

TECHNOLOGY'S CHALLENGE TO EDUCATION

1. Antidotes for Incompetence

By FRED M. HECHINGER

IN DISCUSSING human competence in a world of change, I want to make it crystal-clear that I am not ready to accept all the changes that are being pressed on us. I am not at all prepared to suggest that we must blindly find new competences in order to adjust to all the changes or in order to make ourselves inconspicuous in the modern habitat. Let me be specific. I see no reason in the world why modern man should develop any competence whatsoever to pay high rents in order to be permitted to live in buildings with walls that act as soundtracks rather than sound-absorbers. Nor do I believe that this problem can or should be overcome by developing such novel engineering competences as "acoustical perfume"—artificial noise to drown out next-door noises. When I don't wish to be a silent partner to the bedroom conversation of the neighbors, I am not at all satisfied by having the sound effects of a waterfall, the chirping of crickets, or incidental music superimposed on the disturbance, just to cover up the incompetence or greed of modern builders.

The other day I found myself wandering through the desolate destruction of Pennsylvania Station in New York, thoroughly incompetent in my efforts to find a ticket office. Instead I found a large poster which said that "your new station" was being built and that this was the reason for my temporary inconvenience. Nonsense! my station was not being built at all. My station is being destroyed, and I do not need the new competence of an advertising copy writer or a public relations consultant to obscure the facts. The competence that was needed—and which I and great numbers of like-minded contemporaries lacked—was the competence

to prevent an undesirable change. In plain language—the competence to stop the organized vandalism which, in the name of progress and change, is tearing down good buildings to put up flimsy ones; is dynamiting fine landmarks to replace them with structures that can be ripped down again twenty years later without a tear.

When the packaging industry finds it increasingly easy to design containers that make reduced contents appear to be an enlarged value at a steeper price, the change does not call for the competence of a consumer psychologist to make the defrauded customer feel happy. The change calls simply for a tough public prosecutor.

Lest I be mistaken for a political or even a sentimental reactionary who wants to halt progress and change, let

me add another example of modern life the improvement of which may call for radical public action rather than for any new competence. Commuter rail transportation has fallen into decline in many parts of the country. Persons dependent on it find themselves frustrated and inconvenienced. In reply to their plight, they are given explanations such as the economic difficulties facing the railroad. Explanations, however, are no substitute for remedies. The competence required here is not technological or mechanical. After all, it would be difficult to persuade any sane citizen that a technology able to dispatch men into space and return them on schedule is mechanically incapable of transporting commuters from the suburbs to the cities in comfort, in safety, and on time.

The competence lacking here is one of general intelligence of the kind that is willing to shed doctrinaire myths when they stand in the way of the facts

At the University of Delaware not long ago, an unusual project brought together a number of distinguished spokesmen from the often separate worlds of education, business, science, and government. Their assignment was to explore, each from his special point of view, the increasingly crucial subject "Education for Human Competence in the Face of Technological Change." The three-day meeting was one of the few times such a group has ever gathered under academic auspices, and it thus represented a significant and encouraging departure from the traditional ivory-tower image of a university. Through special arrangement with Bruce Dearing, dean of arts and sciences at Delaware, and Marshall Fishwick, project director of the Weymss Foundation, who jointly planned the conference, a few highlights appear here. Those represented on this and the following pages are Fred M. Hechinger, education editor of the *New York Times*; Howard A. Meyerhoff, professor of geology at the University of Pennsylvania and former director of the Scientific Manpower Commission; James A. Donovan, staff director, U.S. Advisory Commission on International Educational and Cultural Affairs; William L. Reese, chairman of the Department of Philosophy, University of Delaware; Albert N. Browne-Mayers, M.D., psychiatrist and research scientist; and Lamot du Pont Copeland, president of E. I. du Pont de Nemours and Company.

of modern life. To make millions of commuters suffer (and I use this example only because it is readily familiar, not because it is unique today) merely because the doctrine of free, competitive enterprise must be upheld, even after competition has disappeared as a vital ingredient, is an example of ludicrous mental incompetence. So is the tendency to worry whether a public takeover of a public necessity that is no longer being adequately maintained by private enterprise constitutes socialism or merely the protection of citizens' interests.

We ought to place the stress of competence in such a fashion that we can use it to mold, control, and—in extreme instances—even to block change rather than merely to adjust or submit to it.

