

National pride of Mexico

in such a laboratory.

Why should a country that is not yet overdeveloped in its national economy invest its resources in such an enterprise? Could you not absorb the full benefits of programs in basic scientific research by borrowing the literature, at no more than the cost of translation fees

north American English into Mexican Spanish?

But of course, who would then be able to understand, criticize, sift what is relevant, what pertinent to your own needs and purposes?

In the best analysis the justification is that of higher education; indeed, with all respect to the superior teachers

Sigurd
and
writing
the
book

of this faculty, and of my own university, there is
one SUPREME teacher on the quest for the
world, ~~and~~ the physical reality which we inhabit,
and which comprises our own bodies, and that teacher
IS NATURE herself. No amount of scholastic communica-
tion with oneself, no amount of polemics with
others in the same or in opposing ideological frameworks,
can replace the experiment - asking hard questions
of Nature to elucidate how the world actually is ~~is~~ ^{the}
objective reality to be distinguished from how it might ^{we think}
have been, or even how we feel it ought to be.

I do not press this assertion about postpositive
reality as an assertion of ultimate truth, which has
raised many philosophical criticisms about the
possibility of knowledge. But these paradoxes about
the ultimate, the undeniable faculty of human
sensory observation and logical extrapolation, must
not be confused with the nihilism of the ignorant -

(2)

the philosophies that inflate these limitations into a denial of ^{the} scientific method and of objective reality, to the point where "the truth" is to be decided by personal whimsy or by the shouts of the mob.

The scientist finds himself in a peculiar position in the present turmoil of the global revolution, that resurgence of faith in man that transcends the particular ideologies of socialism or liberalism that ^{different ways towards very} seek to build ~~the present~~ similar ends. He is accused of being the high priest who hoards truth (and then immediately political power) for himself and his class by his denial that truth can be found in personal or collective feeling. He is not buying it for himself, for he does not possess it himself - he merely insists that we look for it outside. This is a hard discipline, and we know from sad experience - like the

by your own observation ~~in the~~ during the Stalms
 regime, how rapidly the structure of scientific
 teaching will decay ~~if it fails to~~ without
 constant communication with that inspiring
 schoolmaster, Nature herself. ~~and from~~
~~this will~~ This disease of the social psyche
 This failure will inevitably result in the
 eventual collapse of agriculture of medium
 and of industry; and I believe ^{the failure to achieve} this is one of the
^{a scientific outlook} major ~~obstacles~~ obstacles to the economic
 development of those countries who are falling
 ever further behind in the struggle for industrial
 modernization.

I am not so enthusiastic as to predicate
 the whole economic future of Mexico on this
 one laboratory, and its Director might be the
 first to discourage me from such an unjustified
 generalization. I believe, nevertheless, that the

④ ~~basic~~ national policies that make
such a laboratory possible are indeed crucial
to the cultural as well as economic
future of the country.

all is not simple glory for science, however.

First of all, we must be careful to recognize
the limits of objective research, particularly
in the definition of fundamental ^{human} values, and
when we do focus on them ~~we~~ as undeniably
happens (for scientists ~~are~~ are not ~~of~~ more
loving in faculty than other humans) - we
deserve the wrath of the multitude. The
power that derives from science-based
technology is not always ~~and~~ wisely used,
and scientists are often the scapegoats of
popular resentment against various kinds
of exploitation of people that ^{occurs throughout} ~~are~~ ~~observed~~ ~~in~~ ~~our~~ ~~human~~ ~~organization~~.
~~of the~~ ~~same~~ ~~kind~~, ~~still~~ ~~in~~ ~~fact~~, ~~national~~ ~~political~~
~~system~~. This has led to a political counter

③

reaction ~~out~~ of statement on the part of a few -
that the search for truth has an absolute value that
overrides every other human concern. ~~None~~, ^{Such views,} in my

opinion, ~~really~~ reflect a totalitarian ideology which
has a ~~spirituality~~ of certain number of adherents
in every profession, and must be rejected as an
official expression of the scientific ethic. We
know too well the yield of misery that has follow-
ed from the pursuit of every ideology that denies
the rights of individual human beings.

A better statement would be that scientific
advance is one of the principal responsibilities of
what is uniquely human, and that scientists
must help to ~~lead~~ the community to the most
humane ~~and the most~~ pattern of the
nurturing and of the use of science.

⑥ My concern about this quest is ~~is~~ motivated by much more than the minor cultural revolution we have been experiencing in the U.S. There is in fact an imminent tangible threat of developments that could make a mockery of the humanistic aims of biological science, which could destroy the moral foundations of laboratories just like this one throughout the world.

