SOME REFLECTIONS ON REFORMING MANKIND By T. SWANN HARDING

FOR ages and ages reform has been a favorite human sport. For one thing it combines both the outdoors and indoors in its appeal. For another it is so perfectly adapted to appeal very strongly to many individuals. The customary technique consists in getting somebody to get somebody else to do something you would like them to do which would, if generally done, make the world a better place for you to live in. This is Kant's categorical imperative modified to suit the reformer's technique.

Then reform is never disturbing. It always, no matter how liberal, harks back to the purer customs of some astute and sapient founding fathers sufficiently removed in the past to be both wise and respectable when viewed at the right distance. No reformer ever advocates anything revolutionary and brand new; he simply advocates a return to the simpler, better and more wholesome ways of the past. The difference between what we call a radical and a conservative is this; the radical is simply more reactionary.

At once you perhaps cry "Communism!" I shall not refer you to Christ. We may leave Bishop Brown in charge of that sector and go to the "Ecclesiazusae" of Aristophanes. Herein Praxagora vigorously declares—"I tell you that we are all to share alike and have everything in common, instead of one being rich and another poor, and one having hundreds of acres and another not enough to make him a grave, and one a houseful of servants and another not even a paltry foot-boy. I am going to introduce communism and universal equality." To this tirade Blepsyrus makes the classic reply of the conservative, unaltered down the ages, to wit—"How Communism?" in a frightened tone of voice. Whereupon Praxagora proceeds to explain to him in precisely the terms used by today's reactionary radicals. But the reformer at his best does really hope that he can change the ideas of people by starting at the top. As we shall see later the reformer never starts in a rudimentary way and first clarifies definitions as he should; instead he starts in the very middle of things and expects to change people mentally. What sort of people? Well, among others, a very great many people like the man who objected to daylight saving time because, he said, any fool knows crops need the morning sunshine!

It seems worthwhile to me to examine this reform business a little to see if we can mutually discover why ameliorative measures propagated by the reform technique are so doomed to failure at the start. We can perhaps not do better initially than to consider the intelligence of the people reformers hope to change by making them comprehend complex ideas.

Let it be emphasized right here that our affective attitudes are very strong. For instance if we have an irrational, instinctive feeling that a certain direction is the right one we give that direction up reluctantly even after the dawn of evidence showing that it is positively wrong. When the affective attitude is so strong with so little at stake, there is little wonder that it is very hard for a man to use reason when his emotions are aroused and even his reason habitually balks at the unfamiliar or at dealing with familiar things stated in an unfamiliar way.

This said let me grow personal. In my renegade career as a worker in research I was once compelled to wade through six hundred gallons of pig blood on the outside chance of happening upon about two ounces of a certain rare organic substance with a name that would unnecessarily detain us if repeated here. For the success of my gory enterprise it was necessary that this blood remain unclotted until I got it; I used about thirty gallons daily. A salt of citric acid, namely sodium citrate, will, when added to blood, prevent clotting. This is quite well known.

A veterinarian was to superintend the collection of the blood for me and, in passing, remember that whatever you may think about veterinarians they are college graduates, not uneducated ditch diggers. The solution of sodium citrate was to be placed in an empty keg, then the blood was to be added with agitation to mix the two liquids. This was fully explained to the veterinarian; he repeated the explanation in my own words; and the next day I received a barrel of blood in one massive clot! I telephoned my assistant after a few excursions into the higher reaches of the secular tongue and discovered that he had first filled the barrel with blood and had then added the solution of sodium citrate, no doubt praying fervently that it would somehow reduce the quickly formed clot to a hquid state in direct opposition to all science knows about blood and to all the personal directions I had given.

What has this to do with reform? Just this. We have here a reasonably intelligent graduate of a university who proved incapable of comprehending a very simple bit of procedure after it was explained to him and after he had actually repeated it by word of mouth to his expositor. This in spite of the fact that the explanation concerned a very common phenomenon to any veterinarian, the fact that blood clots quickly and that you cannot unclot it any more than you can unscramble eggs. In spite of the exposition this man had imbedded in his mind another technique altogether, another view which so filled it that it would not be displaced by anything else. Yet to effect a reform by preaching it you have got to change the convictions of people vastly less intelligent and less educated than this veterinarian and cause them to effect such a change in their ideas and habits of thought that your reform becomes a practical possibility!

