reason than ordinarily gambling does, however, because it is more in earnest.

It has been said that the physicist has just as closed a mind about cause as the Christian has about god. The physicist assumes through thick and thin that everything happens according to causal laws. He presupposes cause, just as the Christian

presupposes God.

But the physicist does not assume that there is a reign of law; he hopes that there is. He looks for laws; but, whenever a possible law occurs to him, he conscientiously tries to disprove it by all reasonable tests. He asserts at any time only such laws as seem at that time to have passed all reasonable tests, and he remains always prepared to hear of new evidence throwing doubts on those laws. This is far from the Christian attitude about god. The Christian does not merely hope that there is a god and maintain only such gods as the best tests have shown to be more probable than improbable.

(Thanks to Elmer Thiessen for submitting this example.)

27.



Nancy Reagan: Which history books has she been reading?

### Religion and politics

Detroit Free Press, May 22, 1980

I AM CONCERNED about the comments of Mrs. Reagan and Rev. Falwell at the Christian rally in Indiana, concerning Christian candidates for public office.

This is a country built on the concept of separation of church and state. If a person chooses to join a religion that does not advocate liberal causes, then it is that individual's private preference. The individual's freedom to pursue certain ideas is respected. So it does not seem right for a religious group to dictate its preference to the country that has allowed religions the freedom to flourish and develop.

The intermingling of church and state is a scary concept. The Spanish Inquisition is one example of this sort of idea.

JANE NUGENT Warren

NANCY REAGAN says our country is a Christian country, founded on Christian principles.

I wonder what history books she has been reading. My history books tell me that the United States is a country for all religions — and no religion. My history books tell me our Founding Fathers and the first seven presidents of the United States were Deists — which is definitely not Christian.

The Rev. Falwell says this country is not Jewish and not Moslem—but only Christian. Obviously, it falls into place that if the United States government overturns the 1963 Supreme Court ruling of forced Bible reading and prayer in public schools, that only Christian prayers will be allowed. It also follows that if we are a Christian nation and nothing but, then I wonder what we should do with the Jews, Moslems, non-Christians and atheists?

There was once a man who had the "final solution" to this "problem." While Nancy Reagan and her husband, candidate for president of this great nation, dangerously distort history, and while our Founding Fathers are twirling in their graves in sadness and shock, we better take a lesson from history—or else we are doomed to repeat it.

BARBARA SCHWARTZ Oak Park

### Why such terror over nuclear reactors?

Physicist Edward Teller is senior research fellow at the Hoover Institution, Stanford University, and a former member of the Atomic Energy Commission Advisory Committee on Nuclear Safeguards. He is also author of "Energy from Heaven and Earth.'

#### **By EDWARD TELLER**

IN ORDER to ask if nuclear energy is worth the risk, one must necessarily ignore the risks that are involved in oil dependence on the Middle East (including war), and the risks associated with coal, natural gas and hydroelectric power usage. One must also ignore the safety records of the various power-generating industries, and one must focus on radiation as a terrifying new threat to the well-being of the human race.

Bumper stickers proclaiming "Ban Nuclear Weapons and Nuclear Reactors" are indicative of the underlying association of nuclear energy and destruction.

This is probably related to the first introduction that people had to nuclear energy. However, radiation has been present since the beginning of the universe. When mankind lived in caves. whose walls as a rule release radioactivity, the average exposure to radiation was probably greater by a considerable factor.

THE WELL-PUBLICIZED Three Mile Island accident released about 70 millirems of radiation to the immediate environment. This was the most severe accident that has ever occurred in the history of 200 electricity-generating reactors, operating on the average for 10 years each in the free world.

The increase of radiation that a resident in the area near TMI received was about equal to the increase that would have occurred if he or she had left Harrisburg and moved to a mountain area near Denver and lived there a little less than one year.

The horrors of war, of bombing a civilian population with a mysterious unknown weapon, of which Hiroshima and Nagasaki remind us, are wrongly related to the comparatively small effects of radiation. Three-fourths of the people within 3.1 miles of the bomb impact point survived. Many of them received doses between 100.000 and 200,000 mrems of radiation, and some may even have received more. After 30 years of study of some 80,000 survivors, there is no evidence of increase in genetic birth defects among the children, grandchildren and, in a few cases, greatgrandchildren of the survivors.

