BURIED BY "INSIGHTS"

NEVER in history has it been so easy for sophisticated critics to take the bloom off other men's discoveries. There is, after all, very little new under the sun, and this applies especially to and awakenings affecting transitions individuals and groups. What the teacher may delight in observing, as a passage in selfdevelopment, the critic can usually expose as a cliché with numerous parallels in the past. But whether educational insight or reductionist egotism, the capacity for this sort of perception is one of the side-effects of the penetration of the scientific method into all branches of historical and social studies. Of course, the "objectivity" of research has not been without some usefulness. Even as history repeats itself—in both eventpsychological attitudes—the patterns and increasing assimilation of the past by present-day scholarship leads to identification of certain constant factors in human behavior, and one result of this recognition may be the suspicion that the men of the present are indeed no wiser than their ancestors, and as vulnerable to self-delusion as any ancient tribe or race. It was only a small step, actually, from studying "primitive societies" as though they were colonies of ants to looking at ourselves in somewhat the same way. Obviously, the vanities of "progress" can hardly survive such inspection. Cleverness in objective social science eventually turns cannibal. It exhausts its material through externalizing generalization until nothing is left but a vast emptiness of being. So it is natural that the resulting disillusionment has at first a somewhat paralyzing effect.

At the same time, our growing knowledge of the past may slowly assemble the ingredients of a new faith in the capacities of human beings—bringing most of all a sense that we are not merely "modern" men, but *men*. This realization sometimes appears in brief asides in the writing of

specialists concerned with a wide variety of subjects. The relevance of what it means to be human is becoming increasingly apparent to the specialists, no matter what their field. For example, in *Matrix of Man* (Praeger, 1968), a suggestive history of the forms of the city through the ages, Sibyl Moholy-Nagy writes:

Plutarch defined kingship as government of one man by the consent of the governed (in contrast to tyranny as the will of one man over the wills of the governed). The Sumerians never lost the original concept of kingship, which was a contributing factor to the gradual extinction of the concentric city-states. At the spring festival, the king of his representative governor, the ensi, was stripped of all garments and insignia, slapped in the face by the priest and driven outside the city. In his place ruled for one day a man of the people, enjoying all his privileges, until the king was invited back. Even after the terrible destruction inflicted on the Sumerians by the Akkadians, a gardener ruled in Nippur during the brief Sumerian revival lasting less than 200 years (ca. 2100 to 1900 B.C.) because the rightful king had died during his one day of exile. It is comforting to know that not only tyranny has a historical continuum. From the eighth to the fourteenth century, the citizens of Zaragossa in today's Spain demanded that each new Aragonese king swear an oath protecting urban liberty:

"We who are worthy as you and could do more than you elect you king on condition that you preserve our privileges and liberties, and that between you and us there shall be someone with power greater than yours [the law]. If this shall not be so, we say no."

Well, which counts the most—being able to call a man a "president" instead of a king, or being able to tell him what will happen to him if he abridges your liberties?

Further research might produce what seem good reasons for preferring our own arrangements to those of Zaragossa, but these could easily be matters of convenience rather than principles of freedom. In a discussion of present-day

intellectual confusions, Nicola Chiaromonte (*Dissent*, MarchApril, 1969) observes:

The evil from which Western civilization obviously suffers is not a plethora of consumption (which in any event is the consequence of a certain way of understanding life and the aims of life, not a prime cause), but rather the lack of freedom due to the advanced regimentation and mechanization of collective existence. In this respect, whether the economy remains, generally speaking, "capitalist" is a secondary matter. And it is exactly on this point the necessarily authoritarian mechanization of collective existence—that East and West meet in the selfsame crisis and could meet in the same movement of reform and liberation. The division between capitalist countries and noncapitalist countries has in fact today little or no meaning: the true question is to be found elsewhere. What the term "capitalist" means nowadays is not at all clear: what is clear is that it no longer means what it meant for Marx; and it is also clear that it indicates countries in which plutocracy technocratic state control, and democracy coexist in a somewhat confused manner. To say this does not at all mean that we live in a substantially just, ordered and free society. The opposite is true and evident: our society, presumed to be democratic, IS eroded by injustices, evils, and very serious disorders besides being besieged by tyrannies all the more burdensome since they are less apparent and, what is worse, accepted as inevitable (if not indeed desirable) by the majority of the people.

