CAN MAN SURVIVE?*

At this early stage of his evolution we must not take it for granted that man's present dominant position on this star called Earth is necessarily permanent. If man should become complacent and for a time ignore some of his rivals, he might be destroyed very quickly. Suppose man, after a few generations of freedom from smallpox or diphtheria, no longer thought of these enemies and stopped vaccinating and inoculating children. Epidemics like the old Black Death could quite conceivably wipe out most, or even all, of the world's human population in a very short time, helped along by the rapid methods of transportation introduced by man. It is quite possible that one of the species of bacteria or viruses might develop a degree of virulence which man could not cope with until he had become extinct in large areas of the world. Other animals have been defeated, and apparently permanently.

Continual and permanent vigilance is necessary if man is to survive on Earth—though even with all he can do, he may sooner or later be rendered extinct as have so many other animals before him.

In spite of these obvious truths, it appears that man generally regards his tenancy on Earth as permanent and unassailable. He has, until quite recently, very extensively wasted the natural resources of Earth, with no thought for future generations at all. Even yet we note that many of Earth's raw products are being used faster than they are being replaced. This shortsighted policy, so usual in man despite his intelligence, seems to persist as a result of the local and short-term points of view he seems to have about everything.

It follows then that man's natural and inevitable future lies in the further development and use of his brain, his ability to think. All indications suggest that if there is any universal plan for man (which is not to be taken for granted) it must involve that development of his thinking power. His survival demands it and his evolution up to now shows it to be his only superiority over other animals. There has, of course, been a gradual, though interrupted, development of this ability in man; but it is very evident that the actual thinking equipment available is not by any means used effectively to attain the ends man generally professes to want to attain. We notice that

---

* Reprinted from *The Nation*, July 27, 1946, with the kind permission of the editors.

1 Until recently Director General of Medical Services in the Canadian Army and now Deputy Minister of Health in the Department of National Health and Welfare, Dominion of Canada. His earlier article, 'The Reestablishment of Peacetime Society,' *Psychiatry*, IX, 3-20. (Feb., 1946) was the subject of extended comment in S. I. Hayakawa's article 'Non-Aristotelian Revision of Morality,' *ETC.*, III, 161,173 (Spring, 1946).
throughout man's history there have been, and still are, certain influences which pre-
vent, in the individual and in groups, the full use of man's intellectual endow-
ment. These influences, which everywhere limit man's thinking, make blind spots
in his experience, and distort his judgment and decisions, are his 'taboos.'

Taboos are the social sanctions set up in all tribes of humans by interested and pow-
erful individuals or groups and authoritatively imposed on the young to pro-
tect the privileges, ideas, or faiths of the old people. Such taboos may prevent young men of the tribe from wandering away to explore certain rivers or moun-
tains, explorations which must not be undertaken because 'a terrible and power-
ful god lives there,' or because 'the spirits of the ancestors would not like it,' or for
any one of many possible magic reasons. They proscribe changes from the ways of
the old people or demand certain attitudes or obediences. In various human com-
munities taboos affect attitudes about such things as money systems, educational
systems, systems of government, sexual education and behavior, marriage, clothes,
health, foods, and religion.

In many of the most important ques-
tions of life it is evident that the minds of large numbers, indeed almost all, of
the human race are not freely open to consider how true or untrue old ideas are,
or to consider any advantages which might be found in new ideas. Old ideas and
customs are generally called 'good' or 'sound,' and new ideas, or experimental think-
ing or behavior, are usually labeled 'bad,' 'unsound,' 'communist,' 'heretical,' or any of many other words.

The power these words have obtained over much of the race is astonishing. They
are the symbols of the control that older people and the past have, and cling to,
over young people and the future. They
and 'wrongs.' Rarely do we find humans who examine their authorities. Mothers and fathers are supposed to have acquired, by the mere fact of giving life to children, all wisdom on all subjects, and very usually pose as authorities on every aspect of living to their children, even though their own living may not have been at all happy, satisfying to themselves, or useful to the community.

When we investigate to find the time at which taboos are introduced into the thinking process, we find everywhere that the distortions are produced in childhood. The method is the application of fear—fear of punishment, fear of loss of parental protection, fear of disapproval and consequent insecurity. Distinctions are drawn for the child by labeling all activities or interests as 'good' or 'bad.' And it is very evident that the human race has been doing this for a long time. At least several thousand years ago these same methods were in vogue. Certain writings of long ago, however, show a better understanding of the threat to the race inherent in this system than is common now. The early folklore of the Hebrew tribes, for instance, contains a story in which their god, Jehovah, or Yahveh, warned the first man and woman against having anything to do with good and evil. A serpent, symbolizing the tempter who seduced them away from the true destiny of man, induced them to adopt the conceptions of good and evil, promising them that they would become as gods. As gods they could control other people by the use of good and evil. The old story goes on to show how, at that moment, they introduced guilt, fear, shame, prudery, and deceit to the human race. I find much wisdom in this ancient story and marvel that so little of that wisdom has survived to the present time.