There is an observed increase in only one kind of cancer, leukemia. A total of 126 people of the 80,000 in the study have been so afflicted. This total includes 66 cases who would have been expected to contract the disease even without radiation effects. Clearly, even these massive radiation doses did not set off a cancer epidemic.

THE REAL killers in Hiroshima were blast, heat and fire — not radiation. The only real danger connected with reactors is radiation. The fear connected with radiation may very well have more profound health effects on people than radiation itself. Many people are frightened away from needed diagnostic Xrays or radiation used in therapy, though the radiation treatment is often more promising than surgery.



Three Mile Island: Workers wear protective radiation suits

There is a possibility but not a probability that one single person, years from now, might develop cancer as a result of the TMI accident. Unlike other forms of energy-generation, nuclear energy was not developed until safeguards for human life had been provided. In this we succeeded.

However, we did not succeed in establishing a system that cannot go wrong and damage equipment. To repair the damage to the TMI reactor will cost a minimum of \$400 million. The cost of having to buy oil-generated electricity is much greater.

THE ACCIDENT could easily have been prevented — if the Nuclear Regulatory Commission (NRC) had circulated an earlier report of a similar malfunction (which produced no real damage), as was their responsibility. If the operators had not interfered but had called for help from engineers; if, indeed, the operators had had better training, if the control panel had been easier to read, we would never have heard of Three Mile Island. A major lesson has been learned at the cost of dollars, not at the cost of lives.

Let us train operators better and pay them as well as we pay airline pilots. Let us have in the NRC safety experts, not political appointees. (The same five people who ran the commission at the time of the accident are still in office.)

Let us install computers, not to run the reactor but to stand ready to give advice based on rapid calculations in case of any irregularity. Then reactors will be even safer than they are now.

Two questions remain: Will we become informed about the reality of the energy-related risks that confront us individually and as a nation? Will we make our decisions in time to avoid the real energy-related catastrophes war, national economic privation, unimaginable starvation in the Third World — that now loom as probabilities?

29.

# GENETICS: Maybe Dr. Shockley needs a lesson on biology and people



YOU HAVE to give William Shockley credit for something, and it might as well be for his willingness to expose his real views. He has made no secret of his belief in the genetic inferiority of blacks, and he has not tried to hide his involvement in a sperm bank scheme that sounds like a script from the old "Star Trek" series.

Dr. Shockley was co-winner of the 1956 Nobel Prize for inventing the transistor, but the qualities that make someone a very good electrical engineer do not necessarily transfer to other fields. If they did, the 70-year-old physicist would never have donated his sperm to a California outfit that is trying to concoct a recipe for brilliance.

The brainchild of California optometrist Robert K. Graham, the sperm bank has preserved sperm from five Nobel Prize winners, to be given to women with very high IQs. Says Graham: "My slogan is, the more intelligent you are, the more children you should have." When questioned about all this by the Los Angeles Times, Dr. Shockley, the only identified sperm donor, said, "I'm thoroughly in sympathy with this sort of approach."

But while Dr. Shockley may deserve some dubious credit for sticking his neck out, that is about all he merits. For one thing, he's involved himself in a scheme of doubtful scientific value. Genetics is so far from an exact science that no one knows just exactly what combination of genes is likely to produce a genius — or, for that matter, a dullard.

Many scientists believe environment and nutrition may be as important as genes in the development of intelligence. And since genes are randomly selected in the sperm and egg, the child may not get all the "right" ones, and no child, certainly, will be a carbon copy of his parents. As far as we have been able to determine, Dr. Shockley's parents didn't win any Nobel prizes.



Dr. Shockley: Sticking his neck out

But scientific implausibility is not the only reason to spurn the sperm bank. The idea of impregnating very bright young married women with the sperm of exceptional men to create super-babies is the sort of notion that might have animated a Nietszche or a Hitler.

There is something fundamentally wrong about a theory that defines the "best" people only in terms of IQ. For one thing, no one really knows how to measure intelligence. And, if we did, we might discover that the ability to juggle numbers and concepts is neither the only nor, in some cases, the most desirable kind of mental sharpness.

The survival of the race in the years ahead probably will depend more on the ability to get along with others than on high intelligence, whatever that is. It might make more sense to impregnate women with sperm from gregarious fellows or men born under the sign of Aquarius.

