

DAYS OF THE ICONOCLASTS

SINCE the days of Darwin and Huxley, and, more recently, the days of Ibsen and Freud, the iconoclasts have been busy smashing idols, instructing us in the "realities" of human existence. We have accepted their teachings for the most part, being unable to ignore the facts which they collected and the conclusions which they drew. We became the "earnest atheists" of the nineteenth century, the eager radicals, liberals and reformers of the twentieth century. If the picture of the Beloved Community was "unrealistic" and a guise for reactionary class oppressions, we would have another social ideal—the progressive democratic community, promising the sort of society John Dewey has always had in mind when he writes about the way things ought to be—the way Progressive Education was to help make things to be. Or it was the ideal society which thousands of New Dealers dreamed of and campaigned with religious fervor to bring about. This ideal was still left to us. We could work politically for economic justice. We could heap disgrace upon all those who, for obviously unadmirable reasons, chose to disagree with us—the conservatives and reactionaries who, as Lionel Trilling has put it, did not "express themselves in ideas but only in action or irritable mental gestures which seek to resemble ideas."

We thought that the days of the iconoclast were over, their work well done, and that now a cycle of building might begin. But the days of the iconoclast are not over. Instead, the tables have been turned upon the radicals and liberals, and their ideas, as reflected in their practice, are now being subjected to grilling inquisition.

The analysis and conclusions presented by Bertrand de Jouvenal in *Power: The Natural History of its Growth* begin no merely intellectual or academic controversy about the interpretation of the past century or two of history. They

constitute a bill of particulars for absolute political disillusionment. M. de Jouvenal may be ignored, but he can hardly be refuted; that is, many of the judgments he makes seem to follow necessarily from the evidence which he assembles. There may be other ways to look at his facts—less despairing ways, perhaps—but those other ways are not familiar to men whose basic convictions lie at the political level. Only two sorts of men, it seems to us, are capable of accepting or meeting and dealing with M. de Jouvenal's arguments. The first sort would be the believers in theocracy—the medievalists who look back on "the thirteenth greatest of centuries" with unmistakable nostalgia; the other sort would include men like Tolstoy, Gandhi, and Henry David Thoreau.

Power (Hutchinson, New York and London, \$5.00) is a long book, heavily documented from history, particularly French history. We select from it one idea for discussion, the idea that Power—and for M. de Jouvenal, Power always means the power of the State invariably develops into absolute tyranny unless it has a non-political paradigm, a standard with higher authority than the political interest of the rulers.

What is the origin of the power of the State? It comes, we say, from the sovereignty of the State, for the State has the right to rule. Where does the State obtain the right to rule? From either one of two sources, says M. de Jouvenal. It is based upon divine law, sometimes called "the will of God," or it derives from the General Will—the will of the people, that is.

Now the objections to the "Will-of-God" theory of sovereignty are well known. It leads either slowly or rapidly—in any case inevitably—to the doctrine of the divine right of kings and from this to the absolute despotism of the ruling monarch. Hence the fervent atheism of the

seventeenth and eighteenth centuries, the bloody revolution and regicide of France and, a century and a half later, of Russia.

But what about the theory of the General Will of the people? Someone, some group, or party, invariably becomes the interpreter of the General Will, and after a time declares itself to be the sole authority on what the General Will dictates. How does the ruling party maintain itself in power? Through the political machine. As de Jouvenal says:

The more the machine controls the way in which votes are cast, the more the individual member sinks to the condition of a mere arithmetical symbol and the more the leader of the party tends to exercise an absolute and undivided Imperium. We have seen the fruits of this system in Germany when in 1933 the National Socialist party maneuvered in Parliament as at a military word of command, thereby assuring the absolute rule of their leader.

Had the Communists, who were organized after the same fashion, had the same weight of numbers in the French Parliament in 1936, the same result would have followed. And so the action of parties has caused Sovereignty to pass from Parliament to the victorious Machine, and elections are now no more than a plebiscite by which a whole people puts itself in the power of a small gang.

Let one of these machines put more method into its organization and more cunning into its propaganda, let it boil down its doctrine still further into propositions which are at once simpler and falser, let it surpass its adversaries in insult, treachery and brutality, let it once seize the coveted prey and, having seized it, never let it go—and there you have totalitarianism.