In this article? Mr. Chiaromonte directs attention to the fact that "modern tyranny" is based on ideology in combination with science, so that intellectuals are easily seduced into believing that it is their duty to collaborate, "whether they literati, scientists, professional or philosophers." They regard the present technological imperatives as shaping "a new and progressive form of government, or at least an historically necessary phase, and therefore in substance good." He adds: "This holds true not only for Bolshevism but also for Fascism and Nazism as well as the tyrannical aspects of democratic governments." capitalist Chiaromonte's explication of this analysis is based on the work of an American philosopher of German origin:

According to Leo Strauss, the difference between modern and ancient tyranny lies in the fact that the modern is dominated, first of all, by the idea of the conquest of nature on the part of man (collectively organized) thanks to science, and second, by the vulgarization of scientific and philosophical knowledge, which produces a new and, one should add, completely unexpected kind of dogmatism and conformism, since it is based on the idea of a continuous criticism of reality and on empirical knowledge, not on any sort of revealed This dogmatism and conformism receive formidable support in the idea of science as a universal language and a superior manifestation of objective truth. And since science gives itself the aim of the conquest of nature and the efficient regulation of human society, it must be diffused and vulgarized—that is, it imposes itself with authority. though without assuming an explicitly dogmatic form, but rather the guise of empirical certainty. And this is not only true of the natural sciences but also of the so-called human sciences.

This leads to Mr. Chiaromonte's final generalization:

To conclude this discussion of modern tyranny and the part intellectuals play in it, one might ask what in the end is the principle of authoritarianism, and in what specific form it appears nowadays.

The simplest reply seems to be that the authoritarian principle is inherent in the very fact of placing oneself, as regards social and political problems, at the point of view of the ensemble, the totality, of the necessary and mechanical congruence of the parts and the efficient functioning of the whole. In fact, the preoccupation with totality implies the idea that human society is an organism whose laws are essentially known and, by implying that, it also implies the idea that one can, indeed one must, modify it from on high by means of more or less violent external interventions.

Now it is obvious that, if one starts from this point of view, one will never arrive at the autonomous individual, the free, self-assured man who is the support, not the part, as a gear wheel or organ, of any community that wants to be both civil and orderly. By this path one will arrive instead at the factory, the barracks, the electronic bureaucracy, plus the police to maintain external order.

It should be noticed that Mr. Chiaromonte, while making some use of history, does not

ground his views and criticisms on history, but on humanist principles and intuitions. Only such writers are able to avoid the paralysis of brilliant relativist criticism, which for them is only a tool, not a complete means or a destination. Yet in the hands of such writers, the use of this tool becomes doubly relevant. For example, it enables Chiaromonte to point out the irony in the fact that many of the new radical intellectuals in the West find in "Marxism-Leninism" a solution for the evils of Western Democracy and Capitalism, when they have only to inspect the societies where Marxism-Leninism has triumphed to see that the radicals in those countries are now risking their lives to oppose "a rigidly centralized political system all the more oppressive insofar as it claims to be striving toward the realization of a universal goal, in fact the unlimited reign of freedom." Presentday dissidents and protesters behind the iron curtain are fighting for the very rights of free expression that the new Western radicals declare to be unimportant, even while using and enjoying them every day of their lives. As Chiaromonte says:

We have, therefore, in the East a socialism put in doubt by events, where the doubt as to socialism is accompanied by a vigorous upsurge of the demand for political freedom, in the West we have an "obsolete freedom" accompanied by a rather crude idealization of exotic governments, such as, for example, Maoism.

What does such an intellectual misunderstanding mean? It means that we in the West no longer know what freedom is, are not concerned to know it, and in fact are more or less of the opinion that political freedom (but moral freedom too, and with it the dignity of man in and of itself) is a sort of commodity: one commodity among others that our advanced society lavishes on us and which we make use of because it is there, as we use the automobile or the washing machine because they are there.

Well, with writers such as Nicola Chiaromonte to press the cause of fundamental humanism in social thought, this becomes an area where lies some hope. He practices a criticism which exposes all sectarian positions and returns to the root in the nature of man—which converts

analysis into affirmation. This, surely is the best sort of criticism.

It is, however, uniquely the endowment of individual thinkers. Men who rely on institutions may be effective critics but they lack resources for affirmation. The field of their activities does not permit it. For example, in Harper's for May, Jeremy Lamer, a young novelist, reports his concluding reflections on an association with Eugene McCarthy's campaign for the presidency. Mr. Lamer's perceptions seem accurate and wise. but mainly melancholy. The problems of social change, he finally decides, were simply too much for Mr. McCarthy; and the kind of support McCarthy got from students—from some of them—was too much for Mr. Lamer. Having been told by a sophisticated politico that the McCarthy campaign was "radicalizing" thousands of "kids," Lamer muses:

But I still don't know what that word means in terms of politics. McCarthy's student volunteers were already radical in wanting to change the American political structure rather than slowly reform it, radical in wanting to redistribute power. But in context "radicalization" seemed to mean the abandonment of politics in favor of violence. . . . most student activists no longer feel they can make an absolute argument against force. They talk sometimes as if democratic methods are washed up in this society. . . .