The letter reprinted below in the left column was written in response to an earlier letter in which the writer had referred to the Vietnam War as a "fiasco" and complained that being drafted would interrupt his college education. reprinted below in the right column represents a different point of view about the draft. The editorial in the bottom right corner deals with the causes of inflation. to Sam Fohr, University of Pittsburgh at Bradford, for sending along these examples.

30.

#### Other Voices

This newspaper welcomes letters to the editor. All letters must be signed with the correct full name and address of the writer and should be brief and to the point, preferably not more than 230 to 300 words. If the writer wishes to have his or her name withheld from print, this can be specified after the signature.

No vituperative or actionable material may be printed. The column is designed for discussion of issues and may not be used as a forum for libelous comments.

Dear sir:

In regards to the letter to the editor from "Timmy" who seems to be shaking in his boots at the thought of the draft:

Let me ask you a couple of questions. First, do you think your college education is more important than 50 Americans held as hostages for 90 days in Iran.?

Is your time and effort sitting in college more important than defending the USA?

Was it a fiasco? A fiasco is a clash, a flask, a bottle or a failure. Which one did you mean by fiasco?

Are you really worried about the amount of money and taxes it would cost or are you using that as a crutch?

I'm going to tell you something my son, Joe, said to me when he (luckily) came back to us from that "fiasco."

"Mom, would you rather have us over there, or them over here?"...

Think about that!

My father was a vet. I had three brothers in World War II. My youngest brother was killed there in Sicily.

My husband also was in World War II. Our two sons were in the "fiasco."

We are very happy they both made it home. Joe was wounded twice over there.

I'm very proud to be an American and that my entire family did their share in our tie of need.

Don't think for one minute (while you gather your books to go to your next class) that it is easy on a mother or father, because it was hell.

As for the draft, they should have never stopped it. If you don't want to serve your country, you have that right to leave.

Is the draft really necessary. Your damned right it is!

Irate mother 9/12/80\_

Dear sir:

As a mother of nine children I would like to speak out on the draft everyone is talking about.

I am one that is very much against it. I lost a husband in Korea and if they draft from age 18 to 26 I stand to lose four sons and one

As a mother in poor health I don't think I could take that.

Why can't Carter leave well enough alone and try and find some of our boys still missing or being held some place.

9/12/80

Mrs. L.T.

cording to the Consumer Price Index. which in November went up 12 percent, at roughly the same rate as inflation,

grader knows it.
What is going a than, inflation? According to the Chamber of Commerce of the United States, spending by the federal government continues to increase Government spending. WHAT IS BLACK and white and red all A daily newspaper. Any third up as fast as, or faster

vanced since then? By 105 percent! bas gone up 179 percent in the past decade. could be worse - government spending Who says there is no connection between Inflation? How much have prices Depending on how you look at it, things government deficit spen-

for the government to spend \$547.6 billion, up 11 percent over fiscal 1979's \$493.6 upon two months late by Congress, calls The 1980 fiscal budget, finally The Washington connection

# 33. Hairy subject

# Men with beards could make good study for psychologists

By HILDA FASTMAN Sunday Paper County Editor

Remember when old men had beards and their sons and grandsons were clean shaven? Well, now it seems the reverse is true.

Why so many men are hiding their faces behind hairy shrubbery is one for psychologists to ponder.

Can it be because some men feel women are a threat to their masculinity? What better way to project a macho image than do something a woman can't do—grew a mustache or a full beard.

Also contributing to the hair-raising craze could be the cold weather. There isn't a need to buy a ski mask when you can grow your own.

Vanity often leads men to forsake the clean-cut look. A Van Dyke or goatee can hide a weak chin or cover up a complexion pocked by acne. Unattractive upper lips are easily camouflaged with a healthy growth of hair.

The hairy look came in with the flower children and the drug cuitists in the 1960s. They defied the establishment by letting their hair grow shoulder-length and cultivated straggly beards and droopy mustaches. Some young men who joined the establishment retain their hippie mentality as evidenced by their scuzzy faces. There are few protest demonstrations where the majority of the men are clean shaven.

Have you noticed how stout and



Hilda at Large

rotund men cultivate beards? Could it be they think it detracts from their big beer barrel bellies? There are few tall, lanky fellows walking around with excess growth on their faces.

It may be splitting hairs but most of the bad guys in history and fiction had beards or mustaches. Among these were Brutus, Bluebeard, Blackbeard, Hitler and Stalin. Today the heavies are Fidel Castro and Ayatollah Ruhollah Khomeini.