How is the power exercised in the name of sovereignty to be controlled? M. de Jouvenal shows his sympathy for the medieval order by pointing out—not unjustly—that the divine right of kings has been greatly exaggerated. "The consecrated king of the Middle Ages," he says, "was a Power as tied down as and as little arbitrary as we can conceive." The king was watched closely by his peers of noble blood, and by the Church, which called him to account in relation to the "laws of God." The despotism of

monarchs, he maintains, grew out of the gradual and finally successful effort of the kings of Europe to displace the nobility from positions of authority and power. At the same time the kings, in order to become independent of the Church, encouraged the doctrine that their authority came from the people as well as from "God." Thus the doctrine of popular sovereignty has at least a partial origin in the yearnings of kings for a power more absolute.

Power always seeks its own increase, and does so by claiming to act in the service of some principle of absolute sovereignty. All the theories of sovereignty, de Jouvenal says, "tend to render subjects subservient by revealing to them a transcendent principle behind the Power they see; this principle, whether God or the People, is armed with an absolute authority." He concludes his discussion of sovereignty:

And now we begin to see that Popular Sovereignty may give birth to a more formidable despotism than the Divine. For a tyrant, whether he be one or many, who has, by hypothesis, successfully usurped one or the other Sovereignty, cannot avail himself of the Divine Will, which shows itself to men under the forms of a Law Eternal, to command whatever he pleases. Whereas the Popular Will has no natural stability but is changeable, so far from being tied to a Law, its voice may be heard in laws which change and succeed each other. So that a usurping Power has, in such a case, more elbow-room; it enjoys more liberty, and its liberty is the name of arbitrary power.

If M. de Jouvenal does not persuade us that the will of God, as interpreted by the Church, is a better restraint upon political power than, say, the Supreme Court of the United States, he has at least traced accurately enough the course of the development of the power of the sovereign State during recent centuries. And the gist of his argument holds good, even if his preference for the "will of God" as a controlling principle need not be accepted. The difficulty with the Church as the "administrator" of a "transcendent principle" by which power may be regulated is that the Church, aside from its pretensions to knowing the

will of God, happens also to be an effective temporal organization which operates in human affairs very much according to the pattern that M. de Jouvenal finds typical of the political machine.

Shall we say, then, that the only proper restraint upon power is the appeal to reason—to impartial reasonings concerning the application of Transcendental Law to the affairs of men? That the mandate of Heaven soon becomes the mandate of Hell, or something like it, when men attempt to impose by force the rule of an "Eternal Law" upon other men?

A conclusion of this sort is revolutionary indeed, for it suggests that there is no hope for a social order which relies more upon irrational power than upon the voluntary actions of free human beings to obtain justice and goodness of life.

In the American system, M. de Jouvenal points out, the Supreme Court has taken the place of Divine Law as the principle of restraint upon power. So long as the august body functions with impartiality and wisdom, it provides an acceptable limitation upon the excesses of legislators and executive authority. The Justices of the Supreme Court stand for the principles of the social contract embodied in the Constitution of the United States. They represent, among other things, *the sovereignty of the individual citizen*, as declared by the Bill of Rights. Except for that declaration, and its repetitions and echoes in lesser instruments of the law, the individual citizen is without any authority, and without, therefore, any sovereignty. It was Rousseau who, two centuries ago, saw this defect in the theory of representative government. He wrote in the *Social Contract*:

The English think they are free but they are quite wrong; they are only free when Parliamentary elections come round; once the members have been elected, they are slaves and things of naught. They deserve to lose Liberty by reason of the use they make of their brief intervals of Liberty.

The accuracy of this judgment, so far as the English are concerned, may be left to Englishmen

to determine; for the United States, we may quote from a statement by an American scientist, Dr. Ernest W. Goodpasture, who writes in *Science* (for Nov. 22, 1946) of the need of science to be independent of political authority:

The great threat of our age to human welfare, as I see it, is that societies led or driven by industrialism are gathering the individual into their fold as a service unit. The individual as a member of society thus must do a society's bidding, regardless of the particular pattern that social organization might represent. . . . Industrial, social, religious and political patterns are not yet drawn to serve mankind. It is to be hoped that each governmental power will provide an oasis for students who are individual elements of mankind first and servants of society last. Otherwise intellectual growth will wither and die.