Take the vast social and economic question of the place of the so-called service industries in the changing economy. Economists seem to agree that this is a growing industry and one that will provide more jobs at the very time when other industries, as a result of automation, may be providing fewer jobs. Yet, since the service industries ought, by definition, to provide the kinds of services that make life easier, more comfortable, and more pleasant, the only criterion of success or failure is competence—the ability to please the consumer. Ideally, human service is almost invariably preferable to mechanized service. The work of a competent cook has it all over the most efficiently prepared TV dinner. A well-trained and amiable waiter is infinitely more desirable than the best self-service cafeteria. A safe taxi ride, with a driver who

knows where he is going, restrains his urge to tune in to the Beatles, waits to smoke his cigars, and insults his customers only if specifically asked to do so—is infinitely preferable to driving yourself. I leave it to you to conclude whether such competence as I have been describing is being trained in sufficient quantity and quality today.

It is a matter of a combination of competence and attitudes. I am willing to assume that the new breed of medical secretaries who guard the moats of doctors' offices like so many modern dragons are competent in some of their assigned tasks. But why must all of them be graduates of a special course—it could not possibly be accidental—in how to act superior to patients? I suspect that part of the answer is that we overemphasize and standardize the "how to be competent and professional" in most of our modern training courses and add a smattering of pseudopsychology. As a result, too many of our salesgirls, medical assistants, and even teachers have that superior certified gleam in their eyes that is a dead giveaway: they think of customers, patients, and children as so many controlled experiments to be "handled" or "related to"—and made to feel inferior.

Nor will the modern substitute for competence-plus-pleasantness—the Public Relations folksiness—satisfy the customer in the long run. The hotel PR letter that informed me how good it was to have had me did not remove the unpleasant experience of the fact that they had not had me at all. They had, in fact, lost my reservation and I had

had to find lodging in the dead of night somewhere else. Furthermore, I judge service on an aircraft entirely by the way in which I am being treated as a passenger and not by the standard landing speech, "It certainly was a pleasure to have you aboard and I certainly hope you will fly with us soon again." (The Verbal Relations courses of the service industry's training schools seem to put a premium on the abuse of the word "certainly.") I am service-minded enough to resent even the PR note that adorns practically every implement in modern hotel rooms—bath mats, soap, Kleenex, etc.—reminding me that the particular item has been placed there "for your convenience." I simply believe that the entire hotel, with every executive and employee in it, has been placed there for my convenience and that no other purpose justifies its existence.

I BELIEVE a truly fundamental need is the combination of competence of expression with honesty of thought and attitude. We need to teach children and youths that speech is a precious gift, a sacred and essential art, and the instrument that enables us to say what we mean to say. Since we probably cannot effectively outlaw attempts to use speech to camouflage incompetence and to disguise undesirable change, it is imperative that we teach new generations how to detect and disarm such fraud. This is not an easy task. It is made infinitely harder by the fact that so many teachers have themselves been contaminated by the germs of pedagogical and sociological language. Perhaps we might think of some summer institutes for the verbal decontamination of an elite force of teachers.

A second priority must come to grips with the abuse of our great and important mastery of the art of statistics. It is an art—or perhaps a science—that offers a fine demonstration both of the importance and the danger of competence. There is no question at all that American statistical competence has made significant contributions to the understanding of modern man and to the improvement of modern living. The danger is that statistical evidence will be misinterpreted into becoming a substitute for law, morals, ethics, standards of behavior, goals of society.

The step from saying that a majority of people are "doing it" to believing that this is therefore what everybody ought to do leads to a tyranny of statistics. It is the technological justification of mob rule, made all the more dangerous when it is mistakenly sold as the codification of democracy. It translates the code of the adolescent society—"But dad, everybody is doing it"—into

(Continued on page 77)

From Brawn to Brain: In spite of many distinguished adherents, the view that the mentally able are the students who alone should receive the best in education is untenable. No more acceptable is the fatuous notion that every youngster is entitled to a college education. The first view, if implemented, would create a caste system foreign not only to a democracy but also to the spectrum of personnel requirements in our society. The second ignores the individuality of human beings and entails a waste of precious, and limited, educational resources. Educators are not faced with the problem of sorting the sheep from the goats, but of distinguishing lions from antelopes, and both from dairy cattle.

Translated into human equivalents, the simile drawn from the animal kingdom means the development of reliable and discriminating criteria for the identification of talent of all kinds and at all intellectual levels. It implies the channeling of young people into the kinds of training to which their respective abilities and temperaments will prove most responsive.

