

Professor Hans Thirring

Ladies and Gentlemen, dear Friends!

The paper that a physicist like myself is going to read today will greatly differ from that which a deeply religious man or even a clergyman would deliver on the subject of our Seminar "The power of Love". Do not believe, however, that we scientists were unable to feel the noble emotions of love and to be guided by altruistic and idealistic feelings. Although we are using a somewhat different language and different conceptions in our mode of thinking, we are still human beings like the others, capable of compassion and love. Anyway however, a good deal of rational thinking will pervade my lecture, and in order to build a bridge between what I am going to say here and what our friends will explain to us during the next days you will have to exercise some tolerance towards the man of good will whose reasoning differs in many respects from yours. What we have in common is the love for our fellowmen, the feeling of responsibility towards the human race and the ardent desire to terminate forever the primeval, barbarian epoch of human civilisation, lasting from the glacial age to our time, in which the organized mass murder of wars is still considered a suitable means of settling international disputes. To bring about this historical break-through is our common aim; our methods may slightly differ. Let me tell you in this lecture the way I am proposing to go.

We scientists feel inclined to operate with well defined conceptions, therefore, speaking about the power of love we may start by answering the question: What should we understand in this connection by "love"? Certainly for most human beings the climax of happiness is reached by the discovery that a beloved person is reciprocating the burning feelings of our heart. But the love between man and wife, or mother and child, wonderful as it may be in transfiguring our souls, is a powerful agent only within the tiny circle of the family. A broader feeling of love is necessary to make an impact to our society as a whole. Love taken in that sense is the genuine feeling of sympathy and affection to all our fellowmen, our readiness to help them for no other reward than just the satisfaction for being able to help and heal. To make these sentiments really efficient they should be accompanied by the devotion to the high ideal of unselfish love. For the sake of brevity I shall use the word idealism to denote the whole complex of affectionate feelings plus readiness to work and struggle for what is dear to us.

To avoid misunderstandings it must be kept in mind, however, that words like idealism or materialism are generally used in a different sense in the West than in the East. In talking of idealism we Westerners usually have in mind the ethical meaning of the word as explained just now. The idealist taken in this sense is the man doing a work for its own sake or for some higher goal, irrespective of immediate pecuniary reward. The materialist on the other hand is the man lacking any sense for nobler ideals; he is only eager to profit in wealth or power and often indulges in the sensual pleasures of life, as sex, drinking and so on.

Such a confrontation between the idealist (whom we consider a noble character) and the morally base materialist would not be made in the communist world using the same expressions because the Marxist conception of materialism is quite different. Confronting materialism with idealism plays certainly a fundamental role in communism, but these words are taken in their philosophical sense which has nothing to do with the ethical meaning we have in mind. Materialism is according to Marx and Engels the theory that



matter is the primary substance of the universe, quite independent of the human mind, and that all the functions of our soul and mind, as for instance thinking and feeling, fancying, remembering, loving or hating, are the results of certain physical and chemical processes in our brains which are not yet known to us but may be studied and understood one day. Philosophical idealism on the other hand centers around the famous statement of Decartes "cogito ergo sum" saying in its radical form according to Bishop Berkeley that our perceptions and thoughts, feelings and emotions are the things that exist primarily while matter is a kind of projection of our perceptions into the outer world.

Too little attention is paid to the basic difference between the ethical and philosophical meaning of the two words idealism and materialism, and the result is a confusion which is frequently misused in the political propaganda. Doubtless many well justified objections must be raised against communism, but it is an unfair trick to use the bad smell that the word materialist has in the West to make the philosophical foundations of Marxism contemptuous. Human beings with good and bad ethical qualities are impartially shuffled over all nations and political ideological or religious communities of the world. Therefore idealists in the ethical sense may be found among the adherents of a materialistic philosophy as well as on the other side of the fence. One can even say that more idealism is necessary to work and toil with enthusiasm for the common welfare of the labour class than to do it for one's own profit.

It is needless to say that communist writers and politicians are equally unjust in using the widespread contempt of idealistic philosophy to discredit the Western world in which idealism (taken of course in its ethical sense) is considered an asset. Strict distinction should be made therefore between the different meanings of the word idealism.