Worse still if your reform lies in the political, social, religious or economic fields you have to convince people when no accurate eriteria exist upon which they may base their decisions. As Keller has it in his "Societal Evolution"—"It is not hard to demonstrate to an ignorant person in this country that he should learn to read and write; he can see that by living in this society. Similarly for his interest is it that he shall use the English language. Tests lie all about him, and are immediate and decisive. But try to persuade him by abstract argument to give up the vendetta, to renounce an archistic leanings, or to change his religion, and you fail. There all no immediate and decisive tests at hand. You cannot demonstrate that interest will be subserved by the change; you cannot even secure visualization of evil consequences. Even illness due to filth, where such visualization is becoming more practical, can be referred unverifiably to too many different causes as, for instance, the evil eve."

Let us return momentarily to instances. My object in the aforesaid experiment was simply to make the elusive compound I needed, to analyse it and ultimately, to see what it had to do with the nutrition of cows, since it also occurred in cow's blood. This I stated plainly to several executives in the factory where I was operating temporarily and I even supplied these well educated men with reprints of a plainly worded article restating this in the language of high school children.

Subsequently two men, both high executives of the company, came to me separately. Neither had happened to hear my personal exposition of the work but both had my views through the medium of an executive who had heard me directly and read my booklet. One of these men informed me that I was seeking to prepare a substance which, when injected into dairy cows, would miraculously increase their milk yield! The other congratulated me upon my humanitarian efforts to discover a substance in the blood more effective in combatting diabetes than insulin! Gentlemen like these executives must also be made to understand the reformer. Is it possible?

When Bertrand Russell spoke in Washington all good conservatives were conspicuous by their absence. At one particular point Russell labored to demonstrate that the seeds of war are sown during early education and added that if chauvinistic patriotism could be edited out of school histories much would have been done to abolish war. Adverting to the direct lies propagated by nationalistic school texts in history he declared that if one authentic history could be prepared scientifically by a committee organized internationally, and if this history were taught everywhere as the standard text, the accomplishment would be enormous. He deprecated the type of patriotism which Johnson described as the last refuge of a scoundrel but lauded native pride in cultural, intellectual and scientific accomplishment. Mr. Russell was reported in the press with surprising and complete accuracy.

Thereafter certain undeniably intelligent and highly educated people, again products of our best universities, told me that they had read these press accounts, that they heartily disagreed with Mr. Russell because he advocated anarchy, trampled upon the noble virtue of patriotism, deprecated respect for the flag and was altogether a horrible and a nefarious individual! They meant this absolutely, too.

Then, moved by some obscure spirit of divine grace, I got their

careful attention and placidly explained precisely what had appeared in the press accounts which they had "read." They at once found much to commend in Russell's doctrine and decided that he was considerably less reprehensible than they had assumed.

The point is that 1 got the attention of these people because they had known me since childhod, because they liked me personally and because I worked hard over them. But I should like to see you or a reformer convince them of anything they were indisposed to credit! Ordinarily their attention could not possibly have been aroused to a consideration of what Bertrand Russell really meant. The name itself induced an antipathetic affective attitude in the manner described by Watson in "Behaviorism." Moreover their minds were so cast that they could read one thing (remember the press account was accurate) and retain an opposed opinion, even concluding that this opposed opinion was sustained by what they read. If reform is to accomplish anything by its preachments such people as this must be reformed. Fancy preaching at them !

During the late homicidal disturbance in Europe certain men, like Romain Rolland, saw the issues clearly, appraised them impartially and spoke judicially above the battle. These men were essentially scientific thinkers, because partisans on both sides immediately attacked them, belabored them unmercifully and accused them bitterly of siding with the "enemy." This was strictly in line with the Christian Ethic—"He that is not for me is against me:" the war was of course a Christian war and Christianity does not even pretend, when not sententious, to adopt scientific attitudes. In this it is truly religious, which again is as it should be.

