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OPERATION LUNACY

By LESTER DEL REY

Here is a mercilessly pragmatic appraisal of the "merciful armaments" our laboratories are stockpiling, and a question to ponder about weapons and morality.

IT SEEMS probable that some day in the near future mankind may get rid of the only deterrent to major war ever developed and return to our normal routine of horror, loot, rapine and conquest. We've already stockpiled the potential for such atrocities under the name of "merciful" armaments and we're trying to develop others.

The deterrent to war, of course, is our supply—and our opponent's supply—of A-bombs, H-bombs and possibly Cobaltbombs. So long as such things are in existence and there is a chance of missiles to deliver them, the military business of war is virtually impossible.

This isn't the civilian idea of the bombs, to be sure. The average civilian thinks of an H-bomb as the most powerful weapon ever developed. Nothing could be further from the truth, however. Nuclear bombs are almost worthless for warfare, and they have made the conduct of any military operation so dangerous and unpopular that it is temporarily totally impractical.

To a well-schooled military mind, the nuclear bomb has no place in the scheme of warfare. Wars are fought for several purposes. One is to gain territory, which is pointless when all the assets of the bomb-won land are destroyed and the salient points of the territory are too radioactive for occupation for generations. Another aim of war is the taking over of other peoples to

increase one's own might as a world power, or to become the only power. This cannot be done by a destructive means so thorough that no organized population can remain. (Meantime, unfortunately, there is always the danger that some fool underling will somehow trigger such a holocaust.)

That's why some of our best military minds are working overtime on both sides of the ocean to find a mutually-agreeable means of disarming the bombs and disposing of their nuclear dynamite. Unless some deplorable accident happens in the near future, it's a pretty certain guess that they'll be able to rid the world of the chance of nuclear warfare.

And at the moment that earth's last A-bomb is scuttled, the last horrible threat great enough to prevent deliberate worldwide warfare will be gone.

THE CHANCES FOR WAR

HISTORY is full of weapons so horrible as to make war "impossible," such as gunpowder, gas and the tank. A "classic" story of science fiction thirty years ago used monstrous tanks, planes and poison gases to paint almost the same picture of the final war as those imagined as a result of the nuclear forces. But only a few people ever believed

that such weapons would reach through the military ranks and hit them. (Only civilians or soldiers in civilian posts of power make war; military men merely wage it.) But science has been able to draw such a true and convincing sketch of the invisible demons of radiation that much of the civilian population now is too aware of the dangers to permit major war while such weapons remain as a threat. For the first time in history, war is impossible except by madness or accident.

So we'll get rid of the nuclear bombs. But we won't thus get rid of our chance to make war. We've already been farsighted enough—as have other countries—to develop weapons of other kinds but of equal horror. We've even bragged about how well we've succeeded in this. For the past ten years, countless magazine articles have appeared telling of our development of bacteriological or germ warfare and of horrendous nerve gases that can subdue whole nations overnight.

Recently, the Army announced that it had such a large and varied stock of effective nerve gases in its stockpile that it was halting production. When a military branch makes that decision, it means they have far more than enough!

Of course, whenever such weapons are mentioned, there is

a cry that men are too moral to use them. We didn't use gas in World War II, after all, nor in Korea. We didn't use nuclear bombs in Korea, either. I suspect that most people are a little uncertain about everyone's being too moral to drop the H-bomb: after all, we dropped two Abombs on civilian populations. But once some measure of nuclear disarmament has been reached, the "too moral" argument will be brought up about that, too.

The idea of mentioning the word "moral" in the same sentence with nerve gas is so appalling that even Satan must retch. There is no morality even thinkable when such weapons are developed. Calling them "merciful" weapons is precisely like referring to a "clean" bomb, which still releases Carbon-14 with far more lingering and deadly effects than Strontium-90, as our own Senate stated.

MORALITY AND WEAPONS

WE are, however, far too moral about using weapons which are of no military usefulness whatever.

Poison gas, of the World War I type, was a brutal and sometimes effective weapon. It might have been more effective had the airplane been able to drop it massively on civilians. But World War I was a typical war, where the defense for a long time was developed beyond the offensive powers. It was a static warfare in trenches. In the few cases where gas was used in troop movements, it later proved to be more damaging to the side using it than to the enemy. It remained too long, and ruined future operations.