### Mobilisation of Ethical Idealism

Returning from this semantic digression to the proper subject of our lecture I shall start with a statement of a historical fact and then make two proposals concerning education. The historical fact is the particular phenomenon which in the terminology of the convokers of this seminar - as far as I understand it - may be called THE POWER OF LOVE. I mean the remarkable specific strength of political, ideological or religious movements whose followers are driven by the passionate love for some common ideal. Juvenile minds and souls are readily accessible for being imbued with burning passions for the ideal that a skilfully administered system of education will teach them. In this way remarkable feats of heroism have been performed by relatively small groups ever and over again. The 300 defenders of the Thermopylae under Leonidas is the classical example taught in all books of history; many other examples might be quoted from heroic peaceful activities. Unfortunately they receive less publicity.

Reviving idealism again in our more or less materialistic epoch, and guiding it properly, appears to be the right way towards a better future of mankind. The powerful forces of idealistic enthusiasm have often been abused under the pretext of patriotism for the readiness to fight and kill in wars. There is no serious reason why they should not be mobilized for the common cause of peace as well. What I am proposing is therefore:

- 1) Our education should try to develop more idealism among the young generation.
- 2) Particular care should be taken that the idealism of young people be directed towards goals of real human value.

A comparison of the present situation of the white nations



with that during the two world wars and the inter-war period leads to the result that a stormy revolutionary time has been succeeded by a more sober period of reconstruction with less illusions about far-flung ideals and more realistic interest for matters connected with daily life and the amenities of an improved living standard. Weighing the specific amount of idealism and revolutionary fervour displayed during 1914 till say 1948 we might find this interval to be a heroic period, but in its effects it was one of the darkest, most hideous times of humanity, a bloody stain of our civilisation. As a natural reaction to the atrocities of the wars and revolutions a kind of devaluation of idealism has occurred. In Europe (on either side of the iron curtain) and in North America the surviving passionate fighters both for true and imaginary ideals are getting old and resignedly acquiescent while the new generation begins its career in a time offering more opportunities for enjoying life and less reason to revolt or to go to war.

This situation has a kind of stabilizing effect on our society in Europe and North America. While in some parts of Asia, Africa and South America fanatical nationalistic movements are raging there is little danger in Europe that a popular rise may lead to an explosion. - The smouldering hate of large parts of the population in the East European satellite countries against communist oppression is a result and a residue of wars and revolutions. But after the failures of the East German revolt in 1953 and the Hungarian in 1956 the likelihood of another attempt in this direction is very small. Moreover, the existence of nuclear weapons has a deterrent effect on those statesmen who can make ultimate decisions. Therefore, in spite of the existing grave tensions we are much farther away from a hot war than, say, in 1913 or 1938. We have good reasons to expect that the present state is not only a calm between two storms but the first stage of a transition to permanent world peace.

Still, all those of us who have a feeling of responsibility for the future of mankind should not be satisfied with the political and ideological situation of today. Peace should be built on a sounder basis than on the existing queer mixture of political indifference with reliance on means of deterrence and fear of retaliation. It is not satisfactory either that a kind of silent contempt exists within each nation between the more or less materialistic, politically indifferent part of the population and the idealists of old vintage with their obsolete conceptions of national honor or of duty and responsibility for a certain ideology. In a similar way as American or British war veterans are scorning the teddy boys of today some of the former soldiers of Hitler's armies may detest the German and Austrian "Halbstarken", and the old Bolshevik revolutionaries the "stilyagis" of modern Russia. Irrespective of the side of the cold war where they stand their feelings are: "We have bravely risked our lives and sacrificed our health in the defence of the holy cause of our nation (or the freedom, or the proletarian revolution, or whatever it may be). These young guys, however, lacking any sense for higher ideals and the eternal tasks before us, are intent only on the pursuit of their happiness and the satisfaction of their petty interests."

Thoughts of this kind reflect one of the paradoxes of our time. Numerous people ranging from pure idealists to fanatical supporters of extreme political parties, among them also people who were active participants in the greatest manslaughters of history, feel justified in believing to be morally superior to the indifferent mass which, although including inferior elements too, is a lesser risk to world security. Therefore, the ideological vacuum left after the breakdown of many illusions after the two wars should be filled by new ideals. One of these ideals might be the hope, and the work for its fulfilment, that our children and grandchildren may grow into citizens of ever larger communities of nations. Progressive federation of friendly neighbor states plus more human wisdom taught to the intelligentsia of tomorrow would enable our



offsprings not only to be well-doing themselves but to live safely and fearless in a surrounding world free of misery, poverty and diseases.

To match the rapid and irresistible progress of science and technology in the vitally important field of human and international relations a better education should try to arouse the adolescent's enthusiasm for the New Man of the atomic age. This new type of a genuine, intrinsic gentleman would be the undaunted hero of tomorrow who, unlike the childish superman of yesterday, is detached enough from baser vanities and knowing enough to master the high art of cultivating appreciative love to his fellow creatures in order to go through life without hatred or fear.