But that, we thought, was what the founders of our democratic society intended to establish for *everyone*—not just for "students." And that was what the Supreme Court, as the watchdog of freedom, was to assure for each sovereign citizen. Dr. Goodpasture wants "governmental power" to restrain itself, not for its own interest, but in the interest of selected individuals who, because of their special immunity, may be expected to disapprove and even oppose the existing governmental power! In the terms contemporary controversy, he wants to establish a special breeding-ground for people who will preach that our "industrial, social, religious and political patterns are not yet drawn to serve mankind." Already, one can hear the whispers, soon growing into shouts, that Dr. Goodpasture, well-meaning or not, has allowed himself to become a dangerous echoer of Kremlin doctrines and a subverter of our youth.

Why does not Dr. Goodpasture appeal to the Supreme Court as the defender of our freedom? Because, very likely, it has not occurred to him that the Supreme Court was originally intended to be the representative of individual sovereignty. He turns instead to "governmental power" as something absolute and above all regulatory principles. His appeal seems more like an act of worship than a reference to principle.

But why has the Supreme Court lost its prestige as the preserver of the verities of law, until its role as the regulator of power is almost forgotten? M. de Jouvenal has an answer to this:

The verities to be defended, however, must be eternal verities. The mistake of the American Supreme Court was to defend against political opportunism principles which themselves partook of political opportunism.

The founders of the Constitution were independent proprietors and they legislated for independent proprietors. At the time of the conflict which brought about the eclipse of the Supreme Court, Power had the backing of a mass of proletarians who were suffering from a monstrously distorted conception of the rights of property. It is because it took its stand on the terrain of perishable verities that the Court has seen its authority temporarily in abeyance.

Similar in kind is the mistake of those who say that the natural or fundamental Law should follow the movement of ideas. This high-sounding title masks in truth only the flux of interests. The various classes and social groupings are in continuous change as regards both their composition and their relative strengths. And the phrase really means that Law must adapt itself to these changes.

But there is in Law an immutable element, and we human beings are not, as I see it, alas, equal to the task of evolving a bubbling stream of ever new verities. . . .

Thus the Supreme Court, like the interpreters of the "will of God," is fallible, too. This is the judgment of history, which throws us back upon ourselves. There is no infallible Church and no infallible political system. And there is no book in the library in which we can look up and find Eternal Verities upon which all men will agree.

So, we are at a period in history comparable to the time of Constantine, when an age under the rule of the "will of God" was officially begun; and we are at a time of choice similar to the closing years of the eighteenth century, when the "will of the people" rode to tyrannical authority. We have, in short, to make a new theory of power and to try to live by it. This, if anything, is the meaning of the great dilemmas of our time.

Letter from **CENTRAL EUROPE**

INNSBRUCK.—After the end of World War II, numerous Austrians were of the opinion that a peace-treaty between the Allied Powers and Austria would not be necessary at all. This opinion was based on the fact that the Allies, by mutual decision, had declared in 1943 that Austria had been compelled by Germany to take part in the war and thus was not responsible for its outbreak; and that after victory Austria would regain her sovereignty.

Toward the end of 1945, Allied expressions of this sort became less numerous; finally, the first Austrian Government after the war was informed by the Big Four that, as a Peace Treaty would not correspond with the supposition that Austria had not declared war on any of the Powers, a State Treaty would be drawn up, guaranteeing Austrian independence and protection against aggression.

Satisfaction about these decisions received a first blow when it became obvious that the Foreign Ministers' Committee was in no haste to fix a date for drafting this treaty; and the second blow came when the meetings in connection with the Peace Treaties for countries which had actively fought against the Allies, such as Roumania, Hungary and Italy, began first.

From that time on, the newly awakened democratic feeling of the Austrian nation was attacked with all kinds of missiles. Southern Tyrol—officially promised to Austria (over the radio, by the Voice of America, during the war), as traditionally an integral part of the country—was given to Italy. The division of the country into four occupation-zones was not only retained, but each division was treated like a separate country. Meanwhile the property of Austrian industries and business firms was confiscated and carried out of the country on endless trains. After the first meetings of the Commissioners for the State Treaty, the perception grew that the word "State Treaty" had probably been chosen only to quiet the consciences of those who proposed it, and to lessen the aversion of those who had fully trusted in Allied promises, and acted accordingly, during the war. In practice, the "State Treaty" would be nothing else but a Peace Treaty, and more severe than the other.

More than six years have elapsed since the German leaders warned the Austrians not to believe any of the radio messages which the Allies were beaming to them.