In looking about us we see that taboos have, perhaps, been most rigid, and the distortion of thinking most prevalent, in relation to the whole field of reproduction. The sexual taboo is usually set up in early infancy. All normal infants explore their environment as extensively as possible, and this exploration naturally includes their own bodies. They, of course, have no concept of the feelings associated with some parts of their bodies being 'good' and those associated with other parts 'bad.' The first impressive introduction to this limiting concept commonly occurs when they are first 'caught' touching their genital organs. The offending hand is slapped and the accusation of 'bad, bad' is made. There is little probability of any child so misinformed about equipment so vitally important in marriage, making a really satisfactory marital adjustment later in life. The flavor of 'badness' will always permeate all sexual functions as long as that child lives. This same feeling of 'badness' appears to be the greatest stimulus to promiscuous sexual exploration throughout adulthood; it seems to be the greatest source of the associated feelings of danger and adventure which are so attractive.

It is very important to understand that tabooing of activities does not mean the simple prevention of those activities on a reasonable basis. It means the prevention of activities, whether physical or mental, on an authoritative, moral-magic basis which is not arguable or answerable to reason. Certain controls which in themselves are quite reasonable, and both socially and personally desirable, can become both socially and personally damaging as the result of the use of authoritative moral-magic instead of reasonable methods of application.

Commonly in childhood the process goes something like this:

1. Child does something he wants to.
2. Mother punishes or disapproves with accompanying ‘Bad, bad boy.’

3. Child is afraid of physical punishment, or threatened loss of security in disapproval, and does not again commit same act when mother is there, but

4. Child does same thing when mother is not there.

5. Mother discovers child has done it again, sometimes 'a little bird told me' or 'God told me.' (As a result, child may enjoy killing nasty, tattling little birds, or may hate God as much as he dares to, all his life; both are enemies.) Other methods of discovery are not explained to child.

6. Mother punishes child.

7. Child stops doing it when mother is not there for the same reasons as (3) above, but he is now more confused with magic and more convinced of his essential 'badness.' He knows that he is supposed to be 'good' but is really 'bad.' He must pretend he is 'good' so that he will not be punished or meet disapproval from everyone.

8. Child imagines doing things he would like to do and often unguardedly indicates this to watchful parents.

9. Mother punishes or strongly disapproves of child's thinking things and frequently copes with the situation with 'Remember God [already an enemy] always knows what you are thinking,' with all its implied threat of continual, night-and-day surveillance, disapproval, and eventual punishment.

10. Child has to control his thinking and make it 'good,' leaving no outlet whatever for all his normal and desirable urges and wishes, which by now are almost all labeled 'bad.' All the 'original sin,' the normally developing human urges, must be hidden even from himself by pretence, guilt, shame, and fear. The result is usually a hatred and fear of God which may be compensated for by a superficial, cringing conviction and demonstration of 'love,' or, on the other hand, by a defiance of all rules attributable to God in an effort to prove to himself non-belief and thus avoid fear.

11. During this same time other magics which prevent the development of clear thinking have been set up. Among these are fairies, Santa Claus, personification of animals and things, night skies in which stars are deceased relatives, babies brought by storks, or in the doctor's bag, or found under rose bushes, and many other distortions of reality. Unless he goes through a long and difficult process of re-education it is probable that no child who has ever believed in any of these things can ever, throughout his life, think quite clearly and quite sanely about a wide variety of important things in his adult environment. This statement is not theory; it is quite provable.

Factual thinking for adults so authoritatively misinformed in childhood is permanently labeled bad and dangerous, and can be undertaken only defiantly or shamefully, accompanied by reactions of guilt, fear, and insecurity. Naturally the threat of these feelings is usually sufficient to repress any such attempt or to distort the attempted intellectual process extensively. Every psychiatrist has seen many clear illustrations of this process and knows that it is a potent factor in the production of the confused thinking which is almost universal in the human race. The astonishing belief is commonly supported, as a moral value, that it can be 'bad' to know, to want to know, the truth.

