

## **SYNOPSIS**

- The derivation of the radiative greenhouse effect
- Faults of the derivation
- Paradoxes in the derivation
- Violations of thermodynamics in the derivation
- Empirical contradictions to predictions
- Logical Reality
  - what is the actual greenhouse effect in a real greenhouse?
  - What actually determines the nature of the atmosphere and its temperature?
  - Etc.

## THE CONSENSUS & ONLY DERIVATION

Surface

A SIMPLE MODEL OF THE GREENHOUSE EFFECT

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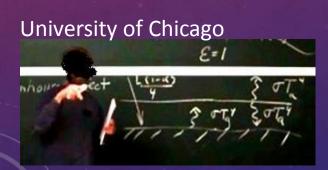
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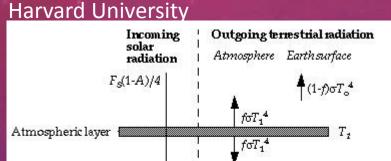
LB. ABSORBING LAYER

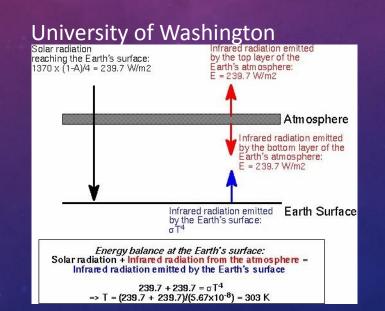
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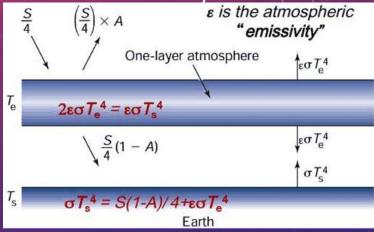
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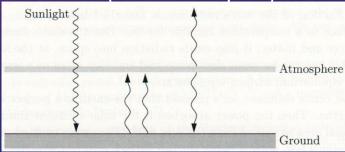




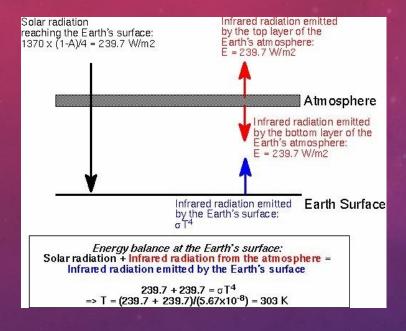
#### Penn State University



#### Schroeder (Thermal Physics)



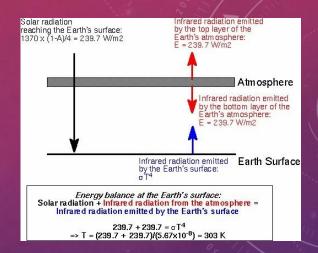
### **FAULT**



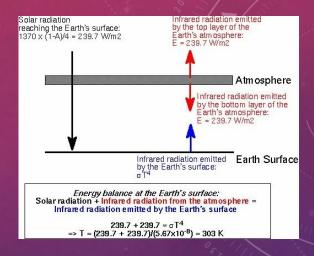
- One Fundamental Problem
  - Do you see it?
- Earth is flat
  - EARTH IS FLAT!
- Why don't you think that that's a problem?
  - It has been a truism of logic for literally thousands of years that if you begin an argument with incorrect assumptions, then your conclusions which follow or whatever you derive in and from that argument will likewise be false.
  - 0 = 0, 1 = 1, true = true, false = false
    - 0 ≠ 1, false ≠ true
    - Does it help for you if it is written as an equation?
    - Earth ≠ flat
- Numbers neither know nor care if you think this is a simplified model – the numbers treat this literally as being what exists
- Neither is this model the "average" system this average is wrong!
- What difference does it make?