Solely for the purpose of discussing the Austrian State Treaty, nearly 300 official meetings have taken place. No agreement has yet been reached. For a while, well-meaning Austrians imagined that the brakes of bureaucracy were causing the delay. Later on, they felt that they had been fooled and got angry. Finally, they lost all interest and became absolutely indifferent.

They do not even try any more to find out who or what causes the delay. And if they were to try, they would have little success, for after each meeting the Commissioners of the Four Powers publish different reports. The Russians and the Communist press in Austria are out to show minutely at every opportunity how the restoration of sovereignty to this small country is stopped by nobody but the Americans, while the Western Powers and their journalists declare that the Easterners are the only obstacle. The Austrian citizen comes to the conclusion that in reality nobody cares about his nation and that Austria has been degraded to a minor place on the international chess-board.

The Austrian Government has tried all possible means for concluding the treaty during the past few years. It has asked that, at least, Austria be liberated from the occupation troops. It has asked that the zone borders be opened for free traffic and it has protested against the arresting and kidnapping of Austrian individuals. The results of these requests have been negligible.

Whoever comes to Austria at present may be surprised to see, here and there, ruined villages and cities partly built up again, the shop-windows well dressed and art and music of the highest standard. But he will not notice that the number of suicides and crimes is higher than in any similar country, and that the shortcomings of the nation's economy are fatal.

There cannot be any doubt that the majority of the Austrian population has long been democratic minded. Those with other views were in consequence of events—prepared to change their political opinions sincerely, when the prophecies of the German leaders turned out to be senseless lies. They did not so turn out. They were not even exaggerated. It is no wonder that the thoughts of a lot of Austrians wander backward. A large spiritual capital of democracy is already lost and still more will be dissipated if the State Treaty is not concluded within a very short time.

CENTRAL EUROPEAN CORRESPONDENT

REVIEW

POPULAR READING

A LIST of the first ten among books "heavily reserved" by patrons of the circulating division of the New York Public Library has been sent to us by a correspondent. While the list starts out with the low "call numbers," and does not, therefore, indicate that these volumes are more read than some others, the fact that they are in constant demand is surely evidence of a basic trend of interest among serious readers—and a trend, it so happens, which seems to confirm a theory which this journal has proposed on various occasions and in various forms. It is that the human sense of what is important—of what "reality" is—is gradually changing, and that if the present is an epoch of transition, politically speaking, it is even more a time of change and revaluation in philosophical and psychological outlook.

While the titles of these ten books were copied from the list of April, and, doubtless, by this time, a new one has been posted, the librarian at the desk told our correspondent that the list changes very little from month to month, for the reason that hundreds of people are waiting for each one of these books. As some of the books now in demand are by no means new, it may be years before some of them exhaust their long list of waiting readers. The ten books are:

Adler:	<i>How to Read a Book</i>
Lovejoy:	<i>The Great Chain of Being</i>
Garrett:	<i>Adventures in the Supernatural</i>
Garrett:	<i>Awareness</i>
Cannon:	<i>Science of Hypnotism</i>
Cannon:	<i>Sleeping through Space</i>
Salter:	<i>Studies in Expressive Movement</i>
Stagner:	<i>Psychology of Personality</i>
Ouspenski:	<i>In Search of the Miraculous</i>
Boring:	<i>History of Experimental Psychology</i>

A random selection from other portions of the list discloses that the care of tropical fish is still a subject of extraordinary interest, that Gray's *Anatomy* continues to be fascinating, and that W. H. Auden's *Age of Anxiety* shares the honor of great demand with texts on advanced accounting and instruction in how to get started in "direct advertising." Books concerned with matters

currently in the news, interestingly enough, have only slight representation.

One could argue, of course, that the attractions of psychic wonders and supernatural experience (Garrett), along with an interest in hypnotism (Cannon), only betray the most popular avenues of escapism in the twentieth century. If this world is becoming so much of a mess that it is not worth even keeping track of (no interest in "news" books), then why not investigate some other world—a world where our secret distinctions, so frustrated in this one, may have opportunity to miraculously flower? Sleeping "through space" ought to be a lot more exciting than sleeping in a flat off Sixth Avenue; and if Eileen Garrett can encounter the supernatural and live to tell about it, perhaps our bonds with the natural world of "food, clothing, shelter, and sex" have been accepted too submissively and may be broken with relative ease.