It could be that our best leaders are fumbling and inadequate because the contradictions are too severe, the cleavages too vast, the resistance too absolute. I suppose the ultimate question raised by the fate of the McCarthy campaign is whether America's problems are really solvable.

No extensive quotation is needed to show that writers who rely on "the church" for solutions to these problems habitually make demands upon religious organizations which, in terms of self-reforming change, *no* institution, least of all slowing-moving religious institutions, can be expected to respond to. The same comment applies to appeals for radical reform of educational institutions, although to a lesser extent. The question is not whether institutions can be suddenly "changed"—they can't—but

whether the men who see the necessity for change will get some practical support if they personally take a therapeutic leap out of laggard institutions and begin to do what is necessary on their own. Actually, this always turns out to be the best way to exert constructive influence on institutions. The ones worth saving will eventually change simply in order to survive.

The project is not to destroy, but to create, little by little, a generous and hospitable social matrix for the emergence of new institutions, and this cannot be done by the institutions themselves, but only by individuals who accept responsibility for the task. What will happen, if people leave such reforms to institutions, is illustrated by the struggles and agonies of the Negro movement. The trial of black faith in American institutions lasted too long for any but Christlike men to tolerate and bear. So black men more like ourselves were taking the initiative away from Martin Luther King before he died.

Meanwhile, pursuing another sort of criticism—brilliant enough, but also blighting, in a way—Peter Schrag writes in *Harper's* for May on "The New Black Myths." He tells the story of Malcolm X—"the man who solved the riddle of blackness, and—apparently—grew up." After reviewing the Black Muslim doctrine which casts the white man as the devil, Mr. Schrag says:

Malcolm eventually broke with Muhammed, and he repudiated the devil theory, but the story symbolizes the sense of racial theft that enrages the black teachers and intellectuals who are articulating the objectives of black schools and black culture. If Ben Franklin and Horatio Alger symbolized the mythology of the traditional American school—the school of hard work crowned by worldly success-Malcolm is coming to share with them a rhetorical and symbolic role in the ghetto school run by blacks. The significance is not in its disdain for hard work— Malcolm was as much of a Puritan as any Yankee school-marm—but in its capacity to organize ghetto experience against the bankrupt claims of the official system. As a symbolic representation—a fantasy and a projection—it provides a rationale for the pursuit of African history and culture, for African dress and hair styles, and for the passionate search for history

and tradition. If much of that history has to be created or magnified . . . that does not fully obviate the validity of the myth or the needs it fulfills. Rather it enhances them. Every travesty of scholarship conducted in the name of African culture reflects a corresponding travesty in the name of American history and civilization.

Mr. Schrag seems to be saying that white men have already made all these mistakes and can now instruct their black brothers from the heights of earlier experience. Well, perhaps this ought to be said' some way or other. But Frantz Fanon said it better, and with a more positive emphasis, in *The Wretched of the Earth*. Fanon also warns against mining a static "tribal" past for the materials of upsurging black identity.

Mr. Schrag continues:

Malcolm never shed his innocent's belief that in some Eastern or African state, in some distant land, men had; achieved the ability to live together in harmony without friction or exploitation. narrative of the royal treatment he received from Arabian sheiks and African politicians is the story of a hustler pushing the golden elixir, a hipster's version of the promised land. In his exotic descriptions of his pilgrimage to the East, there is never a suggestion that Arabia is still a feudal state which exploits its underclass as ruthlessly as any society on earth and whose record of slavery is unmatched in human history. For Malcolm, the Middle East was a blessed society of mutual respect, racial brotherhood, and personal dignity, and American civilization was feudal and corrupt.

The American myth has, in effect, been turned inside out, but it is still the American myth. Malcolm, in his last years, shed his Muslim preoccupations and his mystical racism. But he never resolved his ambiguities about American values.

Well, who, it seems fair to ask, has? And isn't there something encouraging in the fact that the slave-owning Arabs, in other aspects of their social practice, were able to inspire Malcom X with renewed faith in the brotherhood of man?

A freedom better understood by educational than by political philosophers is the freedom a man needs to puncture his own myths. There is something about explaining such things to him in detail that shuts out the possibility of personal discovery. Have white men no illusions of their own to conquer? Mr. Schrag has of course friendly intentions. He is after the same universals that Fanon and James Baldwin and others reach for, and involved here are chiefly matters of educational psychology and humanistic good taste.