In order to grasp the rudiments of scientific attitude, an attitude which if grasped might enable even quite ordinary men to understand what was being said to them, let us momentarily consider a man in a laboratory making use of a standard method to determine the amount of a certain substance X in, well suppose we stick to blood and keep our color scheme intact! What does the investigator actually do? In spite of all the weight of authority behind it he frankly doubts the validity of his method. That is, no matter how old or how respected the method, he is impartial and alert, and is willing to believe that it may possibly lack the quality of absolute infallibility.

As a matter of fact certain high results do lead him to think

that this blood must contain some additional reacting substance which his method nevertheless determines as if it were X. Investigation confirms this and, after long labor, he finds that not only was he determining two substances all the time and regarding them as one, but that neither of these substances was X, the substance the method supposedly determined.

In time he elaborates new methods to determine each of these two new substances he has discovered in blood and announces that substance X, supposed by previous investigators to be present in blood, is really absent altogether. In further time, however, for the investigator remains always a skeptic even regarding his own work, he is able to demonstrate that there actually are three substances in blood, that two of these originally exist in unaltered blood combined together as X, that they can be determined as such by a proper method properly used, but that he at first and other investigators always so altered the blood before analysis that they split X into two component parts.

The case is hypothetical but is very typical of laboratory procedure. Presume, however, that our investigator worked as do political, social, economic or religious reformers. How would he proceed then? He would read certain books, hear certain special pleaders and prevaricators recite their prejudices, or go into a trance. He would next formulate an academic or synthetic method, divinely inerrant of course, for the determination of X in blood. The fact that X might not exist in the blood would be no objection here, which is an advantage, of a sort.

The method he would now formulate with complete finality as inerrant, infallible, unchanging, determined from past history, the product of the divine afflatus. He would declare all adverse critics of the method impious and mendacious. He would proceed to form parties or sects whose *raison d'etre* should be that of assuring each other that the investigator and his method were right and just and true and good from everlasting to everlasting. Having done this he might proceed to analyse some blood, but all results—however startling or absurd—would be crammed into the limitations of the divine formula as majestically representing the exact amount of X present. The investigator and his partisans would then feel free to go forth and break the neck of anyone rebellious enough to use some other method. When we contrast these two methods it becomes easy to see why the rare individuals who think scientifically about practical matters, and few scientists dare do this, must be called both radicals and conservatives, religionists and atheists, austere moralists and ethical libertines all in a breath, depending upon the partisan affiliations of those affixing the label. That is inevitable. For scientific thinkers will not classify into artificial categories: they think creatively and not in accordance with established rules and formulae. Yet one may safely harken to those who are denounced with equal violence by partisans of opposite prejudices, for they are almost invariably committing the unusual crime of thinking scientifically.

Certainly nothing is more needed today than a stricter application of scientific method to the practical problems of life. Yet quite as certainly no one seems less likely to make this application than the average or typical scientist. For the typical scientist is sworn to super-specialization run mad, fears actually to show much interest in things outside his specialty and almost invariably leaves his technique in the laboratory along with his white coat. His motto is, "When among he-men do as he-men do."

Leaving the laboratory the scientist strives to be as inconspicuous as other men. He adopts the prejudices, the inexact language, the catch words and the mental fads of the crowd. He knows of course that his method is dangerously seditious and if once mastered by the common people it would destroy our chaotic and unscientific civilization to build another more rational, more sensible and more just. He knows that this method is subversive of all present herd values and that he himself practices it within a restricted area purely on sufferance. This assumed protective coloration of crowd-mindedness doubtless shields the scientist from many a fervent denunciation, but he is suppressing the only reform gospel humanity needs and his morigeration and timidity vastly deter the progress of real civilization.

In the Great War it was not scientists who retained their mental equilibrium under emotional stress; it was a few scattered humanists and philosophic writers. And it was April, 1927, before the American Chemical Society shamefully took back into its fold the German members impulsively deleted in 1917. But German scientists have no ground for pride in this particular themselves; they signed an idiotic manifesto, or so many of their best specialists did.