How can education most effectively respond to the manpower and brainpower requirements of technological change? The basic ingredient of that change, which is still in full swing, is the shift from brawn to brain. The unskilled worker is obsolete in factory and on farm. All society has moved to a higher economic plane, where the tempo has changed, yet the fundamentals of learning are much the same. Education's most urgent need is a change of pace. Alfred P. Sloan has said, "Give us educated men—we can train them. We can't educate them." If educators will place a higher rating on human capabilities, they can soon raise the level of human competence to the point where it can face technological change, whatever its dimensions.

—HOWARD A. MEYERHOFF.

2. The Automation of Government

By JAMES A. DONOVAN

THE LATTER half of the twentieth century may well be looked upon by historians as that period in which man was forced, by the rapid development of the machine, to become more concerned with his ultimate nature and his relations to the universe. Now, the fact that machines evolve and become increasingly complex, and the fact also that the period of gestation for each new machine is considerably shorter than that of its parents, as Samuel Butler was fond of pointing out, have not been lost upon the federal government. Machines change society, as all in government can readily see, and government must change accordingly.

Of course the government is necessarily concerned with our whole society. Many government programs, most recently the anti-poverty program, necessarily deal with persons within society who are dislocated for reasons including increasing efficiency in the use of machinery. But let us look for a moment at the ways in which the federal service itself has changed with the growth of machinery.

This service, like our society in general, is changing radically toward fewer and fewer straight clerical jobs and more and more jobs for middle-grade technicians, scientists, and engineers. The day when one could think of the federal service as "an army of clerks" has passed, and good riddance. The most recent Civil Service Commission survey of white-collar workers in the federal government shows that in 1961 there were still 28,000 general clerical employees in the four lowest grades. But even at that time there were more employees in physical science occupations and almost four times as many in engineering.

In 1947, to continue these statistics, there were 85,000 typists. The federal government's employees have increased about 25 per cent since that time, so one would expect about 106,250 typists to be on the payroll now. On the contrary, however, we find there are now only 78,000. This is due, in part at least, to the introduction into numerous government offices of quick-copy equipment that has reduced the demand for persons whose skills do not extend beyond the ability to type.

The federal government has long been the country's largest user of equipment for automatic data processing. There are 10,300 employees working with computers and 22,000 machine-operating employees, many of whom work to sup-

port the automatic data processing (ADP) branch of the government's data processing and computer systems. In short, these persons are serving the machines.

One could recite statistics of this sort indefinitely, showing that the demand for increased services from the government, which the increasing population of the total country requires, means more laws to interpret, administer, and enforce. There is a greater regulatory workload in many agencies. There are more claims against the government to examine. And so on. We find, for example, that medical officers in government have increased 15 per cent since 1957 to a total of 11,202, most of these being employed in the Veterans Administration and the Public Health Service.

It should be mentioned, lest these figures sound frightening, that despite the fact that since 1956 the total population of the country has increased 13 per cent, federal employment has increased less than 5 per cent.

One last figure giving some notion of the fantastic increase in the use of computers is to be found in a recent statement of a Senate Government Operations Committee. This says that in 1959 some \$251 million was spent in annual operating costs for automatic data processing equipment. The current budget

for fiscal 1965 provides over \$1 billion for the care and feeding of these machines, their appetites being utterly voracious. (The first of these hungry creatures was born in 1951 when the first commercially procured computer, the Univac I, arrived at the Bureau of the Census. Thus we are talking about a growth in the machine population that has taken only thirteen years altogether.)

Enough has been said to show, I think, that the federal service reflects the numerous changes going on, because of the evolution of machines, in our society at large. As society changes, the federal service naturally changes. In a government that is as responsive as ours to the will of the population, this is good. It follows that numerous persons have been displaced or have had to be retrained for other jobs in government because of the introduction and large use of machines. On the other hand, large numbers of jobs have been created by such totally new programs as those which have sprung up since 1945 in the Atomic Energy Commission, the National Aeronautics and Space Administration, the Defense Department, and other agencies. Training and retraining goes on in the government all the time, thanks to the Government Employees Training Act of 1958, itself a result of the changing conditions that exist in practically every government agency. In fact, hundreds of training courses are offered across the country to all government employees, more than



"It never fails! You get all the oil ready and nobody attacks!"

300 in the Washington area alone. These encompass employee accident prevention responsibility, the current American scene, industrial noise, small purchases, report writing, value engineering, and so on and on.