It is always possible to take a cynical view of what human beings read, think about and talk about, and the "failure-of-nerve" explanation of the new interest in metaphysics, in exotic religions and in "psychic" regions of inquiry has been a popular one among intellectuals for almost a generation. But while there is usually some truth, or rather accuracy, in cynical commentaries about our time, the full force of cynical criticism always depends upon denials rather than affirmations. In this case, intellectual contempt for an interest in metaphysics and the psychic is founded upon the view that metaphysics is no more than a species of delusive "poetry," that the psychic, unless it occurs in a novel by Henry James, is unworthy of serious attention.

What really happens, when the intellectuals cling stubbornly to their academic assumptions about "reality" and the meaning of things, is that they deliver the popular mind into the hands of demagogues and sensationalists in the field of philosophy and psychic experience. The intellectuals have "discipline," which enables them to write in a superior way about the susceptibilities to delusion of the common herd, but the shapers of popular culture often possess a basic if unschooled intuitive faculty which enables them to reach and to lead millions of

people across most of the Rubicons of scientific and academic skepticism.

But there are also unorthodox coteries of metaphysicians and psychics among the intellectuals themselves, and these find representation among the "heavily reserved" authors in the volume by Ouspenski. Men like Ouspenski, and his "teacher," Gurdjieff, seem to belong to the tradition of the alchemists and instructors in hidden lore—to a line of "occult" influence which ought to be recognized as distinct from, although showing similarities to, the line of mystical humanitarianism represented by the secret brotherhoods of European history. Ouspenski was undoubtedly a brilliant man, and this book, which, according to reviewers, describes his relationship with the bizarre and mysterious Gurdjieff, may be expected to provide its portion of subtler thrills and titillations of the psychic sense of sophisticated readers. Yet of the humanitarian current established long ago by Gautama Buddha as a central inspiration of Oriental mysticism, such books are seldom an expression.

These ten books nevertheless reveal a kind of frontier of popular inquiry—they are, many of them, certainly not the sort of books that would be recommended in a conventional course designed to acquaint the average reader with the basic assumptions and "knowledge" of our time. Instead, they represent a reaching out for new or different, assumptions, and may express, more than "escapism," hunger of the human spirit for deeper verities than we now possess. As in any culture characterized by disunities and uncertainties, the frontier of inquiry has several levels and points of departure into the no-man's-land of speculation and independent thought. While Mr. Adler's volume may be a bit Aristotelian in mood and method, its popularity suggests that the project of self-education is a serious one for many. Lovejoy's *Great Chain of Being* is a ponderous study and critique of the influence of Platonic philosophy; it was published at least ten or fifteen years ago and while its sympathies are very different from those engendered by Socratic ardor, the book is useful for understanding the cultural; past and present of Western civilization. The three remaining works, dealing with psychology,

can be taken to represent the growing concern with the nature of the mind—an interest that is as natural as it is constructive in these days of psychological bewilderment.

The comment of our New York correspondent on the list of "heavily reserved" books, while a bit optimistic, perhaps, is to the point:

. . . to see something like this picks you up—if for no reason but that it reminds you that so long as this country has all the libraries it has, and so long as people use them as hard as they do, the topside has to come up, somehow. People are not the dupes they are taken for, and no statistical calculator will ever come within a mile of the tangent a human brain will take, without anyone's telling it to. And, happiest of all, the one tangent a human brain will take fastest is the very one it's told not to!

COMMENTARY

THE U. OF C. LOYALTY PURGE

BECAUSE of a press account which reported that "some of the university's top professors" had lost their jobs in the recent loyalty-letter "purge" at the University of California, we remarked in last week's editorial that "professors" had been discharged. We have since determined that neither professors nor instructors were among the 157, which involved rather a number of nonacademic employees and perhaps some teaching assistants.

Numerous professors, however, are included among the sixty-two employees of the University who did not sign the letter disavowing membership in "the Communist Party or any other organization that advocates the overthrow of government by the use of force and violence," yet whose letters of explanation were voted "satisfactory" by the faculty committee on privilege and tenure. The board of regents of the University did not approve this recommendation of the faculty committee, but voted to withhold its decision until July 21. The board also delayed until this date action on:

- (1) Disposition of six non-signers whose appeals were found unsatisfactory;
- (2) retention of eleven who would not sign for "religious or clear-cut conscientious reasons";
- (3) decision on two professors who are out of the country.