#### The Need of Powering Love by Wisdom

However, to arouse a new idealism without wisely guiding it would not only be an insufficient measure but might even entail new risks. Even the very dark period of the first half of our century was by no means lacking heroes full of idealism and passionate love for their country - it may even have been richer in this respect than the beginning second half. But misled idealists may turn into fanatics and do more harm thanks to their fervour than the selfish materialists with their petty interests. The terrible tragedies of the two world wars - and also of the smaller wars raging since 1945 in several areas outside Europe - were not the natural consequences of an inborn vileness and cruelty of the people involved but of a wrong and obsolete indoctrination.

#### The Poisoning Effect of Conventional Education

We shall never gain confidence in the possibility of improving our world by suitable education unless we recognize clearly the poisoning effect that conventional education produced formerly in a number of civilized countries. Take as an example, Germany, one of the most advanced and prosperous countries which today is widely believed to be one of the firm pillars of the Western World, or Japan, one of the nations leading in the World Peace Movement - or Italy the land of artists, great architects, scientists, and ingenuous technicians, or Austria the home of Mozart, Beethoven, Schubert, Bruckner. Is it reasonable to believe that the ruthless aggressions undoubtedly made by the Axis powers before and during World War II were a proof that the Germans, Austrians, Italians or Japanese are people of worse brutality than the rest of the world?

The answer to these questions may be found in the particular kind of conditioning to which the youth of some countries was subjected through many generations. Instead of simply calling the Germans Huns, and prosecuting their statesmen and generals, the opponents and victims of Prussian militarism should have studied the books and teaching material used in Central European schools that was the very source of the militaristic spirit. One would have found that the youth of a good many other countries fed with this approach might have gone the same way as that of the Axis powers. Moreover one might have discovered in time that a radical and global change of education would be more effective in preventing wars than the execution of a dozen of the major war criminals.

In order to fully understand the impact of militaristic education on juvenile souls one has to consider the fact that it was cleverly enough designed to appeal to the noblest human feelings as well. It would be an oversimplification to assume that the kind of indoctrination which led German soldiers as far east as Stalingrad was merely intended to arouse man's bad and cruel instincts so as to supply the necessary sort of warrior-like manpower to the armed forces. The matter is actually far more complicated. For it is quite a peculiar combination of noble emotions and crude primeval impulses which has been fostered by



traditional education through many generations. Hero worship, glorification of great victories, instruction in blind obedience and devotion to state and nation - all this formed an important part of the education for citizenship. The whole complex of these ideals - dating back to King Lycurgus of Sparta - is at the same time quite a valuable means to develop man's virtues, his willingness for self-sacrifice, his sense for responsibility and duty - and to guide him from the pursuit of lower selfish interests to higher and nobler ideals.

In this way an effective double action is exerted on the flexible soul of adolescents. One side of juvenile ambitions tends to be regarded as respectable, well-merited men, or even heroes. On the other hand, there are, hidden under the surface, the unconscious primeval drives of fighting or outwitting an enemy. These drives are ordinarily suppressed by our civilization, and in most cases they cannot be satisfied directly in the natural way of knocking down the personal enemy. The wars, however, and the soldier's anonymity within the fighting forces, offer a unique opportunity of being hero and beast at the same time. - The preponderance of the desire to be the one or the other of these extremes may vary widely within all the armies and peoples.

Militaristic indoctrination was assisted and enhanced by the way history was taught in schools. To prepare for an examination in history meant to memorize dates of battles and wars, conditions of peace treaties, stories about great conquerors, kings and emperors. We need not be astonished when young people to whom history is presented in this manner, get the impression that humanity's great men are the successful conquerors like Alexander, Caesar, or Napoleon. The natural consequence is that ambitious young men like Hitler or Mussolini dream of acquiring eternal fame in successful wars, and that great masses became fascinated by the idea of their country's glory and victory. In this way the latent impulse to fight and kill were awakened which otherwise would never have come to the surface again.

The result of the foregoing considerations is: Traditional education and school teaching of history, though primarily well meant to shape good citizens, turned out to become an instrument for creating war-spirit and narrow-minded nationalism. Radical change of this part of our education will lead to an equally basic change of attitudes which in its turn will lead to a radical improvement of the world's political climate.