And yet, for all its training and retraining, the government, like any employer, cannot transform the basic human material it has to work with. The only way to prevent accumulating poor raw material, of course, is to improve recruiting methods; the government is doing this.

Still, the best need retraining, and even re-educating. The main point develops, though, that for all that has been said about automatic data processing and so on, there are obviously a substantial number of positions in government at all levels that can never be automated. The work in these is non-repetitive, no decision being quite like the next one. These are the jobs that involve value judgments and are likely to make government increasingly attractive as an employer.

In fact, they are the positions in which
(Continued on page 79)

3. The Uses of Experience

By ALBERT N. BROWNE-MAYERS

COMPETENCE does not apply only to a competent artisan. It is a concept that involves all aspects of the personality. The competent person is competent as a lawyer or doctor, but is also competent in the emotional areas; he possesses sensitivities as well as control, he utilizes the emotional aspects of his life in order to enrich his total experience and the social milieu about him.

Continually keeping pace with technological changes means that the student will have to become competent in relation to his job, to himself, to the society about him, as well as to the variety of social forces that impinge on his daily life.

What can we do to help him in achieving such competence? Without doubt we shall have to rely greatly on

the humanities and perhaps view them also as part of therapy—emotional education—in achieving the competent graduate.

We could start by setting up certain rules to follow. For instance, we might set up one requirement in this new venture. The single rule to follow would be to make naïveté the greatest mistake—as if naïveté were a sin. Naïveté may be defined as an attitude that does not covet experience but actually holds experience in low esteem. Historically speaking, there have been times when innocence and naïveté were enviable states, but in this rapidly changing society, naïveté is inexcusable—we cannot afford not to know.

I should also like to mention a vast area of research and therapy that can be utilized for the education for competence. In our social sciences—and here I would like to include the great variety of psychotherapies, such as individual, group, nondirective counseling, family therapy, etc.—much has been achieved within the last fifty years. In addition to these therapies, there are such techniques as T-groups, role playing, activity groups, discussion groups. All of these new instructional methods are only partial answers to very difficult problems, but the one thing they have in common is that psychological techniques can be used for therapeutic purposes.

Too often we find in today's world that the psychological sciences are used for propaganda—in the destructive sense of the word—or for brainwashing, and we too easily forget the health-giving and constructive advances that have been achieved in the recent past.

If we can pursue our research in an orderly fashion without too many shrieks of pain from the long-established institutions, and if new bridges can be built between the wisdom of the past and today's new techniques, we may well be on the verge of developing a greatly enlightened society. Indeed, it may well be a virtually new society.

My theme of competence for today's citizen is no simple mastery of a technical skill, or of a body of knowledge in a profession. Competence embraces all aspects of living—sensing, knowing, thinking, feeling. These living experiences form a total configuration in which the whole appears to be more than its parts.

In order to achieve this total competence, education will have to provide a wide spectrum of experience. This is no idle talk, for, let us remember, education is in an emergency situation.

A Note on Values: If we ask how one goes about educating for human competence, we must surely begin by asking what it means to be humanly competent. One exhibits competence as a physician when he heals his patient, competence as a businessman when he makes a profit, competence as a statesman when his rule results in the well-being of his people. And to be competent in one of these ways is part of what it would be to be humanly competent. But a man might be competent as a physician and, at the same time, be quite incompetent in a human sense, so human competence goes beyond vocational or professional competence, although it includes that kind of competence as a part. And if we are educating for human competence and not merely for technical competence, we must include but go beyond the goal of technical competence.

In what direction must we go beyond technical competence? At the outset it was assumed that human life has a goal, an unchanging goal. If it has, human competence would consist of achieving this goal. But the language is very old-fashioned, and grave men have warned us often enough in recent years that life is meaningless and man a useless passion. Is life meaningless? Has human life, indeed, no goal? The questions seem hardly edifying. And I would like to avoid being painted into the corner where I sometimes find myself in the Introduction to Philosophy class, treating questions that later seem to me highly dubious, such as "Am I a man dreaming I am a butterfly, or a butterfly dreaming I am a man?"

Educating for human competence, it turns out, means educating for the goal of developed human capacities. And we must add to the procedures insuring technological competence in the education of our youth whatever will maximize the development of these capacities. The developed human being, in the tradition of Western culture, is one who values wisdom, courage, temperance, justice, truth, beauty, goodness, integrity, and compassion. These are the characteristics of an enlightened man, one possessing a luminous self-knowledge, resulting from a discriminating development of intellect, will, and feeling. They combine self-knowledge and self-fulfillment.

