A few days ago, the giant telescope at Palomar was dedicated. This telescope took twenty years to build and cost an immense amount of money.

The question immediately occurs: why was this new, mammoth, telescope built anyhow? Don't we already know enough about the stars?

The answer to this question is the answer to man's thirst for knowledge, that unquenchable urge to find out more and more about the world in which we live.

In the Stone Age, man was engaged in a daily struggle just to keep alive. He had to contend with wild animals, gnawing hunger, and often a perverse nature.

In far too many parts of the world today, man is still in the stone age and expends all his energy just in keeping alive. But in other parts, where tools have liberated him, this singleness of purpose has been supplanted by other motives, among them the urge to explore the unknown, to push out the frontiers of learning into new areas.

We all know in what field knowledge has made its most spectacular advance. It is atomic energy. Although any exploration of the unknown requires courage, I wonder whether we all appreciate the awful gamble that the atomic scientists took when they set off the first bomb outside Alamagordo. They were not sure whether the coolness of the atmosphere would be sufficient to carry away the intense heat of the bomb. Some scientists thought the heat generated would be so great, and so concentrated, that it might set off a chain reaction that would envelop the earth - and us too. The decision was made to go ahead, even though it might have meant the end of the world. Although military considerations undoubtedly determined that decision, I am certain that had it been peacetime the decision would finally have been the same - to go ahead.

Knowledge is dangerous, and discovering it is dangerous, but no effort to
contain it or to limit man's reaching out into the unknown will ever for long succeed.

If the atomic bomb opened up a new world of knowledge, it also revealed with stark clarity that our knowledge of the natural sciences has outstripped our ability to use this knowledge constructively. There is nothing new about this situation. It has usually been the case. There has usually been a lag between great scientific discovery or invention and its use or control for the benefit of mankind. The only difference today is that the lag has become larger, the gap has widened, because of the rapidity with which new scientific knowledge has been gained and applied.

You have all seen the cartoons that depict large heads with tiny bodies. We are like that. We have amassed a lot of brain power but it is not being used to build a robust, healthy social body.

Please do not misunderstand me. I am not advocating a truce on scientific research, but I am advocating greater attention to the ways in which we can beneficially use what we already know and to undertake research about our society, domestic and international.

To illustrate what I mean, let us take a look at the radio. This is certainly an extraordinary scientific discovery, but who is the man bold enough to say that it has widened man's horizon? Its mainstay is the soap opera. If ever there was a playing down to the lowest common denominator that is it. There is no challenge to the intellect and its recreational appeal is so poor that there are no repeats. A radio show goes into the limbo of forgotten performances just as soon as completed.

The radio undoubtedly has a great future both for education and recreation, but so far we have not known how to use it constructively. It has broken down old cultural standards, which, to be sure left much to be desired, but it has not substituted in their place standards even as high.
This disintegration process is so interwoven with the warp and woof of modern life that it may not be easily identified by us but if you will look at a primitive culture that has been exposed to the soap opera, the Hollywood boy meets girl sequence, the comics and bubble gum, you find a breaking up of the traditional values - the simple dignity and quiet integrity and the sense of membership, of participation in a community where each has his place and his responsibilities. Instead there is a conscious aping of habits and customs totally foreign to their own and totally unsuited to their needs.

What we need is the same intensive application to the social sciences and the humanities that we give to the natural sciences. We need to know more about ourselves - our cultural heritage and the organization of our society. For example, we need to know more about the tensions set up by the radio and the movies with their emphasis on high-powered life. Do they create dissatisfactions with the home environment and exactly what is the new image that they create?

Let us turn to another scene to illustrate the need for knowledge about our institutions - from the family to the United Nations. Everyone in this audience is getting enough to eat, but two-thirds of the world's population is hungry. Everyone here can turn on the faucet and get fresh, clean water but most of the people of the world drink contaminated water. Everyone here can read and write - but in some of the most populous parts of the world less than 5% of the people are literate.

With the knowledge at our command, we could go far towards alleviating those dismal conditions. But instead, not three years after Hiroshima, the horrors of the atomic bomb seem to have sardonically faded away - much like the grin of the Cheshire cat, and our main pre-occupation once again is with conflict and war. The money and effort now going into armament though possibly necessary could go a long ways towards whippinng disease and malnutrition and illiteracy.
Well, what can be done about it, you ask.

Obviously, one thing we must have and use is an international organization for the peaceful settlement of disputes. The question is what kind of organization. How much reliance should be put on machinery - on legal formulas - and how much on compounding knowledge, understanding and justice?

At the present time we have the United Nations. Just because the United Nations hasn't solved the world's troubles, there is a tendency to blame the Charter. It's the veto, people say. Get rid of the veto, and all will be well.

Now, the fact is that the veto is in the Charter as much because of our insistence as because other countries insisted on it. The fear was that we would be outvoted so that to protect ourselves from being pushed around we needed the veto. Please recall that this fear of being outvoted was the principal attack of the opponents of the League of Nations. In 1920 these people screamed so loudly about this that twenty-five years later the United States delegates did obeisance to the myth. The veto is not in the Charter because the Russians insisted upon it alone. It is there because we thought we needed it to protect us from majority combinations.