It seems likely that press accounts of these events conceal as much or more than they disclose. In the first place, university people close to the situation think that many of the 157 represent normal "turn-over" in university employment and that they were numbered in the "purge" in order to make an impressive release to the press. Further, the neglect by the press of the fact that no professors or instructors were among the 157 suggests that the action was in some measure a window-dressing operation.

But whatever "qualifications" should be applied to the action of the board of regents, it

remains a serious blow to freedom of thought on the campus. As Dr. Hutchins, chancellor of the University of Chicago, immediately pointed out in a telephone interview, the discharge of these men for refusing to conform to a political test amounts to "a serious indictment of the board." Dr. Hutchins was also quoted as questioning the qualifications of Dr. Sproul to head a great university, but he later said that his remarks in this respect had been misinterpreted.

The irony of the board's action, many faculty members and students recognize, lies in the fact that genuine-Communists would almost certainly sign the loyalty oath or write the disavowing letter, while men opposed in principle to a political test, who are entirely without communist sympathies, may be turned out of their jobs for refusing to conform.

MANAS hopes to present soon a further article on this question, which deals with a phase of public policy which everyone ought to understand as clearly as possible.

CHILDREN ... and Ourselves

IT has been suggested that a real teacher has the obligation to present to the child a number of different views and opinions on a subject, so that the child has opportunity "to decide for himself" what view has the most meaning for him. Perhaps this policy should be more applied in the home, with respect to educational methods.

Not very many years ago a child was acquainted with only one point of view in the home—the view of the father. For it used to be thought that the woman should accept whatever attitudes on civic affairs, politics or religion were held by the man she married. And so there was outward "unity" in the home. Many children discovered only in their late youth that their parents had entirely different outlooks—a difference that had been concealed by the mother's reticence.

In order to understand this chapter in "family" history, we must refer to the considerable number of centuries ruled by a theology which pervaded most aspects of daily living. Authoritarian both in theory and in practice, the dominant religion relied, to support its own security, upon a structure of authority in the home. Its list of virtues was especially long in respect to filial and wifely piety—disobedience or failure in compliance being held psychologically similar to heresy and apostasy in the church. Obviously, this left little room for concepts of individual responsibility, self-reliance, or the defense of a cherished principle in a hostile environment. Three sentences from the Bishop of Verdun (A.D. 1411) sum up both the psychology and the practice of authoritarian morality:

"When the existence of the Church is threatened, she is released from the commandments of morality. With unity as the end, the use of every means is sanctified, even cunning, treachery, violence, simony, prison, death. For all order is for the sake of the community, and the individual must be sacrificed to the common good."

Although more than half the people of the United States do not presently belong to any church, the great majority are still influenced by the long-continued infiltration of such authoritarian doctrine into the pattern of life in the home. "Everything for Unity, whatever the cost in hypocrisy," still summarizes more than a few home attitudes. For dogmas die out much more easily and rapidly at the intellectual level than they do at the emotional level, and a dogmatic approach to solving a problem in human relationships is always beautifully simple. Parents who think themselves above blind intellectual compliance with religious dogmas may yet depend unconsciously upon rules for the family life which were engendered by those same doctrines. Authority settles things so quickly. And we must have Unity, mustn't we? as the Bishop of Verdun insisted. Family authoritarianism is dependent upon and has served to perpetuate the notion that "the family" has a sort of transcendent meaning apart from its members—an "end in itself," like the Nazi State.

There are, of course, other influences bearing upon our view of the family, principal among them being that of scientific rationalism. On this view, the individual is encouraged to look at any human alliance, whether political, religious, or family, as a means toward the end of the enlightenment of individuals. The influence of psychology, also, has been toward viewing the family as a working relationship, a functional arrangement, rather than something which may become statically perfect through diligent practice of established rules. For instance, this newer view encourages men to see that a family is not "good" simply because it remains together under the same roof; that the psychological crosscurrents of hostility and misunderstanding which exist in some instances may make a dissolution of that family, in its present form, desirable. A family is "good" in terms of what it does, and in terms of the happiness it brings. But it is also apparent that this "new view" has not possessed sufficient dynamic to override the attractiveness of Reliance

upon Authority for many things that come to pass in the majority of homes. And usually that old double-dealer, Unity, is used to excuse the commandments foisted upon the coming generation.