## FAULTS & PARADOX

- Given the false premises, what errors are subsequently being made?
- Earth's effective temperature flux is being used as the solar input
  - Conserving energy by equating fluxes over equal areas instead of total energy over unequal input & output areas
  - Dilutes solar input over entire surface (no day & night), thus diluting the temperature forcing potential of sunshine down to -18°C on a blackbody
    - Sunshine can't melt ice?
    - Sunshine doesn't create summer?
  - Absorbed solar constant flux is actually  $1370*(1-0.3) = 960 \text{ W/m}^2 = 88^{\circ}\text{C}$  at zenith
- If the Earth were flat, as shown in the diagram, and the absorbed solar flux was 240 W/m<sup>2</sup> (as shown), then the Earth would need to be 2-times distant than it actually is...
  - This is a PARADOX
  - The derivation of the radiative greenhouse effect is founded upon a <u>paradox</u>
  - It doesn't matter if you claim this is a simplified model the numbers function as if this is what literally exists



### THERMODYNAMIC FAULTS



- Radiation flux from the atmosphere must have to add with the solar flux to make the surface warmer than the -18°C from solar flux
  - So -18°C from the atmosphere adds with -18°C from the sun to make something warmer temperatures from two (cold) sources add together to induce higher temperature...
  - THAT'S FAKE THERMODYNAMICS
  - If you have an ice-wall in front of you, adding another identical ice-wall in front of it it doesn't increase temperature
  - 239.7 + 239.7 =  $\sigma T^4$  is not the Stefan-Boltzmann Law! Erroneous application.
    - S-B Law is that for a given surface T, you get a surface flux  $F = \sigma T^4$  (or if you know the surface F, you can get the surface T creating it)
    - S-B Law does not say that for two objects at -18°C, you will get +30°C!
    - S-B Law does not say that radiation from a cold object can warm up an equal-temperature or warmer object (S-B flux is not heat!)
  - Temperatures/fluxes never add in thermodynamics! The only thing they can do is subtract in which case you get...

#### HEAT

- "Heat is defined as any spontaneous flow of energy from one object to another caused by a difference in temperature between the objects. We say that "heat" flows from a warm radiator into a cold room, from hot water into a cold ice cube, and from the hot Sun to the cool Earth. The mechanism may be different in each case, but in each of these processes the energy transferred is called "heat"." Thermal Physics
- "If a physical process increases the total entropy of the universe, that process cannot happen in reverse since this would violate the second law of thermodynamics. Processes that create new entropy are therefore said to be **irreversible**. [...]

"Perhaps the most important type of thermodynamic process is the flow of heat from a hot object to a cold one. We saw [...] that this process occurs because the total multiplicity of the combined system thereby increases; hence the total entropy increases also, and heat flow is always irreversible. [...]

"Most of the process we observe in life involve large entropy increases are therefore highly irreversible: sunlight warming the Earth [...]." – Thermal Physics

- "Heat is defined as the form of energy that is transferred across a boundary by virtue of a temperature difference or temperature gradient. Implied in this definition is the very important fact that a body never contains heat, but that heat is identified as heat only as it crosses the boundary. Thus, heat is a transient phenomenon. If we consider the hot block of copper as a system and the cold water in the beaker as another system, we recognize that originally neither system contains any heat (they do contain energy, of course.) When the copper is placed in the water and the two are in thermal communication, heat is transferred from the copper to the water, until equilibrium of temperature is established. At that point we no longer have heat transfer, since there is no temperature difference. Neither of the systems contains any heat at the conclusion of the process. It also follows that heat is identified at the boundaries of the system, for heat is defined as energy being transferred across the system boundary." Thermodynamics
- "The temperature of a body alone is what determines whether heat will be transferred from it to another body with which it is in contact or vice versa. A large block of ice at 0°C has far more internal energy than a cup of hot water; yet when the water is poured on the ice some of the ice melts and the water becomes cooler, which signifies that energy has passed from the water to the ice.

"When the temperature of a body increases, it is customary to say that heat has been added to it; when the temperature decreases, it is customary to say that heat has been removed from it. When no work is done,  $\Delta U = Q$ , which says that the internal energy change of the body is equal to the heat transferred to it from the surroundings. One definition of heat is:

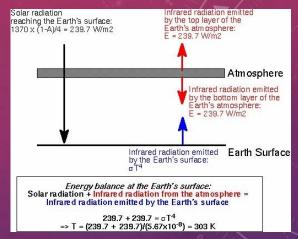
Heat is energy transferred across the boundary of a system as a result of a temperature difference only." – Classical and Statistical Thermodynamics

- "How and why does heat energy flow? In other words, we need an expression for the dependence of the flow of heat energy on the temperature field. First we summarize certain qualitative properties of heat flow with which we are all familiar:
  - 1. If the temperature is constant in a region, no heat energy flows.
  - 2. If there are temperature differences, the heat energy flows from the hotter region to the colder region." Elementary Applied Partial Differential Equations