Now that we find we were so completely wrong, that we are part of a majority, voices are declaiming that the veto should be banned. Cut with the veto and all will be well.

How simple this all sounds, yet how completely barren and sterile! As though a change in legal formula were the answer. The Charter could be amended to eliminate the veto, but would Russia then stay a member of the United Nations? The United Nations without Russia would be just about as vital as the League of Nations was without the United States.

A page from our own history is instructive. After several years of progressive disintegration under the Articles of Confederation, we adopted the Constitution. The change worked. Was this because we as a people had cast off one constitutional
coat and put on another one or because our understanding of the requirements had changed and with that a willingness to try new political clothing?

I think it was the latter - the new form came closer to filling our needs than the old ones. So it will be with the United Nations. If changes in the Charter are necessary, they will only have meaning when there is a greater knowledge of other peoples - by all peoples - and a greater appreciation of the values of cooperation.

This brings me back to my theme, the need for more knowledge of our society and the world we live in. Now knowledge is not simply book learning. Knowledge is also understanding. Einstein's formulas can be learned by heart but what good are they unless you understand what they mean? It is easy enough to learn that the French are a logical people and that the British are practical, but unless you can interpret these generalities they lose all meaning whatsoever. In brief, the cold facts are useless except in terms of the meaning we as individuals derive from them.

I wonder whether the United States today is not in the position of having amassed lots of facts and figures about the world without understanding what they mean. We are justly proud of our libraries which are stocked with the best of world learning but how great has been our comprehension of the wisdom in these books? We have a high rate of literacy in this country. Millions read the newspapers every day but how much of what they read do they understand?

If I have a doubt on this score it is because we are proceeding just as though the world were not topsy-turvy with kaleidoscopic change. It is my impression that despite the excellent news coverage of the great press associations and the commentaries of many penetrating writers, we don't understand that a new world is being born and that it differs greatly from the insular world of the United States.

As to the fact of a world upheaval that is changing rapidly what has gone before, let me quote Marshall Smuts:
"We have passed over from the old feudal world. Mankind is on the march, literally, morally and mentally as never before. This is the century for searching and seeking, the century for making experiments."

How right Marshall Smuts is. Burma, the Philippines, India and Pakistan gaining independence, Latin America experimenting in new political and economic forms for developing resources and raising living standards; illiteracy being attacked on a mass scale everywhere, Western Europe trying new techniques of governmental control and operation of production. If there is a grand motif in this process of searching and seeking, it certainly is the welling up of people, searching for a better life both materially and spiritually. And if any technique for achieving this can be discerned, it is government action — expanding the area of government concern and responsibility, and increasing government extension into the control and operation of productive facilities. Most people would call what is going on a movement to the left, some may call it to the right, but whether left or right it is a fact — a fact that we may choose to ignore but which may well determine what sort of a country we have a generation or two from now.

Important as domestic matters are, the future of our country will be determined by the turn that other countries take at this juncture. This makes it imperative that we learn about the world quickly — and by learning I repeat that I mean more than simply assessing facts. I mean understanding those facts and reaching working hypothesis on the basis of study of those facts.

If I had one wish for you that I could translate into reality it would be that each of you have a year of study in some foreign country. There is a wonderful Indian saying all of us might adopt as our motto. It is: "Judge no man until you walked two weeks in his moccasins." A year of living, working and sharing with other peoples would give you an insight into the hopes and frustrations, the forms and techniques of "mankind on the march." The part of the work would not
make much difference. Whether Latin America, Europe, Asia or Africa, you would
find a ferment at work that expresses a reaching out of peoples for something
better than they had before and an expectation that their governments will do
something to provide it. You will conclude, I am sure, that whether we like the
nature or form of this experimentation, it is bound to influence the kind of
life we have here in the United States.

Too few of you — alas — will have this opportunity. Most of you will
remain right here. Yet right here there is an opportunity — not so easy, not
so clearcut but still an opportunity. No one denies that it is easier to learn
another language living in the country where it is spoken, but it can be done
here in New York City. The techniques developed during the war to teach foreign
languages have shown that the learning process can be amazingly accelerated
and a real facility for speaking imparted very quickly. Language is the key to
the understanding of the culture of any foreign country. It will open doors and
vistas that no interpreter can ever do.

There is also the opportunity for developing an understanding of all peoples
right here at home. It is natural for any country to judge another by the
standards and customs which are a part of its own birthright. We in the United
States are particularly prone to doing this because we live in a great, vast
country not hemmed in by other countries as is the case in Europe. In making
judgments of other peoples, therefore, I ask you to pause and ask yourself the
question "why" before reaching any conclusions. This is one of the first questions
asked by a child, and in evaluating the judgments of foreign people it could well
be the first question that we should ask ourselves.

We live in a world filled with mass movements of one kind or another and
yet the message I should like to leave with you is a very old message. It is one
of individual responsibility. It is that in times of crisis such as these, all
our puzzlement and confusion can be made to vanish when we come to know that our first duty is to understand our times and then to see that there can be no other basis for the better world that is in all our dreams, except the willing and eager acceptance of every one of us of our part in bringing this dream to realization.