In any event, it should be a fundamental part of the humanist utopian constitution that each man, each culture, each race, and each group (such as the American Indians) that finds basic integrity in living and even thinking by common tradition, will be guaranteed the right to go through its own scenario of "myths" at its own rate and under its own steam. A universal culture from which any and all might draw—if and when a man or a group wants to hurry up—would provide evidence of the roots in man's nature of *all* myths and all processes of myth-making. What else, after all, is world culture about?

This, surely, must be what Mr. Chiaromonte means when he says social thinking should start from the viewpoint of "the autonomous individual, the free, self-assured man who is the support, not the part, as a gear wheel or organ, of any community that wants to be both civil and orderly." We all have our myths, and are both inspired and confined by them. If the myths are made only from limiting history, from this time and that place, it goes hard with us when we try to get better ones. But if we could develop a metamythology concerned with how to move, and with necessity of moving, from one mythic context to another, we would have a scheme of meaning rich in patience as well as inspiration for the rest of mankind. Until then, we ought to ask, after Melville: "Tell me this, who ain't a slave?"

REVIEW WAS THE CIVIL WAR A "GOOD" WAR?

IN a paper which throws light on the way historians change their interpretations—which means the moral justification—of history, John S. Rosenberg, a graduate student at Stanford University, draws attention to the recent revisions of opinion among scholars regarding the merit of the American Civil War. The first part of his article (in the Spring American Scholar). shows how the pacifist reaction following World War I led to historical studies urging that there was no necessity for the Civil War. Avery Craven, who wrote *The Coming of the Civil War*, is cited as a historian of this persuasion.

Then, in tune with the heightened moral righteousness felt by intellectual supporters of World War II, a new reading of the meaning of the Civil War became popular. Arthur M. Schlesinger, Jr., is the chief exponent of this view:

For Schlesinger, the war was an inevitable conflict between Good and Evil. Where the revisionists claimed that the debate over slavery in the territories was an "unreal" or "magnified" one about an imaginary slave in an impossible place, Schlesinger and the new nationalists compared the territories to Poland, the South to Germany. Schlesinger, for example argued that, democracies could not challenge fascism inside Germany any more than opponents of slavery could challenge slavery inside the South, but the extension of slavery like the extension of fascism, was an act of aggression which made a moral choice inescapable." And since resistance was preferable to appearement, war was the only moral choice: the Civil War was "an 'irrepressible conflict'," Schlesinger wrote, "and hence a justified one."

John Rosenberg represents the new "revisionist" stance:

One may believe, as I do, that the Civil War—or more accurately, a civil war—was unavoidable and still believe that it was a tragedy that cannot be justified either by contemporary war aims or by the results it achieved. A new revisionism then, would not deduce justifiability from inevitability, as Schlesinger does.

Mr. Rosenberg examines the motives, aims, and claims but also counts the cost of the Civil War. "Are we," he asks, "so accustomed to organized violence we automatically accept without question the conclusion that the Civil War was justified even though it merely loosened the shackles of slavery? Can we be so sure that the privilege of moving from the plantation to the ghetto is worth the death and destruction of a brutal war?"

Two points come out clearly in his discussion. First is his notice of the fact that an irresistible moral compulsion in one epoch may not justify submitting to a similar compulsion at a later time. One should not mine history merely to justify a present moral passion. History is also for *questioning* the urgent righteousness of the hour. So questioning, Mr. Rosenberg does not find the fruits of the Civil War sufficient to pay for the slaughter it caused.

The second point is only a larger version of the first, and is brought out by asking: Is it ever the case that, "Injustice is better than disorder"? This is a badly loaded question. It can hardly obtain a reasoned answer, these days, even though it is obvious that some injustice will on at least a few occasions be better than some disorder, where the value of both "somes" may vary independently from zero to infinity. The problem is not whether the proposition is right or wrong, but how you fill in the blanks, and that, of course, requires thought. The practical argument for civil rights, for example, is the contention that there exist ways to overcome injustice without disorder. The issue turns on matters of degree. And the study of history should help to reveal how people have felt about those matters of degree as well as what they did. This is Mr. Rosenberg's project: it leads him to say that Schlesinger and some other historians give evidence of feeling that, "where profound moral differences exist, any war is better than any peace."

It also leads him to conclude:

For those who are no longer communicants in our patriotic religion, the Civil War begins to appear as a tragedy unjustified by its results. In addition to realizing that war itself is at least as evil as any human or ideological enemy, many Americans have come to de-emphasize the significance of merely legal

reforms, which have only a limited effect on the quality of most people's lives. Since the former revisionists [Craven, and others] were not overly concerned with the plight of the Negro, they held that a war over his status was irrational and unnecessary. The new nationalists, on the other hand, were keenly sensitive to the immorality of chattel slavery, and they were willing to justify nearly any extreme to eradicate But after more than a hundred years of emancipation, over a decade since the Brown decision [desegregating the schools], and several civil rights laws, it is now apparent that much more than legal change is required to constitute real progress. How naive it now seems to justify the slaughter of six hundred thousand men for the slim reward of a formalistic and incomplete emancipation. Maria Child was right: because the nation has not demonstrated much "heart or conscience" on the subject of freedom for the ex-slaves, everything has gone wrong.