## THERMODYNAMIC FAULTS

- Heat is now a very well-defined concept in thermodynamics, and it goes to say that if you violate the definition and law of heat flow, then you are violating the Laws of Thermodynamics as these laws are at least partly if not significantly & totally founded upon what heat is and what it can do
- Radiant flux from the cooler atmosphere cannot transfer as heat to the warmer surface
- Schroeder (Thermal Physics) says:
  - "Much of thermodynamics deals with three closely related concepts: temperature, energy, and heat. Much of students'
    difficulty with thermodynamics comes from confusing these three concepts with each other."
  - Indeed, the fact that any object will spontaneously emit thermal radiant energy is being confused with what heat is and when
    energy may or may not behave as heat. That is, just because the atmosphere, or any object, may emit thermal radiant energy,
    does not mean that that energy can act as heat for another object; there is a requirement that for that energy to act as heat, it
    must come from a warmer object.
- There are TWO ways to increase an object's temperature: heat, and work.
  - Radiant flux from the cooler atmosphere serves neither of those causes for the warmer surface it cannot act as heat, and it
    performs no work
  - There is NO MECHANISM by which radiation from a cooler atmosphere can lead to a warmer surface becoming warmer still
- After several thousand years: LOGIC STILL WINS

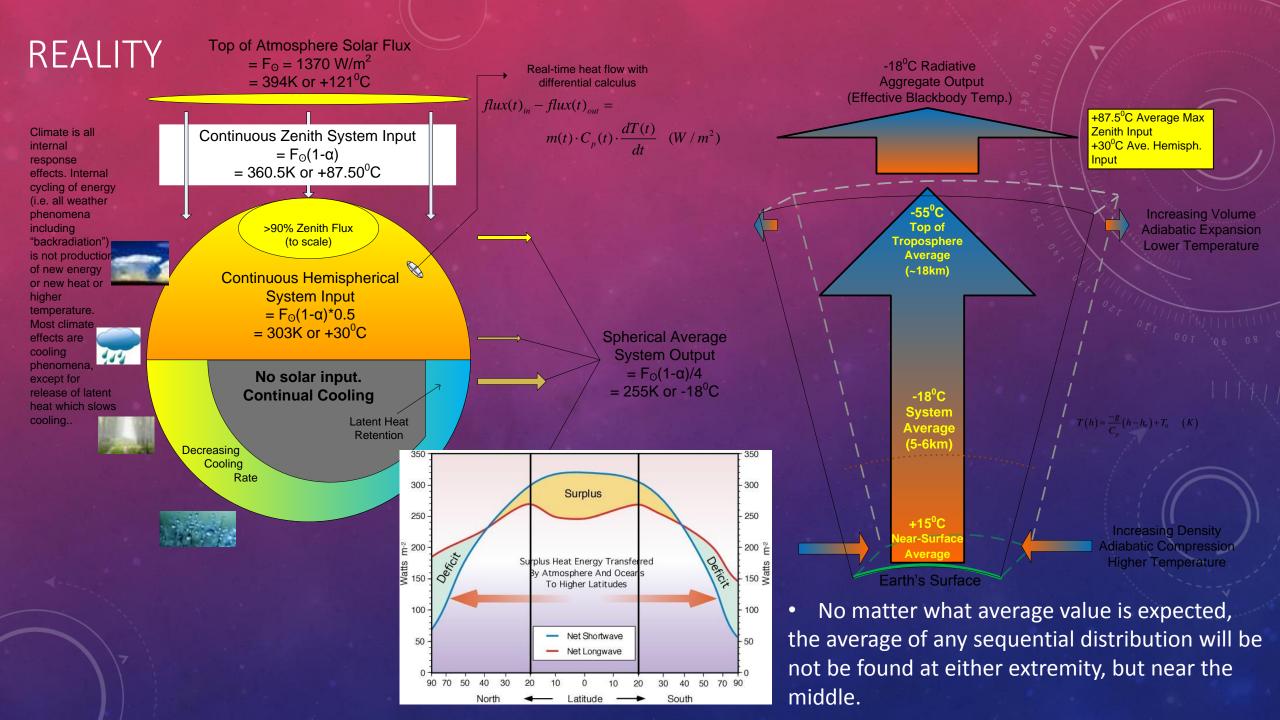
### THEORETICAL & EMPIRICAL FAULTS



- Aside from what was already discussed with "cold sunshine" and flat Earth...
- The radiative greenhouse effect claims responsibility for the temperature gradient in the atmosphere
  - The diagrams and derivation show that radiation from the atmosphere is what causes the surface to be warmer than the atmosphere, hence, the existence of the lapse rate
- However, the lapse rate actually exists and has a cause independent of the radiative greenhouse effect
  - U =  $mC_pT$  + mgh -> dU = 0 =  $C_pdT$  + gdh -> dT/dh = - $g/C_p \approx -10$  K/km (dry lapse rate)(meteorology arrives at same value using a different derivation, but the basic idea is the same adiabatic lapse rate)
  - Factoring in latent heat release from rising "moist" parcel gives the wet lapse rate: -6.5 K/km
- If the radiative greenhouse effect should induce its own additional lapse rate, then we should find larger lapse rates than that calculated above – we don't
  - Measured dry lapse rate is -10 K/km, measured wet lapse rate is -6.5 K/km
  - Aside from the theoretical errors, this single empirical data point totally refutes the RGHE
- Note that when "the strongest greenhouse gas" (water vapour) is present, the lapse rate decreases, not increases, leading to cooler surface temperatures, not warmer

# THE RADIATIVE GREENHOUSE EFFECT DOES NOT EXIST

- The RGHE has neither theoretical nor empirical support. It is a complete chimera.
  - Chimera (http://www.dictionary.com/browse/chimera)
    - "a mythological, fire-breathing monster" (that's apropros)
    - "any similarly grotesque monster having disparate parts" (flat Earth, fake thermodynamics...quite grotesque!)
    - "a horrible or unreal creature of the imagination; a vain or idle fancy" (indeed, that's exactly what it was)
- Its most basic claim of creating a temperature gradient is empirically refuted