By the time World War II came along, effective gas masks had been stockpiled so well that the use of gas was ridiculous. For the same effort in use, other weapons were far more effective. Bombs against factories and rail centers meant more than gassing civilians. So we didn't use gas, though Japan did in China, where conditions were different.

We'll probably always remain too moral to use bacterial warfare, also, but for an even better reason. There simply is no really useful form of germ in existence or which we have been able to mutate which will do enough damage to others without boomeranging on ourselves to make using it worthwhile.

Bacteria—or germs or even viruses—can be mutated into all kinds of variations, of course. This can be done by radiation, by changing environments, or by transplanting a bit of cell

nucleus from one creature to another. (This substance, known as DNA, is the basic material out of which cell structure and heredity are shaped.)

Like most mutations, however, only a certain number prove sufficiently viable and useful. Some lose the power to metabolize food. Others fail to divide into new cells. All kinds of things happen. Some do fine in the laboratory and die on human skin or in fresh water. Sunlight is lethal to many; others require an atmosphere free of oxygen.

Of those that manage to survive, most aren't aggressive enough. Either the cell must look on man (or some foodstuff of man's) as a host, or it must create a poison he can't tolerate. It must also spread so readily that it will attack most of the population.

Well, such germs have been developed—or viruses with similar powers. And lo and behold, they turn out to be pretty much standard diseases, already known. such as a variant of influenza. Nature has been mutating such cells over and over again day in and day out, during the long years of mankind's development. And out of the countless possibilities, the strongest and most dangerous have been the ones obviously most likely to succeed. If the disease is viable enough to make it suitable for an attack on man, it has probably been in business attacking man for a million years!

But somehow, without sanitation or antibiotics, man managed to survive. Most of the population lived through the bubonic plague and survived cholera during the ignorance of medieval times. Even syphilis, apparently imported from America to Europe, failed to ruin the race; in time, the disease seemed to grow tired and far more mild than it had been at first—which meant man built up a resistance to it.

THE LAST IMMUNITY

THOSE without resistance to such bugs died off somewhere between one million BC and now; those who survived passed on their resistance, from father to son. And man has one final line of defense against even some new variation—or one which has vanished for a few generations, but now remutates, such as some influenza.

Man's blood can perform a delicate chemical analysis on the invading posions and create antibodies. These new cells or substances act much like little caps on threaded pipe; they're tailored to mate the "screw" pattern of the dangerous molecule and plug it up with a totally useless end. Often, the body passes this immunity to future generations.

Nothing could have been much more fiendish than the influenza following the first War. It created havoc. But had it occurred in a country in danger of invasion, the havoc would have been fitted into place without seriously jeopardizing the fighting ability of our nation.

The favorite product mentioned for germ warfare is the poison which is responsible for botulism. But the organism producing this highly deadly poison simply isn't able to cope with the normal environment in large enough quantity to serve as a weapon. Nor is the poison itself so stable that it would not be possible to treat water in ways to destroy it without too much difficulty.

Civilians get very moral about using a weapon which serves no purpose. Military men are less self-deceptive: they simply decide its use is not expedient, except when writing press releases. Also, when a weapon has been worked on for twenty years, with countless stories in the papers and with perhaps some propaganda value as a terror inspiration among other nations, no military man is going to be so foolish as to proclaim his failure to make it work. There will be no announcement saying germ warfare is impossible. It just won't become expedient!

On the other hand, morality

never seems to stand in the way of using any weapon which has a tactical-rather than a terroradvantage. Flame throwers are pretty grim and ugly weapons when turned on a man. We used them. Against a city of paper and bamboo like Tokyo, incendiary bombs are horrendous. We dropped them on the only raid we had sense enough to make during the early part of the war with Japan. For that matter, we dropped two of the nuclear horror weapons on that same Japan. without making too great an effort to pick a military target. We dropped the bombs because we would not accept Japan's surrender on condition she retain Hirohito as emperor; then we finally accepted surrender on just such a condition, though calling it unconditional.

In all fairness, however, it should be pointed out that dropping the bomb was a civilian decision. Perhaps the two billion dollars spent developing the weapon needed justification to a civilian Congress. But that doesn't matter, since most great military decisions today are directed ultimately by civilians.