I suggest, in sum, that human competence requires both technical competence and an understanding of the foundation of this competence in theory; that this understanding is part of the liberal arts; that it is through this tradition that the individual is enabled to understand his nature and his place, moving toward those more universal attitudes to which at last one's loyalty rightfully belongs. It is in this movement toward enlightenment that some of us will become creative agents contributing things of worth to the development of our culture.

—WILLIAM L. REESE.

4. Putting First Things First

By LAMMOT DU PONT COPELAND

OF THE EIGHT vice presidents of Du Pont, five hold the doctor of philosophy degree in science or engineering, and two the bachelor's degree. Of the general managers, who head our twelve industrial departments, six have their doctorates and four their bachelor's degrees in the same disciplines.

Superficially, you would hardly expect anything else. A chemical company staffed by English, French, or drama majors would have a rather difficult time competing with companies whose work was done by technically trained chemists, chemical engineers, and others trained in similar disciplines. And so I would not have you leap to the conclusion that the Du Pont Company is about to fill its management jobs with men trained in the liberal arts.

Although the men who reach the upper rungs of corporate management no longer deal with the problems of their academic disciplines, their studies have trained them to have a mentally tight ship and to look for conclusions that follow the facts. Such training is not unique to the physical sciences, but I do believe that those charged with academic curricula could give further consideration to a better integration of cause and effect. The scholar recognizes the interplays, but too many of our students have brains full of knowledge but no cross-reference systems, too many facts but not enough imagination.

Yet as I look around, as I read newspapers and magazines, it seems to me that the problems that threaten to overwhelm our civilization, the problems that have got to be dealt with if we are to survive as human beings, let alone as civilized human beings, do not lie in the field of technology or of the physical sciences. This is true even though their roots may run deep into technical soil.

The problem posed by the atomic bomb is an example. In the first instance, the problem grows out of the physical sciences. It all began with Professor Einstein's $E=mc^2$. But today the technology of nuclear physics concerns us far less than do the sociological problems that have come to exist because the bomb exists.

It is possible to conceive of this problem's being solved by technology—by, perhaps, some breakthrough by one side or the other so far-reaching as to make further competition hopeless. But such a development is, I should think, unlikely. And even if it came, it would promptly evolve into a social rather than

a technical problem: What use do you make of your discovery?

We in the United States had the problem in its purest form at the close of World War II. We had the atom bomb. No one else had it. This meant that we had in our hands the means to be the absolute rulers of the world. No one could have stopped us. This power the scientists had put into our hands. But the question of whether, when, or how to use it was decided neither by the scientists nor by technical considerations.

The nuclear issue is only one of our problems, of course. The racial question is a matter not of technology but of the human equation. The population explosion constitutes a tremendous challenge. The difficult and complicated problems involved in our relations not only with the Communist world but with our friends and allies are more sociological than technical. Man's impact on his environment—changing the balance of nature by diverting forest land to raising crops, switching agricultural land to housing developments, polluting air and water—confronts us with many serious social questions to which we do not have the answers.

THE problems and the challenges offered to us by automation are to a great degree social in nature. They involve a permanent or temporary loss of employment by men and women who must have work or be supported by the state. They involve steadily rising standards of intelligence and education. The social dislocations implicit in these problems will be solved, when and if they are solved, by the best efforts of the social scientists and the humanitarians,

working closely with experts in the physical sciences.

You might say, with a good deal of accuracy, that the physical scientists have been raising exceedingly knotty questions and dumping them into the laps of the social scientists and the humanitarians. It might well be possible to write the history of our modern civilization in these terms without omitting any very significant episodes.

Considering all these things, there can hardly be any doubt as to the importance of the humanities in our modern life. The men who manage companies all across the country are well aware of this. When I say this, I narrow the focus down from the cosmic to the individual. What is the role of a member of Du Pont management in the solution of these problems? What can each of us contribute? What can we do to help the educators? What can the educators do to help us?

I do not pretend to have the answers to these questions. I'm not sure anyone has, in the definitive sense. But it is time the questions were being asked, time all of us together were looking for answers. For it is abundantly clear that Americans are no nearer to solving these questions than are any other peoples. And we cannot procrastinate. The problems won't wait for us.