- There is no mechanism in thermodynamics by which thermal radiation from the cooler atmosphere could cause a warmer surface to become warmer
  - Does not heat, does not do work, does not lower surface emissivity, does not stop the surface itself from emitting, heat is not a conserved quantity



#### **BAD SCIENCE**

- Gavin Schmidt, "alarmist" NASA Climatologist: "Since 'adiabatic' means without input of energy it seems a little unlikely that it is a source of [atmospheric] heating."
  - Adiabatic means temperature change without heat input because temperature can also change via work!
- Robert Brown, "skeptic" Duke University Physicist: "Radiant heat flow is  $Q = F_{surf} F_{atmo}$ , and since Q is the heat from the Sun given by  $\sigma T_{Sun}^4$  and is constant, then if  $F_{atmo}$  increases,  $F_{surf}$  must increase to keep Q constant".
  - Q, there, is the heat between the surface and atmosphere, not the heat from the Sun!
  - Q is not a conserved quantity that must be kept at some constant value; Q = 0 in thermal equilibrium!
  - $\sigma T_{Sun}^4$  is not heat! That's the Stefan-Boltzmann Law for flux; flux is NOT HEAT!
  - Q from the Sun is actually zero, given that the Sun & Earth are in thermal equilibrium to 1<sup>st</sup> order approx. (aside from short-term & local diurnal variations where sunlight does indeed transfer as heat, but on average, Q from the Sun is zero given that the Sun is not known to currently be changing Earth's global temperature)
  - The "heat" from the Sun, and therefore the temperature of the Sun, is not a function of the difference between Earth's atmospheric & surface temperatures!
- Roy Spencer, "skeptic" Climatologist: "Everything else considered equal, a colder object can make a warmer object warmer-still by blocking heat
  flow from the warmer object; if heat flow is blocked then the warmer object must become warmer to compensate. That's how a thermal blanket
  works. That's the atmospheric (radiative) greenhouse effect."
  - Heat is not a conserved quantity, and actually goes to zero in thermal equilibrium; the colder object will rise in temperature to equilibrium without the warmer one increasing in temperature; the warmer one can't rise in temp if there is to be equilibrium!; If warmer object became warmer because/as it warmed cooler object, thermal equilibrium Q = 0 would be impossible!
  - Heat flow can not be "blocked", because it is spontaneous. If Q becomes smaller, this doesn't mean that the warmer object is emitting any less energy.
  - Radiant emission can also not be "blocked", because it is also spontaneous (Stefan-Boltzmann Law)
  - Thermal blankets work because 1) they trap air which has been heated by the body inside the blanket, thus making the occupant's sensory perimeter *feel* warmer, convection has been prevented the occupant heated the air inside, the air inside did not heat the occupant; 2) they have low emissivity (high reflectivity), thus reducing external radiant emission, and this will increase temperature but is NOT a GHE
  - Aside for more logic win: If GHGs emissive then they cool! RGHE logic of emissivity completely inverted to physics.
- These are some of the most cleverly pseudoscientific, confused, erroneous things that "physicists" can say. And you thought that creationism was pseudoscience? You haven't met real pseudoscience until you've met climate science.

