ROSALIE BERTELL

Cet article est le dernier que Rosalie Bertell a publié en 2011 avant sa mort en 2012. Elle a colligé les résultats importants de sa recherche sur le développement d'un mouvement secret de géo-militarisme qui a partiellement détruit la vie sur notre planète depuis déjà des décennies. Le dérèglement de la température, les changements climatiques, les catastrophes naturelles toujours plus violentes et fréquentes résulteraient de ces manipulations dans le monde. Au lieu d'enquêter sur cette situation, la récente science de la géo-ingénierie tente de sauver la planète épuisée mais paradoxalement elle propage les mêmes mesures qui ont causé les problèmes. Un débat public s'impose autour de ces nouvelles technologies, mais il n'est pas encore développé.

This is the last article Rosalie Bertell wrote in 2011 before she passed in 2012. In this article, her aim is to gather the most important results of her research about the development of a secret "geo-warfare" that is threatening, and has already partly destroyed, the life systems of our planet. Increasing freak weather conditions, climate changes, and seemingly "natural" catastrophes around the world are the possible result of these undertakings by the military worldwide. Further, a recently appearing civil science of "geo-engineering" today presents itslef as the "saviour" of a planet under stress, paradoxically propagating the same measures that may be at the root of the current climate crisis. A public debate of the background and development of these new technologies has not yet taken place.

We are all children of the universe. Billions of years before we were born, the furnace of the stars made, in prolific abundance, the basic chemicals that are needed for all of life, and the supernovas gave up their lives to make all of the heavier chemicals and trace metal that our bodies need to properly function. More than four billion years ago our planet earth was formed. Not too close or too far from our planet's sun, so that our temperature was just right to support life. Our planet formed a moon, to rule over the night, the water waves and life-giving cycles. Water covered our early planet, forming a chemical soup in which long molecules including the proteins of life were formed of the elements made in the stars. Then the waters receded to the places of oceans and the dry land flourished into grasses, trees, flowers, insects, butterflies, birds, amphibians, animals of all sorts, and humans. How grateful we must be for this magnificent gift of life and all we have needed to sustain it over the last hundreds of thousands of years! Yet, today it is under threats never felt before in its entire unfolding journey.

While the earth's human civic community has been trying to rid itself of nuclear weapons over the last 65 years, some economically developed nations have quietly moved into the realm of geo-warfare. Geo-weaponry has recently been introduced to the public as a "new" high-tech way to mitigate the effects of global warming, and it is being called "geoengineering." Geoengineering is defined as planetary-scale environmental engineering of our atmosphere: that is, manipulating our weather, our oceans, and our home planet itself. The methods that are being proposed in geoengineering are already a reality without public participation in debate, prior public notification, or democratic oversight. They are based on a deep understanding of the earth system, learned through space exploration, and are staggering in number and scope.

Why have these plans not been announced to the public and openly discussed, even in so-called democracies, although geo-experiments have been taking place since the post-World War II period? This question was answered by a geoengineer at the February 2010 meeting of the American Association for the Advancement of Science (AAAS):

...Studies show, however, that people make judgments based primarily on their values, belief systems, world views, and emotions. Facts play a much more minor role. *This gap cannot be bridged by loading the public with facts, or trying to make the public more science literate...*" [my emphasis]

Likely the legal reasons have to do with the fact that no one owns the atmosphere above the earth, and environmental impact studies for atmospheric manipulation are not required by law. One might add that military secrecy is also an essential part of military culture. The implications of these global experiments involve profound impacts on life itself. Clearly the public and their life support system are under attack and no one has clearly considered, laid out and admitted to the potential consequences, nor have they sought a formal permission from the at-risk public.

The Background

Since the Nuremberg trials after World War II, the legal principles guiding experimentation with human beings have been clearly stated. Its very first principle is:

Persons involved should have legal capacity to give consent; and should be so situated as to be able to exercise free power of choice, without the intervention of any element of force, fraud, deceit, duress, overreaching, or other ulterior form of constraint or coercion; and should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him/her to make an understanding and enlightened decision. This latter element requires that before the acceptance of an affirmative decision by the experimental subject there should be made known to him/her the nature, duration, and purpose of the experiment; the method and means by which it is to be conducted; all inconveniences and hazards reasonable to be expected; and the effects upon his/her health or person which may possibly come from his/her participation in the experiment. (Trials of War Criminals)

It seems quite clear to me (although I do not know the legal opinion) that experimentation with one's life support system, the earth itself, is an experiment that fits this definition and requires informed consent.

