The Flames of Hell

(December 2022)

By comparison with the effects of the 15 kT TNT-equivalent nuclear bomb dropped on Hiroshima on August 6, 1945, it can be inferred that the perfectly orchestrated simultaneous and homogenous explosion of all 12,000 existing nuclear weapons, active and inactive, which total 6,000 MT TNT-equivalent (thus amounting to 400,000 Hiroshima *Little Boy* bombs), would have the theoretical potential to kill the entire world population five times over.

However, it is more than likely that all bombs could not be exploded simultaneously and homogeneously in a perfectly orchestrated fashion and that perhaps only 5% could be used effectively. The lethal potential would still be considerable, at one quarter of humanity, probably mostly concentrated in Europe and North America, Patagonians being quite safe. About three quarters of mankind would survive in other parts of the globe, although one would have good reasons to be pessimistic about its overall state of health, before the unavoidable adaptation through natural selection intervenes. Sadly, it is quite likely, if History is to provide any hint, that the survivors and their new warlords will fight to death among themselves for whatever spoils are left behind.

More generally, current literature has widely predicted and described an Armageddon of general incineration over the whole planet, some even predicting that the world would go up in flames instantaneously and nothing would be left of it.





Still, as much as one may lament the terrible harm that would be done to hundreds of millions of people, the predictions of general incineration need to be taken with a grain of salt. As always, let us not lose our sense of proportions.

Refer below to a short table in which the potential warming effects of different energy sources are compared:

| Heat source | Energy input per sq. m of Earth surface | Potential overall atmospheric temperature increase | Notes: |
|---|---|---|--|
| All 12,000 existing nuclear weapons, 6,000 MT TNT-equivalent: | 50,000 J | 0.0008 C | 1% of daily worldwide rain energy; would evaporate a 20 micrometers layer of ocean water |
| 5% of all existing nuclear weapons: | 2,500 J | 0.00004 C | 0.05% of daily worldwide rain energy |
| Annual heat release from human bodies: | 25,000 J | 0.0004 C | Half the energy of all 12,000 nuclear weapons; 10 times the energy of 5% thereof |
| Annual heat release from fossil fuels: | 1,000,000 J | 0.016 C | |

| Annual release of Earth internal heat: | 3,000,000 J | 0.05 C | Mostly through radioactive decay of Earth's mantle |
|---|------------------|--|--|
| Heat release if absolutely all fossil fuel reserves burned overnight: | 60,000,000 J | 1 C | Oxygen drop in atmosphere: 0.3% |
| Heat release if absolutely all vegetation on Earth burned overnight: | 100,000,000 J | 2 C | Oxygen drop in atmosphere: 0.3% |
| Annual irradiance from the sun: | 10,000,000,000 J | 150 C (if no diurnal loss and release) | Sun irradiance amounts to the energy released every single second by the explosion of 2,500 Little Boy nuclear bombs |

It would seem that despite the dramatic localized destruction of life and assets the overall thermal effects would be quite negligible (which is not to minimize the potential side effects of nuclear irradiation on life).

One big casualty would be our disproportionate self-esteem and the very high opinion we have of ourselves and of our destructive muscle, although we wouldn't be there to experience the shame.

On the other hand, the essence of nuclear deterrence being fear, terror, and dread, it is to be expected that the effects of nuclear weaponry be demonized accordingly, especially since no practical non-destructive experiment can be run.

The victims would be ourselves, not the world outside ourselves.

Quiz:

- Which of the mammals below will shed the most sincere nostalgic tear on the demise of Homo Europeanus?
- Will these mammals rather suffer, or benefit from our departure?
- Are their numbers likely to increase, or decrease?