~~I speak of biological war~~

The threat is the escalation of biological warfare, the development of viruses and bacteria as agents of disease for military purposes.

B-W are not ^{now} taken very seriously as weapons which a country could rely for its national defense. ~~They~~ ^{like} Unlike chemical weapons, which inflicted ~~have~~ many casualties in WWI ~~starting with the use of~~ chlorine and ~~mustard~~ gas, B-W have not been employed for any significant purpose in modern war.

⑧ We have ~~enough~~ ^{too much} contemporary anxiety from other sources to be complacent about new cycles of such events.

An important turning point in ^{the} world history of BW was Pres. Nixon ... 11/25

later extended to toxins, chemical substances ~~related~~ mainly of biological origin. Also assumed that the Geneva protocol of 1925 would be submitted to the Senate for formal ratification. This has been delayed, at least in part, owing to ... biological and herbicides in ~~the world~~ ~~the world~~ ~~before~~ ~~the~~ ~~issues~~.

~~This is not the place to debate~~
~~then to whether this is to risk~~
acrossing contemporary and emotions that I ask to be put aside if we are to ~~confront~~ ~~the~~ ~~global~~ ~~threats~~

These repudiations, separate, I believe correctly, the issues of BW and of CW. I will remind you that the Geneva ~~not~~ protocol, ~~and~~ together with Pres. Nixon's statements, obligate the world community never to make the first use of either BW or CW. However, ~~many~~ ~~such~~ ~~as~~ ^{every major power.}

① including the U.S. & the USSR are essentially
containing secret research on ~~the CW~~ & CW
~~and so~~ They are also still stockpiling
reserves of CW, ^(i.e. new ones) on the assumption that
this will deter their adversaries from
violating the Geneva protocol. But of course
this is precisely what stimulates the
continuation of CW research in military
laboratories. Disposing of existing stocks
of CW - as the U.S. has announced it will
do in ~~the~~ certain localities - is itself a
serious embarrassment because of the well
publicized hazards to civilian population.

The Nixon statement goes one step further
than ~~the Geneva protocol~~ by excluding R + D on
and stockpiling of
biological weapons, as well as the promise against
first use contained in the Geneva protocol. Some
other countries, especially U.K. and Canada
had already taken similar steps, but the exact

⑩ scope of these new policies is still somewhat uncertain - for example, just what is meant by "defensive" research. The First Detach laboratories are definitely being dismantled but their further disposition is ~~not yet~~ ~~known~~ is being negotiated at the present time with the Health and other Dept.

We have no news from ~~the~~ the USSR or China about unilateral actions on their part.

This very encouraging and important step is the result in large measure of a great popular outcry and the revulsion of many laymen against the promulgation of disease as a military adjunct. However, there are serious limitations on the long-term significance of these new policies, ~~made on a unilateral basis.~~

Nor do ~~these~~ these new policies, ~~and~~ have the force of a treaty obligation; they could be a-

① revealed at any time by the present or successive governments. Indeed - and let me stress that I speak only as a private citizen having had ~~no~~ access to ~~confidential~~ ~~prop~~ ~~govt.~~ ~~papers~~ only to ~~public~~ reports ^{published} - it is hard to believe

that a unilateral ~~also~~ ~~abrogation~~ ~~of~~ ~~the~~ ban would be continued for very long if other countries were known or seriously suspected of continuing secret R+D in this area.

It is therefore urgent that we proceed to a universal understanding of the need to contain BW development in every country, preferably through formal treaty arrangements.

~~I say this not because I have ~~such~~ ~~high~~ ~~faith~~ ~~in~~ ~~the~~~~

Why formal agreements? After all a treaty can always be denounced, and is there so

② much advantage for security, it has to
go through the protocol?

The answer is that <sup>(especially defining
the research)</sup> PWP is a very com-
plicated subject, that only by ~~writing~~ a formal
contract can the various countries really be
sure to be sure of their obligations to one another.

Further, the ^{agreed} treaty can and must provide
the channels for a continuous exchange of
questions and clarifications of suspected
incidents that would otherwise provoke a
resumption of military work in defense
in retaliation.

What if we do not reach such agreements +
PWP research continues. Would this add much
to the evils of a world ~~in~~ which already
knows the possibility of nuclear extinction.

Consider...

(3) Qualitative -

Testing

Escapes -

Every small city - esp. small towns!

There will be a butchering of the
around this lab — as there must

be around military numbers

Wagner's BCD by the board.

Escape

Political instability - - - -

④ Why not put them together.

① ③ How urgent + risky

② Role of independent national

exhibitors for world leadership.

Example Sberia's work as
UN Committee