#### Ways to Break with Tradition of Education

In trying to reform, even to revolutionize our education we can scarcely follow the example of the Great Russian Revolution of 1917 which, in overthrowing the old regime, threw overboard most of the old ideology, declaring it an obsolete remnant of the rotten bourgeoisie. One of our objects must be the realisation of peaceful coexistence between peoples living under different economic and political systems, or adhering to different ideologies. This is why the representatives of Western culture, while endeavouring to reform education, should carefully avoid hurting the feelings of men connected with the history of their country. This could be done by making a strict distinction between the conceptions of "soldierly spirit" and "militarism". To be courageous, ready for self-sacrifice, devoted to higher interests of the community, are attributes of the good soldier whom we rightly honour by placing a wreath on the monument of the Unknown Soldier. But glorification of the soldierly spirit should not lead to glorification of the war itself or its unscrupulous promoters, and our due respect for all the heroic victims of wars should not prevent us from fighting against militarism, that is, against the basic idea of settling international conflicts by military means. The fact should be inculcated into the minds of all people that wars - instead



of marking culminating points in the history of nations - were insane crimes, committed by vain despots out of sheer lust of power, becoming ever more criminal and insane with the progress of modern warfare. To abolish war does not imply a radical change of human nature. The task before us is rather to remove the traditional incentive for waging wars, that is the expectation - fed by the old way of teaching history - of achieving glory and fortune.

To accomplish the necessary reform of education, modern teaching should incorporate into its curriculum the following few items:-

What We can Learn from History:

- 1) One of the first lessons is to demonstrate the vanity of the aims of wars. Deep and lasting wounds were suffered by many nations in their military fights against enemies, and for aims, that were believed to be everlasting, but later on turned out to be transitory, or even ridiculous. Germany and Austria fought against Italy and Japan in World War I, but only 25 years later relied on the alliance of the same nations in World War II. Russia was an ally of Germany from 1939 to 1941, then suffered Hitler's attack in one of the bloodiest wars of history. The subsequent alliance between Russia and the Western Powers which led to the world's greatest victory over Germany and Italy in 1945 broke down within a few years. But the same countries Germany and Italy that sacrificed millions of their sons during the war against the Western Powers are closely allied to the West today and ready to fight against their former ally, Russia. What is the sense of sacrificing a nation's fortune and the elite of her sons to defeat an alleged enemy today, and preparing to defend the same "enemy" at still greater costs tomorrow.
- 2) A second lesson is the unavoidable disappointment of the abettors of a war. All those who might be taken seriously into account as being among the instigators of any of the two World Wars were utterly ruined by its outcome. If ever a kind fairy would have permitted them to turn back the wheel of history they would have taken good care not to repeat their insane crimes. Any promoter of acts of fanaticism, and particularly of wars, must reckon with the overwhelming probability that the final result will be the reverse of his aims, or an even worse catastrophe. It would be a good antidote against the wrong notions of historical greatness caused by traditional education to remind the schoolboys all over the world that Hitler committed suicide and that Mussolini's corpse hung upside down in the street, was spit at by his deceived and disappointed followers.
- 3) A third lesson is the lost balance between defensive and offensive power caused by technical progress. At a certain stage in former times, up to about 1914, one could reasonably expect that any lead in weaponry would soon be matched by a corresponding progress of means of defence, e.g., stronger guns, stronger armour, and so on. This balance was shaken in World War I and upset in World War II not to speak of the nuclear and thermo-nuclear bombs to be launched soon by guided missiles. All talk of interception is nonsense. The limit of defence possibility is the hope of destroying a small percentage of the missiles in flight while the rest would reach its destination and suffice for a country's total destruction.
- 4) A natural consequence of this development is the distinctly observable decline of the profits gained by war. In former times strong military superiority secured not only a chance to



conquer but also a guarantee that one's own country would not suffer from invasion and destruction. A guarantee of this sort became void already in the era of air attacks and is completely nullified in the atomic age. Correspondingly, war profits have become smaller and smaller during the last few generations. Apart from moral considerations, and disregarding the loss of life, one could say that the victors of the French-German war of 1870-71 and the Spanish American war of 1898 made a clear profit from their fight. However, no considerable gain was achieved in World War I; the victors of World War II emerged somewhat weakened, and the vast majority of their citizens suffered economically from the inflation and taxes necessitated by the enormous national debt. After a third World War - which could never be stopped before recourse to nuclear weapons - no victor would be left but only totally and almost totally destroyed countries. Any total war in the atomic age would not only be a crime - as it has been before - but also a catastrophe.