As early as 1946, the General Electric Company discovered that by dropping dry ice in a cold room one could "create" ice crystals similar to those in clouds. Within months of this discovery they were dropping dry ice from planes into cumulus clouds, converting the water droplets into ice crystals, and then watching them drop onto the earth like snow. By 1950 industry researchers had found that silver iodide had the same effect. The era of weather modification had begun and no one considered the people's right to know and accept this experimentation. Of course, rain was natural, so there was no reason to bother getting permission. The original expressed purpose of rain-making was to make the dry areas of the plain states more fruitful. It is said that Russia used rain-making to cause the fall-out from Chernobyl to drop before reaching Moscow.

The Escalation

In the race to the moon, early in 1958, both the U.S. and the U.S.S.R. cosmonauts discovered the Van Allen Belts, magnetic belts protecting the earth from the destructive solar wind's charged particles. Between August and September 1958, in Project Argus, the U.S. Navy exploded three fission type nuclear bombs 480 km (300 miles) above the South Atlantic Ocean in the lower Van Allen belt. The U.S. Atomic Energy Agency called it "the biggest scientific experiment ever undertaken" (Baldwin). The "experiment" caused worldwide effects creating new artificial aurora borealis. Long-term effects of this incredible destruction, that occurred before the protective function of the Van Allen belts was understood, have never been declassified.

This "great" experiment was repeated a second time over the Pacific Ocean on 9 July 1962 in Project Starfish. Three nuclear "devises," one kiloton, one megaton, and one multi-megaton, were exploded, seriously disturbing the lower Van Allen belt and altering its shape and intensity. Scientists predicted that the belts would not return to their original formation for a hundred years (which may be wishful thinking) (*Comptons 1996, 1998; Microsoft Encarta*, 1999). This so disturbed the Queen's Astronomer in the U.K., Sir Martin Ryle, that he became a staunch anti-nuclear critic.

By 1962, the U.S. military was using electronic beams to ionize and de-ionize areas of the atmosphere in imitation of lightning. In the same year Canada began launching satellites into the earth's ionosphere and chemically simulating the plasma.¹

Later in 1962, the U.S.S.R. undertook similar planetary "experiments," creating three new radiation belts between 7000 and 13000 km (4300 and 8100 miles) above the earth. The electron fluxes in the Van Allen belts have change markedly since this event and have never returned to their former state (*Keesings Historisch Archief*; Harle).

Zhigniew Brazinski, advisor on Foreign Affairs to Presidents John F. Kennedy and Lyndon Johnson during the Viet Nam War, discussed, investigating ways of using artificial lightning as a weapon in Project Skyfire and hurricanes in Project Stormfury. According to Lowell 2000 kg (4400 pounds) of chemicals were dumped into the atmosphere including 1000 kg (2200 pounds) of barium and 100 kg (220 pounds) of lithium. Lithium is a highly reactive toxic chemical easily ionized by the sun. This increases the density of the lower ionosphere and creates free radicals capable of causing further chemical changes (Begich and Manning). Although these experiments are clearly a part of the military desire to control weather as a weapon, reports of their environmental impact are non-existent in the public sector. Instead ozone depletion was

Although these experiments are clearly a part of the military desire to control weather as a weapon, reports of their environmental impact are non-existent in the public sector. Instead ozone depletion was blamed on under arm deodorant and cologne, atomizers and asthma medicine dispensers.

Ponte, author of *The Cooling*, the military also investigated the possibility of destroying the ozone layer over North Vietnam with lasers or chemicals, causing damage to crops and humans.