Nerve gas is an entirely different matter. We have it, without any doubt. We've got immense amounts of it, we know it works, and we have excellent facilities for its use. Or rather, we've got them, since there are many different forms of nerve gases, with many different effects.

NERVE GAS FACTS

THESE are not properly gases at all, in the true meaning of the term. They're aerosol mists, like the vapor that comes out of a pressure can of bug spray. In fact, we might say that the first effective nerve gas was an aerosol mist of DDT, since that acted on the nerves of many forms of insects. Any good military man watching the use of a bug bomb must have dreamed of something like it to use against human enemies. From wish to fact was a fairly short step.

The advantage of the aerosol mist over a true gas is a very great one. In the first place, almost any finely pulverized solid can be suspended in such a mist, as can any liquid which will spray out in fine enough a form. The action of spraying it out by means of a pressurized volatile substance such as the freons then leaves the particles suspended like dust motes in the air, where they may remain for days or weeks.

Just as an example of how simple such a weapon could be, you might imagine suspending ragweed pollen and spraying it in a concentration greater than any occurring naturally! Of course, this wouldn't be a good weapon, since it only attacks a small percentage of the population; but for the susceptible, it would be totally incapacitating.

The first of such "gas" substances actually developed was almost as crude. It was a substance which acted by paralyzing the victim. A number of journals published the details on this, since it was not kept secret; an antidote that could be carried around by everyone was quickly discovered, making this gas almost useless.

That gas of a decade ago was what might have been called a merciful weapon. It was reasonably painless—aside from the fear and horror as a man realized he was being hit by it. It could knock out a population without killing too many, provided medical care was given within a reasonable time. If the antidote hadn't been so easily guessed, it might have become an excellent weapon.

But after that, science reached back into the unknown to come up with pure black magic, in all its ugliest manifestations. From here on, the story stops reading like science fiction and reads like the nightmares of a wizard at the Sabbat! The source of the new knowledge was as unlikely as a true wizard would have been, since the discovery was made by psychiatrists.

Decades ago, Freud had made one of his rare contributions of true insight when he suggested that insanity might have a chemical basis in the body. Now suddenly, a chemical was found which could produce the symptoms of schizophrenia. This was lysergic acid, as reported in the papers. The volunteers who took it developed the symptoms of true temporary insanity. The use of a chemical could induce a psychotic state directly! Other drugs also turned out to have the power, such as serotonin. How many different drugs have been found is largely secret, but they produce all types of equally horrendous reactions.

Here was the substance for a perfect weapon.

definition, the perfect weapon shouldn't kill. A corpse is far less trouble to the enemy than even a wounded man. A man who has gone insane would be better than a normal casualty. since he would foul up the actions of many others. A perfect weapon should also do no damage to enemy harbors, forts, weapons, plants, etc. It should wipe out all effective resistance. but it should destroy nothing of value to the conquerors. Ideally, it should so dishearten the enemy that they would accept conquest and never consider the possibility of resistance after their recovery. HERE in the insanity-producing (or nerve attacking) substances there was the potential of just such a weapon. Military men had speculated on it for years, and considered its requirements so mutually contradictory that it was impossible. Now, out of almost arcane dabblings into men's minds had come the ideal instrument!

The rest is clouded in bits of secrecy. Nobody is going to say precisely what has been done, or what chemicals are used. But the psychologists and psychiatrists who had a hand in creating it couldn't be kept out of things entirely, and they needed some of the stuff to study what drives men mad and how to treat insanity without the doubtful and slow art of analysis. The propagandists have also been given tiny bits of the results obtained. just to keep the other side worried.

One series of pictures was proof enough. The first few frames showed a cat in a cage. A mouse was introduced. The cat moved with beautiful precision, speared the mouse, and proceded about proper feline business. The next sequence was after—quite a while after—the cat had received a mild gas treatment. Again the cat is in the cage, looking confused. Enter

mouse. Cat promptly backs into the furthest corner of the cage, arching its back, baring its teeth and looking like the cat who discovered the world's largest and meanest dog. Eventually the mouse gets used to things and wanders toward the cat. Thereupon, the cat leaps frantically for another corner and goes into convulsions from fear!

This is a series of pictures widely released, and probably represents one of the minor achievements in designing nerve gases!