Let me, then, as the representative of a technically-minded company, volunteer one suggestion. It is that the solutions to our problems will not emerge as huge cosmic entities. Perhaps it would be easier if it happened that way, but in my opinion it will not. History shows us that the world's problems have not yielded to all-embracing solutions. It is true that efforts have many times been made to impose Procrustean solutions on great masses of people. This is, indeed, the easy way out inevitably taken by

(Continued on page 78)



"I made 6,000,000 shekels speculating on the grain exchange—all on papyrus, of course."

Scene Designers: Their Art and Their Impact

By HENRY HEWES

QUITE RIGHTLY, the drama critic's evaluations of stage settings and costumes are apt to be different from those of the art critic. For whatever its value as art may be, a design in the theater must be judged by its contribution to the total, unified impact of a particular production. But even the drama critic is often unable, in one sitting at least, to appreciate the contribution of the designer. *Saturday Review* therefore asked thirty American scene designers to indicate their preferences (see page 31), in the hope that out of it might emerge a truer assessment of contemporary stage design.

A tabulation of the survey shows that these professionals regard Jo Mielziner's *Winterset* (see opposite page) as the outstanding setting in our theater's history. Furthermore, Mielziner is cited for seven other designs, a score that places him one ahead of the late Robert Edmond Jones in this respect. It is also a setting by Jones, *Lute Song* (see cover), that receives the second greatest number of mentions. The simplicity of this lovely design is breathtaking and, equally important, it is part of a total production scheme in which the graceful Oriental frame is used with differing backgrounds to sustain unity in a wide-ranging narrative. However, according to Edward F. Kook, who worked closely with Jones for many years, the late designer's own favorite was his first, *The Man Who Married a Dumb Wife*.

Although it is not by an American, the late Christian Berard's enchanting

decor for *L'Ecole des Femmes* (see page 26) was seen by theatergoers here and came third in the selections, just topping Jones's *The Iceman Cometh*, which placed fourth. After these choices, no single setting received more than two mentions, but the late Norman Bel Geddes (whose reported personal choice, *King Lear*, was selected by none of his colleagues) and the currently prolific Oliver Smith each had various designs cited seven times. Boris Aronson settings received four mentions and those of Lee Simonson, Mordecai Gorelik, Jean Rosenthal, William and Jean Eckart, and Peter Larkin were each mentioned by two other designers.

TWO new books have just appeared to arouse interest in the world of the scene designer. The first is the large deluxe *Stage Design Throughout the World Since 1950* (Theatre Arts Books, \$25). Like its predecessor, *Stage Design Throughout the World Since 1935*, it was prepared by the International Theatre Institute under the auspices of UNESCO. However, the handsome new volume offers designs from thirty-three countries, whereas the former book covered only eighteen. There are some 540 reproductions, thirty-two of which are in color. Numerically, the greatest representation is given to Russia (sixty-eight), France (sixty-two), West Germany (thirty-eight), Italy (thirty-three), and England (thirty). American designs number twenty-seven, with nineteen designers contributing. Most missed are Ming Cho Lee, Jean Rosenthal, Ben Edwards, and Isamu Noguchi, all of whom

have done more remarkable work since 1950 than some of those included.

As for the designs in the book, they constitute a rich collection, with the emphasis on scenery that breaks away from literalism and tradition. Bridges, steps, skeletal buildings, and ships dominate. And abstraction appears to be the prevailing trend. It should, however, be noted that the Russian designs generally resist this trend and therefore suggest a theater whose decors are somewhat old-fashioned.

In addition to the reproductions, this book includes a well-documented inquiry into new materials and methods, and a "Who's Who in Stage Design." These features plus the reproductions make this book essential to all who work in the theater.

The second book, *A History of the Theatre* (Odyssey, 95 cents) is much less expensive but in its way just as handsome. Issued as one of a series of eighteen such booklets on a broad variety of subjects, it is amazingly effective within its miniature (four by six and a half inches), forty-eight page-format. Hannelore Marek's simple description of the development of the theater from the Greeks to the present day highlights the most pertinent facts and is relatively easy to read. And Peter Spier has contributed almost 100 color illustrations that capture the essential quality of his subjects. Since the sketches include some of the settings for *L'Ecole des Femmes* and *Marco Millions*, SR readers may perhaps be interested in comparing them with the larger-sized reproductions that accompany this article.



Robert Edmond Jones's remarkably simple barroom designed for Eugene O'Neill's *The Iceman Cometh* (1946), owned by the University of Minnesota Theater. It is interesting to compare this with Hutchinson Scott's very complicated set for the British production in *Stage Design Throughout the World Since 1950*.