Defenders of the hairy look invertably bring up bearded Santa Claus and Abe Lincoln to show there are some good guys who rejected the razor. But they are a minority. Such bearded presidents as Rutherford Hayes and James Garfield never held a candle in history to clean-shaven George Washington, Thomas Jefferson, Andrew Jackson, Franklin D. Roosevelt and Harry Truman.

Nobody seems to know when man first started shaving but it is recorded that ancient Egyptians shaved for religious reasons. Greeks wore beards of all sizes and Romans let their beards grow in time of mourning.

Alexander the Great made his

soldiers keep clean-shaven so the enemy couldn't grab them by their beards and shishkebab them with a sword.

God is always pictured with a beard as are Christ and Mohammed. "By thy beard" and "by the beard of the prophets" are well known oaths of truth.

You must admire the determination of the bearded ones who must cope with many obstacles because of the hair on their chinny chin chins. It is amazing how they can eat spaghetti without trapping the slippery pasta in their beards or having the hairs coated with meat sauce.

Eating a dripping ice cream cone can be dangerous. Women who say they like men who have beards must be masochists. It is bad enough to endure whisker burn from smooching with a clean-shaven fellow. Kissing a bearded man leaves a girl with a mouthful of wiry whiskers.

From a safety point of view, beards can be dangerous. If the man with a full beard smokes, he risks setting his hairy growth on fire. Working around machinery can be hazardous.

At last the clean-shaven look is resurging on the fashion scene. Burt Reynolds cut off his mustache and every man who keeps up with the latest fashion trends are following suit.

Perhaps psychologists could tell us that men who hide behind beards are insecure, obstinate chauvinists. They may think they look macho but they really look like the Devil who is depicted with a spade beard.

This column appeared in The Sunday Newspaper (Ohio) in January, 1980. Thanks to Nelson Pole, Cleveland State University, for submitting it.

34.

### Comment & opinion

#### For us or against us

SECRETARY OF STATE Cyrus Vance has laid it on the line for our so-called friends and allies in the free world: if you're not for us, you're against us.

This applies particularly to the Japanese, whose current wave of prosperity, unparalleled in any Asian country, is due to American benevolence and to American protection.

The Japanese seem to forget who won World War II, and what kind of vengeance we might well have extracted from the island empire.

Instead, we put the Japanese in a a sort of protective wrapper under cover of which they have built a mighty industrial organization to rival our own — indeed, Japanese-made goods are the most serious rivals that American manufacturers have.

Moreover, Japan has a tiny military budget. The responsibility for protecting Japan — by treaty — rests with the United States; so, the rain may fall upon the American umbrella but will not wet the Japanese.

We also encouraged and assisted Japanese manufacture and the rebuilding of Japanese industry after World War II, so that it is equal to any European nation.

To be sure, Japan must import all its crude oil. It has no domestic source. But we do not see why the Japanese should be ready to take up the slack in Iranian sales when we have banned the importation of Iranian oil in this country.

There are other sources. The Japanese are acting, in our opinion, like greedy children, fighting over scraps dropped by their elders from the picnic basket.

If we have any ally in this world, that ally should be Japan, for Japan exists today

because of American mercy and a willingness to let bygones be bygones, ignoring the rape, torture and murder inflicted on American soldiers and civilians during World War II.

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One wonders how survivors of the Bataan Death March must feel toward the Japanese at this juncture. Many of them are bitter already at the gentle way we treated the Japanese. Precious few of that nation's wartime leaders paid the price for their atrocities. By comparison, Germany's wartime leaders suffered far more than did the Japanese, and Germany's people, through Allied bombing and occupation, paid a much higher price per capita.

We do not expect slavish bowing to our every whim by the Japanese or any other friend or ally, but we do not expect them to stab us in the back when our attention is fixed elsewhere. It smacks too much of a Pearl Harbor mentality which is supposed to have been relegated to the back closet of history.

The Japanese are a very industrious and clever people who have gone far beyond the mere copiers of other peoples' technology which they were a generation ago. But until the Japanese swing into line behind us in this grave crisis, it behooves us, we feel, to see that Japan understands the situation in the kind of economic terms that it best comprehends.

Those who are not for us in this struggle are against us.

And those who follow their own dictates should consider how far out on a limb the U.S. might go in their behalf should some similar affliction fall upon them in the future.

Thanks to Sam Fohr, University of Pittsburgh at Bradford, for sending us this example.

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