Well, can we tell now, with Mr. Rosenberg's help, who is "right" about the Civil War?

But we shall desert both Mr. Rosenberg and the sore issues he raises if we rush on to some righteous conclusion. Righteousness, if it is ever real, flows from a mysterious and largely private calculus involving the best decision an individual man can make about both facts and values. He has to decide whether and to what extent the facts serve the values or go against them. And how can such decisions even determine in any final sense a "public" truth? Will not treating such solutions as though they could be public truth result in intolerable dogmas followed by undermining hypocrisies?

Something like this attitude seems present in the recent decision of U.S. District Court Judge Charles Edward Wyzanski in the case of the conscientious objector, John Heffron Sisson, Jr. Sisson based his right to conscientious objection on the fact that he regards the war in Vietnam as "illegal." At his trial he introduced in evidence books by Richard Falk and Howard Zinn to support his claim to having a "reasonable" view, and not in an effort to prove the war illegal. Judge Wyzanski accepted this argument. He ruled that "Sisson's views are not only sincere, but, without necessarily being right, are reasonable."

If this decision should survive the Supreme Court, there will hardly be any further question as to whether the United States should have a volunteer army.

Mr. Rosenberg's *American Scholar* article also makes clear that righteousness is not what a state does or tries to compel or cajole its citizens to do. While *thinking* what the state does is righteous may be the habit of many men, history which is of any value must review that thinking, and show, as Mr. Rosenberg does, that there were and may today be other "reasonable" views. The writing of such history is the creation of *culture*—the common area of growth within the tension between what is and what might be.

So there must be, if anything like "progress" can exist for civilizations—and a case can be made for doubting it—a sense in which a broad consensus may emerge among thoughtful and cultivated men concerning what is the most reasonable course for a human community to follow. Historical studies are material for that consensus, but such studies can only point—suggest, propose, invite—not conclude, for everyone who reads. It is only by this deliberate uncertainty that civilized men can obtain certainty that they are really exploring the meaning of their lives and the best way to make their history.

It is worth while to turn, in this connection, to the writings of Walt Whitman about the time he spent attending the wounded and the dying in the military hospitals of the Civil War. Whitman, you could say, was the first modern writer to look at war itself, apart from its pretensions and claims. One need not, from reading Whitman, decide that the war was simply and unmitigatedly wrong. It may have been, but we shall never finally "know" in the sense of being able to decide about the morality of those men who lived a hundred years ago. One might learn from Whitman the uselessness of seeking a final righteousness, a revisionism to end all revisions, and thus, by multiplying individual elevations, raise the common level at least a notch or two, until men discover that being right is indeed possible, but only by not claiming to be.

COMMENTARY SELF-MADE REALITIES

WHEN Robert Jay Wolff remarks (see "Children") that beyond our industrial framework "we have no stable culture, no cohesive tradition," yet at the same time "easy access to every known tradition, to the products of all epochs, to creative achievements of every age," he helps the general reader to see behind some of the bewilderments of "modern art." The anxieties which afflict the parent, the businessman, and so ambiguously the growing youngster do not leave the artist unaffected. Alfred Alvarez has briefly clarified the arduous task of the artist in these times:

As I see it, the failure of all traditions and beliefs is not an excuse for failure in the arts, it is their greatest challenge—or irritant. It simply entails a new emphasis. The artist's need to create a new style and language for himself and from scratch means that he is deliberately *using* it to create his own identity. Hence that sense of strain and extra-æsthetic urgency in so much of the best contemporary work.

Loss of reliable tradition exposes the artist's own resources to himself, and this can be a frightening thing. He serves then, in his way, by dramatizing what is happening to us all. Mr. Alvarez writes perceptively of what the artist now must do:

. . . the obvious truth is that the more subjectively exposed the theme, the more delicate the artistic control needed to handle it. . . . the genuine artist does not simply project his own nervous system as a pattern for reality. He is what he is because his inner world is more substantial, variable and selfrenewing than that of ordinary people, so that even in his isolation he is left with something more sustaining than mere narcissism. In this, of course, the modern artist is like every other creative figure in history: he knows what he knows, he has his own vision steady within him, and every new work is an attempt to reveal a little more of it. What sets the contemporary artist apart from his predecessors is his lack of external standards by which to judge his reality. He has not only to launch his own craft and control it, he has also to make his own compass.