Of course the average reformer is a psychopath, but I am not using the term in this restricted sense. I have reference rather to normal men of more than average intelligence who actually do want to see civilization improve and have some message of value to deliver. Among them scientific method is almost altogether absent. A free thought periodical may generally be reckoned on as conservative politically and economically, over-anxious to declare that "We may be atheists but we are not Bolshies!" Or "We are just good old-fashioned Americans, for America's first five presidents were infidels!" Political or economic radicals are usually more rigidly moral than any Puritans, more morbidly ethical than any psychopaths, and wont to say "Now we are not liberal sexually; we simply want to get back to the good old Americanism of Jefferson." Conservatives quote the inerrant "founding fathers." Liberals preach and analyse but seldom define; they distrust the reason of the average man whereas they should distrust his language. For man is so logical that, grant his premises, and he will rear an edifice of logic even though he be insane.

In short those who dare to think scientifically in some segment of practical life and to reach their conclusions on the basis of real, unindoctrinated facts, seem to feel that they must compensate for this indiscretion by getting back to the fundamentals of old-fashioned something-or-other elsewhere. Very often indeed they simply go over into a new form of thinking by rule and invoking absolutes anyway, as when they substitute the absolutist concept of economic determinism for the absolutist concept of an anthropomorphic divinity.

Scientific method applied to practical life would close no avenues of thought with doctrinal obstructions. A man facing life freely and thinking scientifically may adopt the provisional hypothesis of atheism and stand thereupon as a sound basis for his present stage of culture. But if using scientific method he will not automatically uphold capitalism and denounce radicals as "bug-house" when you propose some economic reform. Instead he must examine this economic business separately and dispassionately. He may then become an advocate of Single Tax or a Socialist. But these will be provisional hypotheses, not end-point dogmas. Each problem must then be acted upon judicially, impartially, permitting the facts to create the generalizations, never compelling them to enter an illfitting but ready made generalization regardless of distortion.

But today partisans are the only articulate people who want to make life better. They are our reformers. Though they sincerely want to fashion a better world they have no idea how to make themselves understood, how to achieve agreement on the part of others. Again 1 am not speaking of "reformers" who merely want a world less hostile to their type, more favorable to their deficiencies, or who simply want a little publicity as a salve for egotism.

Why then are sincere reformers so futile? Because they almost invariably deal in finished preconceptions. They have determined that birth control or single tax or vegetarianism or communism or atheism would be good for men. They forget that they are logical abstracting organisms who are given to the fallacy of abstracting certain characteristics of the universe together and calling their abstracted object the whole truth. They forget that what seems true, just and good for them may not be so for others. They forget that others do not even attach the same meanings to these words that they do. Since their ideas seem logical, sound and just to them they seek to impose these ideas upon humanity and become quite indignant when humanity seems lax and indifferent, as it is quite likely to seem towards any specific reform.

For even if an idea is in all truth rational, logical and scientifically sound why should that argue its acceptance by the masses? Do they live scientically? The very housewife most irked by excessive procreation is often enough exactly the person to let a religious cult make her regard birth control as inherently revolting. The very man who suffers most tragically from periodic unemployment is usually the man who permits party loyalty or political preconceptions to assure him that all basic economic reform is of the devil.

The reformer returns to the lists armed with statistical method. Yet social reforms do not actually lend themselves to statistical any more than to experimental methods. Humanity cannot be prescribed for by making a numerical survey and listening to the problems, desires and aspirations of individuals. For so long as people do not think clearly and speak precisely so long will their answers to questions be worthless. Such collections of statistical data are almost uniformly worthless as well. Then what can be done?

A man leaves school today essentially unequipped to meet the

vital problems confronting him in life. In such problems he has no systematic, thorough going training. The experimental habit of mind is deliberately dulled. He has been educated by a system of drill; education as a continuing process he knows nothing of. A book tells him how long it takes a tadpole to turn into a frog; he is never encouraged to try such a thing experimentally and find out for himself when he happens to be curious about the phenomenon.

If he goes to college he merely absorbs more authoritarian attitudes fashionable at the time regarding certain matters. He remains still basically ignorant of the process of really using his brain. Professors who are sufficiently unconventional to stir student's brains up are normally thrown out of orthodox educational institutions.

Such men as these, then, subsequently read the newspapers and popular magazines, see the movies and a few happy-ending plays, attend church or lodge and learn how to make a fair amount of money. They never do overhaul their minds thoroughly as to the crucial problems of human life and their minds hence remain museums of immature fixations, snap judgments, picked-up prejudices and unverified hand-me-downs as Overstreet, to whom we are somewhat indebted, tells us in his *Influencing Human Bchavior*. This man has the mind of a child on the shoulders of an adult and he is the fellow who must be convinced to make reform feasible!