We were hardly too moral to develop such a gas, it seems. Oh, of course the military branches aren't supposed to be moralthey simply execute the final failure of diplomacy, as the saying goes about war. But I seem to recall that the civilian papers were delighted at our development. And none of the citizens to whom I pointed out the pictures expressed anything but admiration for our cleverness. Good old moral us were now ready to use this stuff to put an end to the immoralities of bad old them!

Merely paralyzing a whole population from planes spraying aerosol mist or U-2's dropping light aerosol bombs might not be more immoral than most war, I admit. I don't quite see how we could move in fast enough with rescue squads to revive most of the victims before they died, but

that's still within the modern theories of warfare on the population at large.

But now let's be more realistic. We have gas which will not directly kill anyone, but will simply render the population insane. That is obviously merciful, isn't it? We don't kill anybody at all and yet we win the war. That is, we do provided they don't have missiles loaded with their gas bombs waiting for instant retaliation.

TARGET: YOU

↑ LL RIGHT. Imagine you're a A citizen of Urbia Dobre. It's a normal day. Then there's perhaps a warning, before planes show up. But fear is replaced by curiosity as the planes spray out something like the vapor used in skywriting and then head away. You breathe a gasp of reliefand your mind begins to twist . . . they're all against you . . . You're awful . . . Maybe you sink to the ground in a catatonic fit. Beyond you, the nice old man from the grocery store goes back for his biggest knife. He has just been inspired by a Divine Message; he must kill all the evil people of this town to purify them. The knife flashes back and forth as he moves down the street smiling beatifically.

The maid in the apartment house has become a hebephrenic.

She chants a singsong rhyme about her mother, turning on the gas. After a time, the odor reminds her of the idea she had. She strikes a match and waits for the big pretty flame.

The manic depressive at the local air base heads for the high test fuel tanks. He knows it's all his fault for everything, and nothing good can ever happen again. He'll have to let outenough gasoline to make a big enough flare so the planes can see him and recognize it's all his fault. Of course, with his luck, that will touch off the stockpile of explosives stored in the big shed and kill the whole base, but what can he do? Nothing ever goes right.

Over the hill, the vacationing general suddenly recalls that he is Napoleon's reincarnation. He must act—act first—immediately. Those missiles under his command must take off at once. Too bad he has no nuclear explosives, but maybe that nerve gas stuff will knock America out. "Now, Boris, don't question my orders! Get that stuff on the way. Of course I'll sign an authorization." Sure, Boris will follow orders. He'd better. No more Waterloos this time!

It would be a picture multiplied by millions of times in any modern country. Fires and auto collisions would desolate the cities and kill even the innocently insane. Murder, torture and berserk sadism would flourish. But it would hardly be fair to accuse anyone of being guilty among the gassed crowds. Surely, if there were such a thing as world law, the men who ordered the gas dropped would have to share all guilt with the men who elected them! It probably wouldn't occur to them, however. An atrocity is what the other side commits on your citizens.

Do the war crimes rules apply to such actions? Apparently, the war crimes precedent would apply, but only to the side that loses. If the attackers won, there would be no trials, but only decorations.

WAR-MADE ZOMBIES

THERE are accounts of an even nicer gas—one which simply paralyzes the will. The man then will act only when some outside order is given. He may not even eat without being told to do so, or until driven by extreme hunger. Once his hunger is sated, he relapses again. Anything told him is true, any order by anyone is valid, like the geas of an ancient magician.

We've had stories of that already, shown in the horror movies. Such things were supposed to occur only in the back country of Haiti. The victims were known as zombies, the living dead. And

even Haiti has severe laws against the practice of creating a zombi.

Such creatures would not even procreate without accidental contact to arouse pure animal reflexes or orders from outside their own minds. But it hardly matters. As human beings—as a people—the pitiful things would already be dead.

There are laws against genocide. But again these laws apply only to the side which loses, or which is small enough to be called to account by other nations. Overruling this legal threat lies the fact that a will-

destroying gas would be the ultimate weapon.

Having made it and threatened to use such a weapon, it's hard to believe morality would prevent our use of it in an emergency. And most people would hardly expect other nations to exercise more morality than we would.

So far, morality has never kept any powerful nation from making and using the strongest weapon possible. Only when one horror of a more efficient type has replaced an older horror is the obsolete method abandoned.

THE END