To "remain themselves" in the present depends for artists on doing these very difficult things. We may in time admit to owing them much for even their smallest successes.

CHILDREN

... and Ourselves

THE ELEMENTS OF DESIGN

[This is another article in the series by Robert Jay Wolff on teaching design to high school students.]

UPON completion of the first workshop exercise with textures, it might not be a bad idea to pause and review what has been done in the light of things to come. We have handled one of the basic elements of design, textures that cover the object world and which since time immemorial have been designed into the objects men build and use—into the rairnent they cover themselves with and into the images they carve and paint. But this element, these textures, are only a part of the story, a fragment in the complex structure that eventually becomes the house we live in, the automobile we drive, the page in the book, the picture on the wall. As people and citizens who have the design of our lives in our hands and as designers who will provide the visual and structural wonders that surround us, we must become familiar with the elements that, when expertly and imaginatively combined, give order and beauty and meaning to the man-made world.

People rightly envy the great satisfactions that come to the architect who plans towns and creates the structures that house and shelter us. They are grateful to the designer who gives our language the clean order and sharp legibility of fine typographical form. They look to the painter and the sculptor to speak their own unexpressed thoughts and feelings about tangible and intangible things in images and colors and forms that they themselves cannot create. Everywhere they turn they find evidence of the skill, imagination, and creative vitality of the artist. They wonder how he does it.

How are these things done? Are people taught how to do them? In a way they are, but it is not as simple as that. Do history and tradition teach them how? In a way they do, but only the

easiest part. Once a thing is done it is not too difficult to repeat it, to duplicate the technique and to imitate the form. Once we know the formula we can learn it and pass it on. We can go to school for this and have it wrapped up and delivered in a neat package. We could say, "I want the formula that will enable me to paint in a certain way," "I want the formula that will enable me to build in a certain way," or "I want a formula for this, that, or the other thing." But this, that, and anything that men have created for the present, as distinguished from the past, are works which have gone beyond known formulas and in a sense demanded from the designer the kind of effort that ignores the fact that such a thing has ever been done before. This is not to say that we do not learn from history. We are, in fact, inseparably a part of history, the living dynamic part, the only part that lives and changes. As soon as we stop living and changing we become part of the motionless past? a date in a history book, a formula to be imitated. The hardest job a teacher has is to deny his students the deadly comfort of imitation, the phony security of completeness, already created and done with. What an easy thing to hand over those accomplishments, so easily learned and so difficult to create—how easy to hand them over with professional pride to young people who see in the gift you are offering the expression of their own unexplored creativeness and unexpressed vitality. pleasant to absorb their gratitude and their admiration. How self-inflating. And how difficult, and how thankless often, it is to lead them into unknown territory where they will have to be themselves and stay alive and start from the beginning as though their tasks had never been solved before.

The student of design should question himself before he decides to become a teacher. He has two choices, the creative way or the easy way. If he takes the latter he can, for example, teach his young people how to try to draw by authority of Ingres or Lautrec or Picasso or even himself. Or he can, with all the design knowledge at his command, lead his students to an understanding and command of each dynamic element that the masters correlated with utmost skill and expressiveness into graphic completeness. Once this rocky pedagogical road has been traveled, he can take deep satisfaction in the fact that while he has not fashioned a single synthetic Lautrec or Picasso, he has at least allowed for the fact that these originators will have successors. The teacher of design provides the means to, but not the shape of, contemporary expression and accomplishment.

We are often asked, "Why all this to do about originality?" Other epochs have produced excellent and even great design throughout a long and persistently traditional way of doing things. What's the matter with us? Why can't we let well enough alone and be satisfied with doing things as others do them? Originality in such a period as the centuries of Archaic Greece was a quiet and unobtrusive thing, an almost unnoticeable extension, when it occurred, of a mature and living traditional vision. Today it is a different matter, and we must make sure to understand the difference. People who hold out these distorted historical parallels do not like to be exposed to the simple fact that the changes that took place in human existence throughout ancient cultures were infinitesimal when compared to the last few hundred years of Western civilization. Life on this planet has never moved as fast as it does today. Beyond our industrial framework, we have no stable culture, no cohesive tradition to guide us. On the contrary, we have an almost irresistibly easy access to every known tradition, to the products of all epochs, to creative achievements of every age. We have the keys to all known forms that man's originality has fashioned. What we do not always understand is that these are also the keys to our own creative inertia, to the kind of cultural anarchy which says, to each his own favored imitation and the devil take the hindmost. This is the opium pipe that the architects of the Chicago Columbian Exhibition smoked while Louis Sullivan was matching his powerful originality against unvarnished realities. This is the trap into which every new acceptance is transformed. This is our dilemma.