The Effects

The United Nations General Assembly became so alarmed by these activities that on December 10, 1976, they approved a Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques. However, they failed to exclude "peaceful projects" such as "pure research," solar energy projects or industrial resource development. No thought was given to informed consent of the public. Governments merely changed their public relations posture. As an example, the U.S. began weather research to increase the output of food in the North American plains. Russia was carrying on comparable research to increase food production.

For over 50 years atmospheric modification experiments have been undertaken either by adding chemicals to the atmosphere causing reactions that may or may not be seen from earth, such as artificial aurora borealis ("Northern Lights Thrill"), or wave experiments using heat or electromagnetic force,² or even nuclear atmospheric explosions. These latter interrupt or distort the normal wave motion of the upper atmosphere, often effecting weather changes in the troposphere.

Chemicals dumped into earth's atmosphere included barium azide, barium chlorate, barium nitrate, barium perchlorate, and barium peroxide. All are combustible and destructive of the ozone layer. In 1980 alone, about blamed on under arm deodorant and cologne, atomizers and asthma medicine dispensers.

Actually, it became evident in the early 1970s that the 300 megatons of atmospheric nuclear bomb testing by the U.S., U.K. and U.S.S.R. between 1945 and 1963 had depleted the ozone layer by four percent and had seriously damaged human embryos, fetuses, children, adults, and the whole living environment (*Long-term effects*).

Supersonic military planes and rockets also damage the ozone layer and cause atmospheric changes. This was made public in the evening news during the '70s, and probably influenced the decision of commercial airlines to decline supersonic flight, with the exception of the Concord. However, the public soon looked the other way and forgot the supersonic flight problem and atmospheric nuclear testing when refrigerators were blamed for the serious ozone hole damaging human health and crops in various parts of the world, especially the southern tip of South America. Civilian uses of CFC's exasperated the problem, but were not likely the first cause.

By 1974, U.S. research into heating the lowest edge of the ionosphere first undertaken at the Pennsylvania State University; moved to Plattsville, Colorado; Arecibo, Puerto Rico; and Armidale, New South Wales, Australia. This prompted the U.S. Senate to introduce legislation that would bring all military experimentation in weather modification under the control of a civilian oversight committee. Unfortunately, the bill failed to pass Congress.

In 1981, the Plattsville Ionospheric Heater moved to the Poker Flats rocket launch site in Alaska. A second Plasma Physics Laboratory (exploring the ionosphere) is located at Two Rivers, Alaska, and is called HIPAS (High Power Auroral Stimulation). In the foothills of the Rocky Mountains, near Gacona, Alaska, a massive array of transmitters has been erected, called HAARP (High Frequency Active Auroral Research Program) by the U.S. Army and Navy. It now contains 180 transmission towers in grid formation, although it began operation in a modular form of a 48-tower grid in 1994. There is reason to believe HAARP may further expand to 384 or 720 transmission towers. This powerful synchronized transformer is companioned by a series of SuperDARNS (Dual Auroral Radar climate change." Those who watch the military prepare for a weather war are alarmed.

Most recently, on September 19, 2010, the U.S. Navy undertook an artificial cloud study called CARE (Charged Aerosol Releases Experiment). The Naval Research Laboratory and the Department of Defense Space Test Program used a NASA four-stage Black Brant XII suborbital sounding rocket from Wallops Island, Virginia, to dump aluminum oxide and chaff, creating an artificial cloud in the earth's outer atmosphere at 280 km (174 miles) above

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Networks) that continuously monitors the effects on the earth's surface of manipulations of HAARP on the earth's ionosphere (Bertell 119-128).

It now appears to be possible to "steer" the jet stream, deciding the line between warm and cool air in geographic regions; or manipulate the large vapor rivers that move the rain from the tropics to the temperate zones, causing draught or floods. Natural occurrences or instabilities like monsoons, hurricanes, tornados, etc., in the atmosphere can be made more severe by "adding energy." Insertion of oil in tectonic faults, or creating artificial earth vibrations with electromagnetic pulses can cause earthquakes.

This is not to say that military experimentation causes all atmospheric events and ultimately climate change. I am just saying that it is difficult in each case to separate out the military geo-experiments from the genuine heaving's of the planet. The increase in violent weather is obvious to everyone. Is Mother Earth try to send us a message of distress? Is only the civilian economy responsible for climate change? I think not!