There is, of course, much to be said for parents who endeavor to settle their various disagreements with each other when the children are not present, and this is because a certain kind of unity is indeed needed in the home. But this is not the sort of unity which stems from authoritarianism. The best unity grows from a working agreement between people who recognize differences of personalities and points of view, who make their disagreements rational, who will agree to disagree—and work through their debates and arguments to a common understanding. This by no means implies, however, that all the differing approaches of husband and wife should be obliterated in the presence of the children. The child needs to have some introduction to the fact that all beings do not necessarily see all things in the same way. He also needs to see how it is possible for people to disagree, yet live constructively together.

Perhaps the notion that some sort of "policy" must be developed jointly for the instruction of the young is unnecessary; a sort of institutional compromise which does not honestly or satisfactorily represent the opinions of either parent. The child will benefit far more from the establishment of two slightly different kinds of relationship in the home than from a sort of abstract relationship with "the parents." This, however, is admittedly also a dangerous doctrine, for it is not well for the parents to compete for the child's love or allegiance. Yet if the parents are sufficiently intelligent to see that their own love for the child must preclude any attempt to prejudice him *against* the beliefs of the other parent—which would prevent much that might be learned from that other—it is possible to realize that the greatest closeness of understanding grows out of free and fully natural communication. We

are saying, then, that it is best for parents to regard the home as an opportunity rather than an institution. As a sociologist has said: "The process of translating the purpose into an institutional structure always somehow deflects and distorts it."

FRONTIERS The Meaning of "Science"

BACK in 1938, the American Association for the Advancement of Science announced the formation of several committees to study "the profound effects of science on society." The project was an important one, representing the growing self-consciousness of men whose activities, whether in original discovery or in technology, were in process of transforming the world around them. Although some early reports by these committees were published in *Science*, the coming of the war seemed to interrupt their work. But whether or not these particular committees are still in existence, the cycle of self-examination by scientists is still going on.

From the practical question of how science is affecting our lives, the inquiry is now moving into the region of philosophical investigation, asking, what, exactly, science is, what is scientific method, and how they are related to the essentials of human experience. Books such as David Lindsay Watson's *Scientists Are Human* (Watts, 1938) and Anthony Standen's *Science Is a Sacred Cow* (Dutton, 1950) reflect this general tendency, which is far from confined to scientists themselves. In the academic world, men like Alfred North Whitehead and John Dewey have been chiefly responsible for the orientation of philosophical criticism of scientific assumptions, while, more recently, R. G. Collingwood's *Essay on Metaphysics* seems to be exerting similar influence. In any case, the popular view that science is some sort of magic wand or intellectual calculating machine possessed of ultimate infallibility can hardly be justified by any reference to contemporary scientific literature.

It will be a long time, however, before the idea that modern science has effected a basic change in human life will be capable of just evaluation. The average man of today looks back on the people of the "pre-scientific epoch" with much the same pity or condescension that the

evangelical Christian regards the unenlightened masses before Christ. They are somehow "different" from himself, lacking, he thinks, in something that he possesses.

This feeling is undeniable; we all have it in some measure, although a consciousness of history—of the elements of greatness in other civilizations than our own—may qualify our sense of superiority and make us wonder, sometimes, if the new beginning science is supposed to have afforded for the human race has really changed anything fundamental. Here, really, is the question that ought to be decided, for a great deal depends upon what we think the importance of science to be.

Suppose we assume that the contribution of science *has* been fundamental: what, then, are we to say about it? An article by Hadley Cantril and others in *Science* for Nov. 4, 1949, seems to have the beginning of an answer to this question. Discussing the nature of scientific inquiry, the authors observe:

. . . the method of scientific inquiry seems in many ways to be an unconscious imitation of those age-old processes man has employed in his common-sense solution of problems. In common-sense activity, the assumptions and awarenesses on which man depends for effective action are the hypotheses he has built up from his many experiences: weighted averages he unconsciously uses to give him a high prognosis for effective action.

There are, however, certain important differences between the steps involved in pursuing scientific inquiry and the apparent processes that constitute common sense. A most important difference is the fact that in using scientific inquiry, man is the operator who decides what he is going to operate on and how. In an everyday life situation, however, man is not only the operator but he is also being operated on and must carry out his activities in the midst of the situation itself. When we meet hitches in everyday life and try to overcome them with hunches for effective action, we test these hunches by the action itself in a more or less insightful, more or less conscious way. In scientific inquiry, on the other hand, hunches are tested by controlled experiments and a deliberate attempt is made to intellectualize the processes involved.