- 5) A critical reappraisal of the conception of "Great Men of History" leads to quite new results. Traditional history measured historical figures by the fuss that was made about that person among his contemporaries. Retaining this custom would make Marilyn Monroe one of the most prominent figures of the 20th century. It seems more reasonable, however, to choose as a measure of the importance and greatness of a man, the depth of the impression his work left on human life. There is no doubt that radical changes have occurred in the way of life of all civilized nations within the last half dozen of generations. These changes - leading in their totality rather more in the direction of improvement, though partly also to some deterioration - are everlasting and irreversible while the effects of all the great wars were mainly destructive and relatively short-lived. A list of real Great Men of History, compiled according to the value and durability of their impact on the fate of mankind would not contain any of the big conquerors and war heroes. It would, however, contain along with the founders of humanity's great religious also social reformers whose names are so far unknown in wide circles, besides some of the great revolutionaries and, last but not least, the great thinkers and scientists who opened our eyes for the world surrounding us and taught us to master the forces of nature.

History presented to school children in this form would remove one of the strong incentives for waging wars. There is no doubt that the dream of being printed in big letters in future books of history played a decisive role in Hitler's decision to launch his attack on Poland in September 1939.

The lessons we can draw from history form an important part of the new education I am advocating. But they alone do not suffice to mould the New Man of the atomic age who should be free of hatred and fear. Additional instruction about some elementary facts of human nature and psychology should be added which in their totality constitute what may be called an "ABC of elementary wisdom".

#### The Concept of Elementary Wisdom

The proposal to include an "ABC of elementary wisdom" into the school curriculum might be easily misinterpreted. The popular idea of a wise man is associated with the vision of a very old man with a long white beard, as represented in hundreds of classic biblical paintings, that is, the man devoid of passions and impulses. Wisdom taken in this sense would be the result of ageing and should therefore not form a part of education. What I am calling wisdom is, however, something quite different. According to the definition I am proposing, even a young man or woman, driven by all the passions



and impulses of his age, and without being a marvel of virtue or self-sacrifice, might be called wise - if he, or she, fulfils these conditions:

First: To possess the knowledge and goodwill for a better understanding of, and insight into, his own self and his fellow man.

Second: To possess a good sense for a proper order of rank of the various values and human issues, duties and responsibilities.

Third: To be trained to see through man's natural inclination to overestimate the issues and immediate advantages lying within the range of his limited mental perspective.

#### Fit for Juvenile Minds?

Although these requirements, as expressed here in their abstract and condensed form, may appear at first sight a bit too advanced for children at school age, I maintain that the necessary knowledge, administered in proper form might be well taught in secondary schools. Grown ups are in the habit of under-estimating the mental capacity of children. Elementary arithmetic is taught to children under 10 years and is apprehended by a great percentage - at least outside the sphere of hopeless juvenile obscurantism caused by the TV epidemic. On the other hand, the majority of grown ups beyond 30 would scarcely be able, or afford the patience, to learn how to divide two numbers of several digits if they had never been taught it before.

Therefore I venture to say that it is just the adolescent age in the years following puberty in which the human soul is plastic and receptive enough to be imbued with the proper spirit of elementary human wisdom and practical philosophy. The kind of knowledge which ought to be taught with this aim in view has to meet the following requirements:

It must be clearly formulated so as to be comprehensible and well suited to an average high school student's mental capacity.

It must be capable of influencing the individual's behaviour so that he will be enabled to achieve a reasonable integration with society.

#### Great Effects with Small Means

The extent of knowledge necessary to lead to this aim is relatively small. If we succeed in eliminating just five per cent of the material taught today in schools and replace it by suitably chosen behaviour-shaping knowledge in the field of psychology, history and other "humanics" - then we can reach the goal of the new education and form a man better suited to fill his place in the age of science.

Such a promise has quite a suspicious smell of utopian world-reformism and is therefore always met with serious objections. Ever since the times of Socrates the thesis has been accepted that his endeavours to teach virtue were basically doomed to fail. Can we expect today, two thousand years later, to score better and to achieve radical improvements in human relations be merely disseminating knowledge?

Roughly stated, the answer is that we may reasonably expect to achieve substantial improvements of the human society not by trying to make people more virtuous, but by just opening their eyes far enough to avoid blind or shortsighted fighting. The material for an enlightenment of that kind can be found in several books of



The Power of Love.

9.

British and American authors, and also in two of my books. Unfortunately its practical use in education has been restricted to selected groups of schools. I shall be glad to give a few examples of single items of such behaviour-shaping knowledge if I am asked to do so in the discussion.