical Exposition of Bergson's Philosophy, 4.
41 Philosophy, Its Scope and Relations.
country are more concerned with problems of sociology than with those of metaphysics. The very term "social philosophy" indicates a new phase of philosophic thought.

Moral philosophy, or ethics, as it is now generally named, is likewise experiencing an influx of revolutionary ideas. It is now confidently asserted, contrary to the usual view, that there are no definite absolute rights, that there can be no standard rules of conduct, and that no absolutely valid rules of justice can be formulated. Interest is now focused on social justice, and this idea recently became politically important.

Theology is famous for its conservatism. At the present time, however, the development of new ideas and attitudes is clearly discernible. Doctrines of long standing are being abrogated, and doctrines generally are receiving less attention than formerly. Sermons, like judicial opinions, now contain discussions of practical problems to the proportionate exclusion of doctrinal exposition. A professor in a Philadelphia theological seminary is said to have described the situation picturesquely as follows: "Nowadays, instead of giving a message of salvation, the minister is expected to preach on civic movements, the police force and politics." Churches are now much concerned with the problem of practical achievement, and social service is really the order of the day in theological circles. There is also a movement for church consolidation, which has been consummated in several instances. Church unity has now become a familiar

---

53 Willoughby, Social Justice, 24-28. On page 26 Professor Willoughby says: "In demonstrating the impossibility of framing absolute rules of justice, the necessity will be emphasized of bringing each of our acts to the bar of reason, and of determining in each case, not simply its formal accordance or non-accordance with some previously accepted rule of conduct, but whether, as a matter of fact, both the ethical motive which prompts its performance is a proper one, and its ultimate as well as proximate results will be such as will tend to advance the realization of the highest good which our reason has been able to suggest. With no thumb rules to guide us, we will be thus taught that what is right and what is wrong for us as members of a society can be determined only after we have ascertained all the circumstances which have led to a given state of affairs, as well as the conditions by which a given line of conduct is to be influenced in the future. This will mean that at least a certain amount of study of actual social conditions is imperative upon every one, and especially upon those who would seek to teach or guide others."

54 News item.
theme, and plans have been made for a world conference on this subject. Modern theology is becoming pragmatic and social.

The economics of the nineteenth century was more or less regarded as an exact science and its methods were largely deductive. Individualism, with its accompanying corollaries of the private ownership of property, the freedom of contract and industrial competition, was the basic economic doctrine, and the prevailing policy was laissez faire. In the economics of today there is a great change both in attitude and method. In attitude it has become highly socialized, social economics being now an accepted phrase, and in method it has become experimental. As regards property, the idea is now gaining ground that private property is a social trust. The theoretical freedom of contract is yielding to an appreciation of the actual fact that persons are frequently not free to contract as they please, because of the pressure of economic needs. In place of competition cooperation is now the keynote of industrial endeavor. Consistent with these tendencies is the substitution of regulation in place of the principle of laissez faire. Economists are now insisting that the use of private property be regulated for the public benefit. In the philanthropic side of economics we see the supplanting of "charity" by "social service."

Mathematics and the allied sciences, physics and chemistry, are fast losing their reputations for exactitude. Apparently they are now no more exact than the law is certain. The axiom now seems to occupy about the same position with regard to self-evident truth as does Coke's famous maxim that the "known certainty of the law is the safety of all." The "dogma of the indestructible and indivisible atom" no longer holds sway.

---

85 Roscoe Pound in note, 27 Harv. L. Rev. 734.
86 Ely, Evolution of Industrial Society, 88.
87 Ibid. 91.
88 See Farnam, Economic Utilization of History, 190.
89 "Physics has learnt to regret accepting such seemingly self-evident propositions as that a thing cannot act where it is not, and modern mathematics has learned that such seemingly self-evident assertions as that the whole is greater than a part, or Euclid's parallel postulate are not necessarily true." M. Cohen, Place of Logic in Law, 29 Har. L. Rev. 622, 631.
90 Millikan, Radiation and Atomic Structure, 45 Science (N. S.) 321.
atom is now regarded as having a very intricate structure, one of
the widely accepted theories, the "planetary," being that it con-
sists of a nucleus with several rings of moons around it. Experi-
ments with radium have upset the belief that stability is the essen-
tial characteristic of an element. An editor of the Independent,
after the last meeting of the American Association for the Ad-
Advancement of Science, thus facetiously describes the position of
the physicists:

"They are not only robbing the chemist of his atom, but they
are upsetting the fundamental principles of their own science with
reckless disregard of the consequences. They show no more rever-
ence for Newton than they do for Dalton. Even Euclid is not safe
from their inconoclastic hands. The whole is no longer equal to
the sum of its parts. An atom may weigh less than its com-
ponents. Mass is made dependent upon motion. Action does not al-
ways vary inversely as the square of the distance. Time is purely
relative. Length depends upon velocity. The second law of ther-
mosdynamics is declared unconstitutional. Action and reaction may
be neither equal nor opposite. Energy does not flow out continu-
ously but is emitted in atoms. Such are some of the subversive
heresies now being openly profest and preached even in orthodox
circles."