Science, in other words, in addition to its problem solving and hitch-eliminating activities, seeks to establish *general ideas* about the nature of things. It seeks to strengthen or to correct what we think about the work we live in. Every man has a picture of the world in his mind. Dr. Cantril calls this his "assumptive world"—it is the world he works with, that he carries around with him, and the ideas which make it up determine how he acts and how he meets the experiences which come to him. Accordingly, as the article in *Science* puts it:

. . . we might say in general that science is an activity designed by man to increase the reliability and verifiability of his assumptive world. For it would appear that in the last analysis any scientific pursuit—no matter how abstruse it seems—is carried on because it is somehow of concern to man. Science is the human effort to understand more about nature and human nature in verifiable, determined terms. The word *determined* is used here in the scientific sense as meaning high in prognostic reliability. From this it is clear that real progress in any science involves an awareness of our assumptive worlds, a consciousness of their inadequacy, and a constant, self-conscious attempt to change them so that the intellectual abstractions they contain will achieve increasing breadth and usefulness. Real progress in science means much more than merely adding to existing knowledge.

. . . The aim of science is often defined as the attempt to increase the accuracy of our predictions. While the accuracy of predictions is clearly a most important criterion of progress in scientific formulation, emphasis on prediction alone can easily obscure the more fundamental aim of science covered by the word *understanding*. When we use the word *understanding* we are giving emphasis to the importance of increasing the range of our conceptual knowledge. Increased accuracy of prediction will be an inevitable coproduct of increased understanding in this sense. Any increase in understanding is also inevitably accompanied, sooner or later, by an increased ability to control variables and to apply our knowledge. Understanding also avoids the implication of a rigid determinism which seems, among other things, to be inconsistent with the fundamental indeterminism of modern physics.

The end of science, in short, is wisdom. It is wisdom which can be sought and mastered by human beings. Science meant this for the great initiators of the scientific movement in the sixteenth and seventeenth centuries. It amounted to a declaration of the immeasurable capacity of the mind and soul, a stirring idea and vision which aroused the men of the West to the building of a great civilization—great, at any rate, in its promise and potentialities. Science thrilled even the ignorant and unlettered people who still could say to themselves: men, not gods, have done these things. It enabled everyone to imagine himself as a discoverer, as a pioneer.

Was this entirely a new idea? If we now reverse our position and say that it was not—that the spirit of self-reliant discovery existed before the sixteenth century, that it flourished in ancient India, in Egypt, in China, and in Greece—we shall be right in principle, although some further discussion is necessary. First of all, the idea of knowledge, in the period of European history immediately preceding the rise of science, was a special idea that was limited to what had become known to the world through the Christian Revelation. Even the great medieval thinkers who were rationalists at heart—men like Thomas Aquinas—felt that reason must work its way to a confirmation of Scriptural teachings. The scientific revolution, therefore, destroyed the psychological monopoly of the Church on the idea of knowledge.

If we study the history of science, if we turn to the writings of the men who made the idea of science popular, we shall find that for them science meant the promise of finding new meanings in existence—of each man finding his own, to the extent that each man investigates his experiences and the world in general in a scientific spirit. What other explanation can we find for the deep sense of reverence felt by so many people for the idea of science?

But if the *European* pre-scientific period had not been a time of blind belief in dogma, would

we still feel that something absolutely new and different in the affairs of men had been begun by men like Copernicus, Galileo and Newton? It seems unlikely. It is because we mistakenly evaluate the entirety of the past in terms of the past of Western civilization alone that we have come to identify science as amounting to a change in almost the very fabric of human life. Quite possibly, when we understand better the effects upon the human mind of dogmatic religion, we shall be able to regain a sense of historic continuity with the larger past of the human race and, as a result, adopt a more sensible view of the achievements of modern science.

In one respect, however, the scientific epoch has been different. It has produced such a riot of progress in engineering technology that it has been easy to mistake our Age of Inventions and Power for an Age of Freedom and Knowledge. In engineering we have certainly accomplished something new. But the achievements of engineering are not achievements in *understanding*—which, as Dr. Cantril says, is the true aim of science. A dawning recognition of this distinction is doubtless responsible for the strenuous self-criticism now being practiced by the scientists themselves.