Imagination has, by this process, been distorted and permanently crippled. It can be allowed to play only with 'good' urges and desires, except with accompanying feelings of guilt and shame, or brav-
ado and defiance. What is this 'imagination' which may be crippled? It is a function of the highly developed cerebral lobes of his brain, possessed to a far greater degree by man than by any other animal, which enable him to picture and experience objects or circumstances or activities which are not present in reality. Does it matter if imagination in man is crippled and shackled by moral values and distorted by fears, if it is forbidden by taboos to explore in certain directions? Clearly, it does matter—very greatly.

Imagination provides a way of exploring without any real danger, of trespassing without being caught, of adventuring to gain experience without committing oneself in reality. Imagination is a scout that man may send out in all directions—past, present, and future—to investigate all circumstances, activities, possibilities, and consequences. Major adjustments to the important requirements of any civilization must be made in all fields of human urges. Only by true reports from a free imagination is it possible to get true pictures of the results of various kinds of adjustments to these demands. Each person's environment and problems of adjustment are different from those of others and continually change. They require always his own solution, not a standard rule to be applied at all times and under all circumstances throughout his life. If the scout (imagination) must be deaf to some things, blind to others, and may not feel still others, its value as a reliable source of information is greatly reduced. Actions and decisions founded on its reports are not likely to be effective or sensible.

The only possible substitute for imagination and reason as a guide to decisions and actions is 'conscience.' More foolishness has been talked and written about conscience than about almost anything else. It is quite clear, and easily provable, that conscience is nothing more nor less than whatever one believed in childhood. One should be guided by conscience only if one is prepared to believe that the child was wiser than the adult is now. To go to conscience for guidance is to appeal to the rules imposed on a child before he was able to defend himself from authoritative parental certainties which might or might not be true or relevant. Actually these are rarely the rules which parents use for themselves but are only their ideas of what children should believe—generally what the parents believed when they were children.

Thus, though the parents may have escaped intellectually from their childhood beliefs, they still commonly continue to have a potent though unrecognized faith in the rightness of their own consciences. The setting up of conscience as an authority is an attempt to legislate in childhood for all possible circumstances which may arise throughout life. It would be a very foolish parent who would think himself qualified to prescribe the desirable behavior of his children even thirty years from now, when he can have no idea of what changes may have been made in the local customs of the natives by that time. Surely it would be sounder to equip the child to do his own thinking, clearly and unafraid, not hampered by taboos or the certainties which happened to be the conscience values of his parents, imposed by the authority of their parents, and so on back.

It would appear that we have now discovered our diagnosis to be something like this: 'Man is prevented from progressing peacefully along the pathway of intellectual development (the pathway determined by his inherent equipment) by distortions of his power to think clearly, distortions which are imposed on
CAN MAN SURVIVE?

him while he is still a small child and defenseless against parental authority."

If this diagnosis is valid then the prescription is easy. Stop doing it. Stop giving children final answers, rights and wrongs, local or any other kinds of certainties. Allow them to look at everything. Help them to look at all available realities and encourage them to prepare to do their own thinking, independent of their parents' faiths.

It is as simple as that, but not easy. Perhaps enough people can do it to save the human race.

REQUEST OF PAVLOV TO THE ACADEMIC YOUTH OF HIS COUNTRY

What can I wish to the youth of my country who devote themselves to science?

First, gradualness. About this most important condition of fruitful scientific work I never can speak without emotion. Gradualness, gradualness and gradualness. From the very beginning of your work, school yourself to severe gradualness in the accumulation of knowledge.

Learn the ABC of science before you try to ascend to its summit. Never begin the subsequent without mastering the preceding. Never attempt to screen an insufficiency of knowledge even by the most audacious surmise and hypothesis. Howsoever this soapbubble will rejoice your eyes by its play, it inevitably will burst and you will have nothing except shame.

School yourselves to demureness and patience. Learn to inure yourselves to drudgery in science. Learn, compare, collect the facts!

Perfect as is the wing of a bird, it never could raise the bird up without resting on air. Facts are the air of a scientist. Without them you never can fly. Without them your 'theories' are vain efforts.

But learning, experimenting, observing, try not to stay on the surface of facts. Do not become the archivists of facts. Try to penetrate to the secret of their occurrence, persistently search for the laws which govern them.

Secondly, modesty. Never think that you already know all. However highly you are appraised always have the courage to say of yourself — I am ignorant.

Do not allow haughtiness to take you in possession. Due to that you will be obstinate where it is necessary to agree, you will refuse useful advice and friendly help, you will lose the standard of objectiveness.

Thirdly, passion. Remember that science demands from a man all his life. If you had two lives that would be not enough for you. Be passionate in your work and your searchings.

Scripta Mathematica, December, 1943.

111