## GREENHOUSE SOPHISTRY, CONFUSION OF TERMS

- "This mechanism is called the greenhouse effect, even though most greenhouses depend primarily on a different mechanism (namely, limiting convective cooling)." – Thermal Physics
  - So then why call it something that it is not?
  - Now, everyone thinks that a greenhouse and the radiative greenhouse effect are the same thing (they're not!)
- The newspeak mechanism of a greenhouse effect is the postulated radiative phenomenon, and hence has been labeled as a
   "radiative greenhouse effect", and the other mechanism is a physical phenomenon involving the physical entrapment of gas,
   which thus may be called a "physical greenhouse effect". The two mechanisms operate on physically distinct principles, and
   so should be named separately as such.
- The physical greenhouse effect operating in actual greenhouses functions by preventing convective replacement of warmed air. In the open atmosphere, air warmed in contact with the sunlight-heated surface will naturally convect and be replaced by cooler air from above; this limits the near-surface air temperature at the bottom of the troposphere to a lower value than if fixed air parcels were heated in place in contact with the surface. That is, the warmed surface-air is constantly being replaced with cooler air from above. By trapping a fixed parcel of air at the surface within its enclosure, a real greenhouse allows the air inside to be warmed to a higher temperature because its air cannot convect away to be replaced by cooler air. Recall that the solar constant is +121°C in effective blackbody flux temperature.
- The glass of a real greenhouse also has lower emissivity than the ground surface.
- This is how your bed blanket works, this is how a thermal blanket works; it is not the RGHE, but the physical GHE
- This type of language manipulation & confusion is sophistry, and pseudoscience. Newspeak.
- The physical greenhouse effect does something thermodynamically rational; the radiative greenhouse effect, as we have seen, fits neither thermodynamic theory nor the empirical results it predicts.

# SUMMARY (1 OF 3)

- Climate alarm and even basic climate science is based in pseudoscience: in physical paradoxes, and violations of the laws of thermodynamics
  - Why doesn't this matter to you?
- The real danger is CO<sub>2</sub> depletion due to geologic forces: photosynthesis ceases below 200ppm CO<sub>2</sub> and for the last few
  millions years that's where planet Earth was almost hovering around and heading towards
  - That would be global extinction. Doesn't that matter to you? Why not?
- By using hydrocarbons as fuel man is replenishing the CO<sub>2</sub> that used to be in the atmosphere but was leached out of it due to the ravages of geologic history
  - This will only get CO<sub>2</sub> to 2-times pre-industrial level
- Earth-life evolved with up to 20-times the CO<sub>2</sub> concentration that we have now, that's what it prefers
  - That's why we go to 5-times concentration in greenhouses to optimize plant growth and it has no effect on their internal temperature, curiously enough (or not so much)
- Science has adopted an anti-human, anti-meaning attitude towards human existence
  - Given that like goes with like, (true = true, false = false, false ≠ true) then that this attitude uses pseudoscience to support itself, the position itself must be illogical and pseudoscientific
- Thus: Life has not evolved over billions of years of struggle and terrible sacrifice & loss to continue existing, just to find itself
  discovering that it is "bad" and shouldn't exist when it gains the ability to think about itself
  - Human development is doing what it is supposed to do not what it is not supposed to do.
- "Carrying capacity" of Earth
  - Was exceeded thousands of years ago, in pre-history, with the very first crop, very first stable, etc. Man engineers his survival
    with his mind; animals subsist with what they accidentally find. What are you? How are you living?
  - Man is the most important & precious & valuable development in evolution EVER! That's an objective scientific FACT.