Medicine is also assuming a new complexion. In method it
has now become avowedly experimental, and with this change
have come more effective results. Further, the viewpoint of the
profession has been measurably enlarged. Physicians are no
longer concerned solely with the symptoms of the individual
patient, but are studying the causes of disease and are taking steps
to eradicate them. The extent to which this has been carried is
evidenced by the establishment of chairs of preventive medicine
in some of our medical schools. The necessary equipment of the
medical practitioner has been greatly increased in recent years.
He must now be somewhat of a psychologist and sociologist as
well as a physician. In addition to this, he is now coöperating,
as never before, with the members of other professions. Psy-
chological laboratories in connection with law courts afford oppor-

\[\text{Ramsay, Ancient and Modern Views Regarding the Chemical Elements,}
\text{Report of Smithsonian Institution, 1911, p. 183.}
\]
\[\text{Editorial in the Independent, Jan. 29, 1917.}\]
tunity for the physician to advise judges and prosecutors as to the proper treatment to be accorded feeble-minded and insane persons charged with crime. In connection with the whole difficult problem of dealing with mentally diseased and defective offenders members of the medical and legal professions are now working together. An interesting book on the connection of medicine with education and social work appeared a few years ago. The author states the effect of such relation on medicine as follows:

"No one can have followed the history of the last ten years in medicine, education, and social work and noted the increasing evidence of their interpenetration and closer co-operation without discerning:

(a) The rapid growth of public medicine, whose method is educational, preventive, and sociological;
(b) The consequent restriction of the sphere of the 'private doctor.'"

Psychology is probably undergoing the greatest change of all the sciences. Thirty years ago a distinguished scholar defined psychology as the "science of the human soul." The psychologists of that time, particularly in this country, were mostly clergymen, and their principal methods were self-observation and the derivation of psychic phenomena from metaphysical hypotheses. The connection between metaphysics and psychology was for a long time very close. One of the chief concerns of the earlier psychologists was the metaphysical problem of whether or not the will is free. The older psychology was theoretical and was concerned with the mental phenomena of the individual alone.

Very little of the foregoing description applies to the advanced psychology of today. The association with theology and metaphysics has been broken, and a new one has been formed with physiology and biology. The problem of the freedom of the will is now disregarded by psychologists, and is left for the few remaining metaphysicists. A recent German writer says the "new psychology differs from the old in its spirit: it is not metaphysical; in its end: it studies only phenomena; in its pro-

---

62 Cabot, Social Service and the Art of Healing.
63 P. 111.
64 Porter, The Human Intellect.
65 Hall, Founders of Modern Psychology, 319.
The fine arts, as well as the sciences, are now experiencing radical innovations. Within the past few years interest has been aroused by exhibitions of painting and sculpture which represent a marked departure from traditional standards. Lack of symmetry and a suggesting rather than a depicting of the subject,
combined in the case of painting with unusual color combinations, seem to characterize this new art. Its followers see in it an emancipation from the deadening restrictions of standardized rules, while its critics can see nothing but bad drawing and composition and execrable taste in the use of colors. This new tendency in art is manifested in the work of several groups—the cubists, the post-impressionists and the futurists. They differ among themselves as to subject and manner of treatment, but they are one in their protest against orthodox methods.

In the closely allied field of architecture there is evidence of a similar breaking away from accepted forms. Refusals to follow classical, Gothic and colonial models are now not infrequent in this country, and the development of a new style is discernible. New materials are being employed, and the environment is considered to a greater extent than formerly in the effort to secure a better effect. Most significant of all is the attention that is now given to adapting the building to the purpose for which it is intended. This is particularly noticeable in the case of public buildings, for which the wasteful dome and rotunda are now no longer regarded as essential.

Literature is now undergoing an internal revolution very similar to that observed in the pictorial arts. "Free verse" is winning a recognition for itself both in this country and abroad, and at the same time is bringing down upon itself the wrathful ire of the conservative critics. This form of literary expression in appearance somewhat resembles ordinary poetry, but has neither rhyme or meter, the latter of which has almost universally been regarded as the sine qua non of poetic construction. The new verse is based on rhythmical cadence, although the rhythm is more subtle than that to which we are accustomed. There are several groups of free verse writers, the realists, the fantasists and the futurists, but they differ more in subject than in method, and they all have as their motto "the abandonment of existing forms." A recent writer says that "the coldness of their reception is due in part to the inveterate traditionalism of the human race." 72

Music is also displaying an anti-traditionalistic tendency. Richard Strauss, acclaimed by many as the greatest living composer, has employed new forms of musical expression and on occasions has shocked the conventionally minded with his frank realism. Debussy is also a realist. He contends that melody is incapable of expressing completely the ranges of sentiment and emotion. The impressionists are composing musical novelties, which are meeting with rather consistent lack of appreciation. There are also futurists in music, as well as in painting, sculpture and poetry, who are experimenting with new forms. Professor Clarke, of the University of Pennsylvania, in a lecture delivered a year ago, said of modernism in music: "It has enlarged the boundaries and swept away some of the pedantries that hampered music." 

From the foregoing discussion it may be concluded that the arts and sciences which have been considered are now undergoing a definite evolution, in some instances amounting to revolution, and that there is a marked similarity in the character of the changes which are occurring in each field. The instances given are too numerous, and the fields are too closely interrelated, to justify the conclusion that such similarity is merely a coincidence. On the contrary, the evidence seems sufficient to establish that a general movement is now taking place, and that its trend is away from traditional standards, doctrines and rules.

In the case of the sciences the movement is displaying three distinct qualities. It is empirical, pragmatic and social. Principles are now developed from observation and experiment, they are being judged by their workability, and the interests now being increasingly served are those of society. This last quality is evidenced by the new nomenclature—social legislation, sociological jurisprudence, social philosophy, social economics, social service, social justice and social psychology.

Edwin R. Keedy.

Law School, University of Pennsylvania.