What relevance does all this have to the teacher of design in a high school, to his decision to confine his preliminary program to the elements of design and to make these, for the time being, the sole content of his workshop exercises? And how, once the teacher has decided upon this course, is he going to gain acceptance from his students and add to this their confidence and enthusiasm? There is only one answer to this, and that is to tell them in your own way the story I have been telling you. Tell them that it is not necessary to design in the manner and according to the content of any acceptable prototypes in order to make good design sense. Tell them that the world is getting tired of imitation, even imitation of so-called modern design, and is looking for something else. Tell them that it isn't bizarre originality that is expected of them. Tell them to be themselves.

They will want to know why when you put pencil and paper in their hands you do not provide a scene to draw from; why, when you ask them to enclose space into volumes, you do not give them a pattern to follow. They will ask why your exercise in color does not allow direct transference of colors observed in nature. They will want to know why your method in modeling does not seem to lead to the sculpture that can be seen at the Metropolitan Museum or even the Museum of Modern Art. They will ask these questions and you will have to answer them. There is only one answer. Show them at once a drawing of the highest quality which they will accept not only as an example of professional skill but also because it represents nature in the way they think a good drawing should. It could be a portrait by any one of many masters, Durer, Rembrandt, Rubens, Goya, Ingres. At the same time have one of the students come and stand next to the drawing while you describe it. Point out that there is a face as we see it and that here is a

drawing of a face as a master draughtsman has interpreted it, not by magic, not alone by inspiration and insight, but also by a knowledge of the tools of his trade. Show them that drawing does not excite us alone by the way it represents the things we see in a face, but to a large measure by the way it uses the elements of drawing to express these observations. What is the actual difference between the drawing and the subject of the drawing? In the drawing you will find lines of all sorts, dark, light, thick, thin, mixed or cross-hatched, lines that create areas of light and shade, or that give a textural quality to the surface. You will find strong dark areas, areas of gray grading off to delicate tones that merge into white.

We would all like to be able to make a drawing like this. How should we go about it? The obvious thing is to get a model to draw from. Now what? Let's examine the model. Do we find the same type of lines, the same textural qualities, the same visual effects in the gradations from light to dark? It is plain that we do not. Still we would like to make a drawing like this one. To accomplish this what would we have to do? We would have to copy the drawing first and observe the face only as an afterthought. This obviously is neither an honest nor a very pleasant procedure. Yet if we want to learn how to draw how else can we go about it? There is another way. We can start by separating, for the time being, the drawing from the subject. This does not mean that we need throw one out in the interest of the other. We will do greater justice to both by not handling them simultaneously. Further, there is no reason to be bored with nature in the absence of design, nor with design that does not describe nature. We are not bored with the lightning stroke in the sky because it has no meaning beyond itself. Perhaps we can make the lines we draw as expressive in their way as the lightning stroke is in its way. Let's find out what we can do with a line before we try to make it represent something other than itself. The same goes for all the other ingredients that go to make up a good drawing. Later, when we understand and gain a certain skill with these ingredients, we can correlate them into drawings that will have the same qualities of the ones we now admire, qualities of line and tone and texture and, especially, the quality of individuality.

The problem of drawing is used here as an introductory example which can be followed up with a review of the many other elements of design. In each case you can repeat the foregoing demonstration, using illustrations from your visual note book, or whatever visual aids are available in the form of posters or lantern slides. important thing is to visually emphasize the complexity, whether it is a painting, an industrial product, an architectural interior or, in nature, a leaf, a forest or the milky way. Point out in each illustration the interlocking relationship of basic Point out the presence of textures, elements. light, volume, plane, size, color, value, space, mass—point them out wherever you can make them felt and seen. Ask the group whether anyone thinks he would like to tackle the job of putting them all together to create a painting such as this. Ask them, could they do this without blindly copying the painting as it is. Ask them, could anyone design an interior like this without knowing the quality and character of the many different design elements that are here so expressively assembled. Take them down the line and tell them that these are the materials without which the richest, creative imagination would be helpless. We will explore them one by one, and as our familiarity and experience with them grow we will bring them together according to our own intentions and in the form dictated by our own vision. We will not have to imitate. We can be designers and still remain ourselves.

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FRONTIERS

Caution—Scientists at Work

RECENTLY, MANAS (in Review for April 9) gave attention to a supplement in *Natural History* for February, containing five papers by biologists and ecologists concerned with the destructive effects of technology. The papers reported in detail a number of cases in which extreme environmental pollution has been an unanticipated result of supposedly "progressive" measures. Writing in summary of these and similar findings, Dr. Barry Commoner said: "It is beginning to be clear that this assault on the integrity of the environment is the price we pay for many of the benefits of modern technology."