In a democracy this man is entrusted with the destinies of civilization and of culture. He will venture immediately a flat opinion upon politics, economics, morals, religion or civilization as promptly indeed as a dog shows a conditioned reflex to a stimulus. And these two phenomena are of the same order. This man may manage the affairs of a town, depose a pastor, elect a ruler, denounce a progressive intellectual or be arbiter of the local educational system as a member of the board. And no reformer ever will change him essentially by exhorting him. If he hears, he is as incapable of understanding as the veterinarian we met earlier in this treatise. For his mind is already full and his maximum educational stature has been attained. Again, what can be done?

Now let us attend something so simple that we had to wait for a Pole, Count Alfred Korzybski, to point it out to us in 1924. Suppose you want universal peace, be it family, school, industrial, economic, political, scientific, personal, international or what not-upon what does that depend? Consider this sequence-

Universal peace depends ultimately upon universal agreement.

Universal Agreement depends ultimately upon Rigorous Demonstration.

Rigorous Demonstration depends ultimately upon Definitions. Definitions depend ultimately upon Correct Symbolism.

Correct Symbolism means the process of defining words so precisely and exactly that anybody can know certainly what anybody else is talking about.

This sequence is generally applicable. Reformers constantly break into it near the top. They demand universal agreement upon a proposition which they cannot demonstrate rigorously because they use inexactly defined words. They need then just to do two things— 1. break into the sequence at the bottom and make their language definite; 2. realize that a thing is not universally true merely because it seems so to them and examine their hypothesis carefully in order to ascertain that they have not added themselves to it, in which ease it is a dogma and is therefore of little value.

In Wilhelm Meister's Apprenticeship, to my mind a terrifically dull book, Goethe remarks "The rude man is contented if he but see something going on, the man of more refinement must be made to feel, the man entirely refined desires to reflect." This is an interesting statement.

People who reflect should be able to comprehend the sequence stated above. They should appreciate its significance. They should be able to make others feel its basic importance so that enough should finally be going on to satisfy Goethe's rude man! Such penetrations of the masses from the human apex of reflection often take place. The utilitarian fruits of scientific research penetrate quickly; a rather unreflecting and unanalytical respect for a concept called "science" has also penetrated to very low levels. It is not at all impossible to make the scientific attitude quite generally appreciated.

What should authentic reformers do then? They should first realize that they are probably indoctrinated and should do all they can to divest themselves of every belief not grounded in fact, not based that is upon an ample number of particulars. They should then face phenomena, data, facts and events free from doctrines and preconceptions. They should record these data without adding themselves and their personal prejudices to their record. They should describe these data in a precise, exact, easily and generally understandable language. They should then hypothecate tentatively whenever they have sufficient facts to justify this, using the result as a working hypothesis, but holding it always so lightly that it can be altered without pain upon the appearance or discovery of a new fact or particular. Such technique would result in authentic reform and in real progress. Its wide deviation from the self-propagation of repressed psychopaths so common and so impertinent in America is too obvious to discuss further.*

* Upon completing this paper I came across a press item so perfectly illustrating one point that I must at least foot-note it. The American Economic Association met in Washington, D. C., December, 1927. They discussed "What is prosperity and have we got it?" became quite frank and snippy with each other and concluded without arriving at any agreement. One speaker denied that the term prosperity referred to the welfare of all groups in the country but that a prosperous farm group implied prosperity. A second denied this. A third elaimed that a downward trend of prices accounted for increasing unemployment. A fourth deelared that a falling price level is a boon to workers because it reflects increased production economy. A fifth promptly said "Whenever you have falling prices unemployment follows." A sixth finally held that the important factor in determining the prosperity of wage earners is the volume of annual earnings and not the rates of pay generally discussed. In short these rather conservative economists, for no Scott Nearing could break into such a select group as this, differed fundamentally in their definition of the word-symbol "Prosperity" and they therefore got no further than an exchauge of personal opinions stated from the standpoint of an individualistic conception of what the word meant to them.