# SUMMARY (2 OF 3): THE FACTS

#### • It is a <u>fact:</u>

- that the biosphere requires more CO<sub>2</sub> in the atmosphere, not less, not the same as now or that at 100 years ago (if you're interested in the continuance of Earth-life that is...are you?)
- that CO<sub>2</sub> is not pollution, but is one of the 3 basic elements required for life (sunlight, water, CO<sub>2</sub>)
- that it is good that man's activity is replenishing atmospheric CO<sub>2</sub> (if you're interested in the continuance of Earth-life that is...are you?)
- that climate alarm/climate science is pseudoscience, based in flat-Earth woowoo physics & based in paradox at
  the foundational level, and has "low information processing scientists" at the highest official levels on both
  "alarmist" and "skeptical" sides defending it
- that there is no radiative greenhouse effect
- that man always has, always will live beyond the "natural carrying capacity" of the Earth; what's the natural carrying capacity of low-Earth-orbit?, of the moon?, of outer space?
- that the anti-value, relativist, anti-meaning, anti-human ideology which has been adopted by "science" overrides science's *ostensible* desire for truth, and hence will continue to teach flat-Earth woowoo physics knowing this on the one hand, while ignoring it on the other
- that the actual fundamental threat to human existence as we have known it since pre-history is not having more of the source of life (CO<sub>2</sub>), but is having the source of man's subsistence destroyed - that source is his mind, which means his ability to discriminate truth: absolutism over relativism, fact over fiction, value over waste, utility over fraud...merit over bullshit, the real thing over the simulated thing
- climate alarm is an attack on the basis of human existence we survive BY changing the environment!

# SUMMARY (3 OF 3): US VS. THEM

- Both sides claim that the other side presents a threat to reason, science, life, the environment, children, etc...
- Only one side is right
- One side is based in reason, consistency, logic, true proper science, good intention, merit, honesty, etc.
- The other side is based in fantasy, paradox, hysteria, sophistry, pseudoscience, weakness, deception, etc.
- Climate alarm is a quintessential *political leftist* phenomenon
- With the left, one must look beyond the superficiality of the words they use to their actual logical outcome:
  - They pretend to be for the environment, but are actually about total political control over all life and seek the final
    destruction of all human life on the planet; it doesn't matter if they admit it, and they never will, but the outcome of their
    words is a clear fact
  - With communism they pretended to be for equality, but were actually for total control over life and the destruction of
    personal merit, and for a tiny political class of no intrinsic merit composed of meritless people who could never produce
    anything worth another person's labour, who wielded total power, leading to the murder of 100's of millions
  - We see climate alarmist leftist political operatives with no intrinsic merit who could never produce anything worth another
    person's labour jet setting around the planet in high luxury and opulence attending extravagant elite parties beyond the
    reach of the political power of the average person, lecturing to literal serfs and peasants that "they can't have airconditioning and vehicles or else the planet will boil over"!
  - And sometimes they do admit their intention:

- "My...main goals would be to reduce human population to about 100 million worldwide, [&] destroy the industrial infrastructure..." Dave Foreman, co-founder of 'Earth First!'
- "Human beings, as a species, have no more value than slugs." John Davis, editor of 'Earth First! Journal'
- "The extinction of the human species may not only be inevitable but a good thing." Christopher Manes, 'Earth First!'
- "We can't let other countries have the same number of cars, the amount of industrialization, we have in the US. We have to stop these Third World countries right where they are." Michael Oppenheimer, 'Environmental Defense Fund'
- "Isn't the only hope for the planet that the industrialized civilizations collapse? Isn't it our responsibility to bring that about?" Maurice Strong, founder of the 'UN Environment Programme'
- "We've got to ride this global warming issue. Even if the theory of global warming is wrong, we will be doing the right thing..." Timothy Wirth, president of the 'UN Foundation'
- "You think Hiroshima was bad, let me tell you, mister, Hiroshima wasn't bad enough!" Faye Dunaway, speaking as 'The Voice of the Planet', WTBS series.
- "To feed a starving child is to exacerbate the world population problem." Lamont Cole, environmentalist and author
- These are reprehensible statements that people think are funny and which they repeat & love <u>literally worse than Hitler</u>
   but it's liberal and leftist and so it's OK. WTH!? Goblins in Mordor would talk like this...!