That technology is also being applied, today, in an extensive campaign of deliberate destruction of the natural environment is an almost unbelievable idea, but that is exactly what the defoliation program carried on by the United States in Vietnam amounts to. In a report authorized by the Department of Defense, the Midwest Research Institute of Kansas City revealed that the 1968 Military requirement of herbicides for defoliation involved more than 60 million pounds valued at 45 million dollars. The demand for such materials for use in Vietnam was so great that certain weed-killers were no longer available for agriculture in the United States. The MRI report said laconically, "Just how much harm this much spraying is doing to Vietnam's physical environment is anybody's guess."

Back in 1966, E. W. Pfeiffer (University of Montana) began an effort to obtain an impartial scientific survey of the harm being done to "all biological systems" affected by the defoliation program. At a meeting of the American Association for the Advancement of Science he introduced a resolution calling for a study by the AAAS. The story of this and other efforts is told by Prof. Pfeiffer in a long article in the January *Newsletter* of the Society for Social Responsibility in Science. The biggest problem, it became

apparent, would be to have the research carried on by an *independent* group. The National Academy of Sciences, for example, could hardly qualify, since this body "has in fact been assisting the biological warfare program of the Department of Defense." It was argued, meanwhile, that the AAAS is not "equipped to conduct such a study," while the need for "military or other official permission and sponsorship" was obvious enough. The report of the Midwest Research Institute, casually minimizing the dangers of defoliation. was eyed with natural suspicion, since MRI is a Department of Defense "subsidiary research organization," and approval of this report by the National Academy of Sciences did little to strengthen the confidence of individual scientists in its evaluations.

In July of last year, the American Association for the Advancement of Science took a strong position. The Board of the AAAS then declared: "We do not share the confidence expressed by the Department of Defense that serious adverse consequences will not occur in Vietnam, insofar as arsenical compounds are concerned." The Board urged that use of arsenical herbicides be suspended pending a study of their long-range effects. An effort is being made, today, to get the UN to authorize research on the consequences of chemical and bacteriological warfare, but Prof. Pfeiffer reports no response as yet. He adds:

If the UN will not undertake a study in Vietnam, then it will be necessary for American scientists to organize such an investigation with help from the international science community so that the world can know what the Department of Defense is doing with CB warfare in Vietnam.

The final portion of Prof. Pfeiffer's paper reviews other experiments and plans for experiments in bacteriological warfare, pursued with the camouflaging assistance of respectable institutions such as the U.S. National Museum and the U.S. Forest Service. He also reveals disturbing evidence of the limited use of poison gas in Vietnam, despite official assurances that only "non-lethal gases" have been employed, and

tells, once again, the story of the thousands of sheep killed in Utah last year by Army experiments with nerve gas. He concludes his discussion:

The U.S. Government is escalating its use and preparations for the use of a broad spectrum of chemical and biological weapons in Vietnam and elsewhere. In response to this critical danger to mankind, rank and file American scientists and some of their leaders have tried hard to get organized American science to meet its responsibilities to at least be fully informed as to what is going on. These attempts have met with limited success. What is needed now is a massive investigation, by world scientific bodies, of the chemical and biological warfare policies and programs of the U.S. Government.

Intimation of what can happen when Governments proceed in such directions without control, following only their own measures of "responsibility," was provided by Lord Ritchie-Calder in his presidential address before the British Conservation Society last November. After explaining why there is a new element, radioactive strontium, in the bones of every young person in the world who grew up during the bomb-testing cycle which caused the Lucky Dragon tragedy, he said:

And why? Because those responsible for the Hbomb testing miscalculated. They assumed that the upthrust of the H-bomb would punch a hole into the stratosphere where gaseous radioactivity would dissipate itself. One of these gases was radioactive krypton which quickly decayed into radioactive strontium, not a gas but a particulate. They had also been wrongly briefed on the nature of the troposphere, the climatic ceiling. They thought that this would keep the fallout from falling in but they did not realize that between the equatorial troposphere and the polar troposphere there is a sort of fan-light. The radio-strontium came back through that fan-light, was caught up by the climatic jet streams and swept all around the world to come back as radioactive rain, to be deposited on food crops and pastures, to get into our food-animals, into milk, into babies and into children and adolescents whose bones were then being formed. All that those responsible could say was, "Sorry chums!" Fortunately, it was an argument that was listened to in securing the test ban.

While the amount of radioactive strontium acquired by the children of that time (children's bones assimilate this calcium-like material at four times the rate of adults) was, or may have been, as Ritchie-Calder says, "medically insignificant," will it be insignificant "next time"? And what sort of a "next time" can we expect? These are questions which Prof. Pfeiffer thinks we ought to have answers for—answers better than "anybody's guess."