The Future

The U.S. is not the only country involved with this high tech assault on the earth system. At least Russia, China, the U.K., Australia, Canada, and Japan are also involved. The geo-warriors are, I believe, wishing to go public with even more risky experiments, with public approval, and maybe even become "climate change heroes." At the United Nations Conference on Climate Change in Copenhagen, in 2010, geo-warriors made their most public pitch under the guise of "geoengineering" as a "solution to global the surface (normal clouds are at a maximum of about 80.5 km (50 miles) above the surface in the mesosphere). The cloud was designed to glow in the dark. The aluminum will, of course, eventually drop into the ocean or on farmland polluting crop and food supplies. The tests may damage the various atmospheric boundaries that protect life on earth and no one knows what they will do to climate, agriculture, and human health, or if they will alter infrared or UV radiation reaching the planet. The U.S marine breeding habitats, including the National Marine Sanctuary, are at risk from this experiment. Apparently this artificial cloud shading of the U.S. East Coast in the fall of 2009 brought on unusual snow and wintry weather. What else it caused is not reported (Moscovitz; Bernhardt; Peterson; "Night Clouds").

Similar Naval experiments include: the Unified Aerosol Experiment (UAE 2) in the United Arab Emirate in 2004 and Seven South East Asian Studies conducted from Singapore in 2007. The earth has already become a "research victim" of militarism and it is time to stop geoengineering as a cruel farce and crime against life itself. Civil society should clearly not give the geo-warriors a public blessing to do more planetary damage.

Shall we place the healing of our earth in the hands of those who have for over 65 years shown the grossest carelessness of its well-being? Shall we throw away this magnificent planet, like we do cheap plastic trinkets? It is time to honour and protect planet earth as the Indigenous people have done for thousands of years. We must acknowledge our philosophy of life to be faulty since it has brought us to this crisis. It is time to question patriarchy, which implies domination over all living things, and raw capitalism that requires excessive military force to guard its greedy hoarding of natural resources. We sorely need a critical plan for a more intelligent, feminized, and humanized future.

There is great need to stimulate a sober look at our global life style, philosophy, and social planning so that humans, all life, and planet earth may have a long and fruitful era of peace and prosperity. Our sun has some four to five billion more years to bless us with its energy—let's not squander it.

Rosalie Bertell was born in the U.S. in 1929, and passed in 2012, at the age of 83, at her Order "The Grey Nuns of the Sacred Heart" in Pennsylvania. She received her PhD in biometrics from the Catholic University of America, Washington, in 1966. She was awarded nine PhD honoris causa and many awards, among others the Right Livelyhood Award in 1986. She was the co-founder of the International Institute of Concern for Public Health (IICPC) in Toronto (1984) and the International Physicians for Humanitarian Medicine in Geneva (1999). She is the author of No Immediate Danger? Prognosis for a Radioactive Earth (Women's Press, 1985) and Planet Earth: The Latest Weapon of War (Women's Press, 2000). She was a consultant to the U.S. Nuclear Regulatory Commission, the U.S. Environmental Protection Agency, and to Health Canada. Since 1990, she was a member of the U.S.-Canada International Joint Commission (IJC). She has conducted research with institutions in Japan, Germany, popular ecological organizations on the Marshall Islands, in Malaysia, India, and the Philippines. She was also a member of the Permanent Tribunal of Peoples, the International Medical Commission of Bhopal, and the International Commission of Physicians for Chernobyl in Viena (1996).

¹Plasma is a fourth state of matter. Starting with the solid state, followed by the more energetic liquid then gaseous

states, plasma is even more energetic and contains molecules that are dissociated into positive and negative ions. For example, water molecules in air can be converted into HO⁺ and H⁻, positive and negative ions. An example of plasma is lightening.

²The NASA/U.S. Air Force CRESS 1990 Press Kit outlines an atmospheric NASA testing program (linked to HAARP and the U.S. Air Force, that could produce the Vibrant Spectrums (auroras) (cited in Peterson).

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