

Moderní technologie a bezpečnost

Technologie, historie, společnost

5.10. 2016

Jakub Drmola

Dlouhodobé trendy

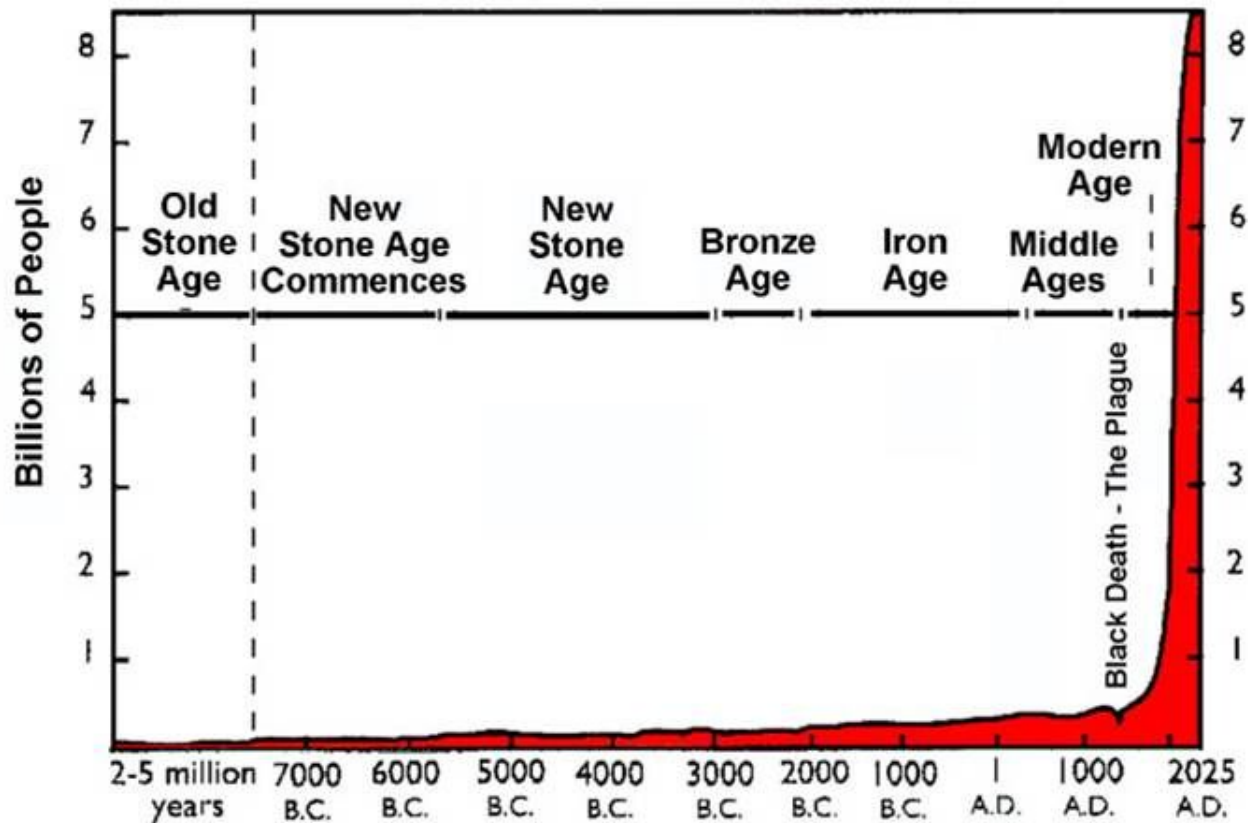
- posun od primární obživy a výroby
- tvorba nových odvětví, dopad na společnost
- role konfliktů
- dlouhodobá nepředvídatelnost výsledků vývoje a výzkumu

Fritz Haber

- 1918 Nobelova cena za Haber-Bosch proces
 - vázání atmosferického dusíku do čpavku (NH_3)
 - asi 1-2% světové spotřeby energie
 - produkce cca 400 milionů tun ročně
- pilíř zemědělství (hnojiva)
 - cca 4x efektivita plochy
 - $\frac{2}{3}$ vyprodukovaného jídla
- předpoklad populační exploze



World Population Growth Through History



From "World Population: Toward the Next Century," copyright 1994
by the Population Reference Bureau

Fritz Haber a WW1

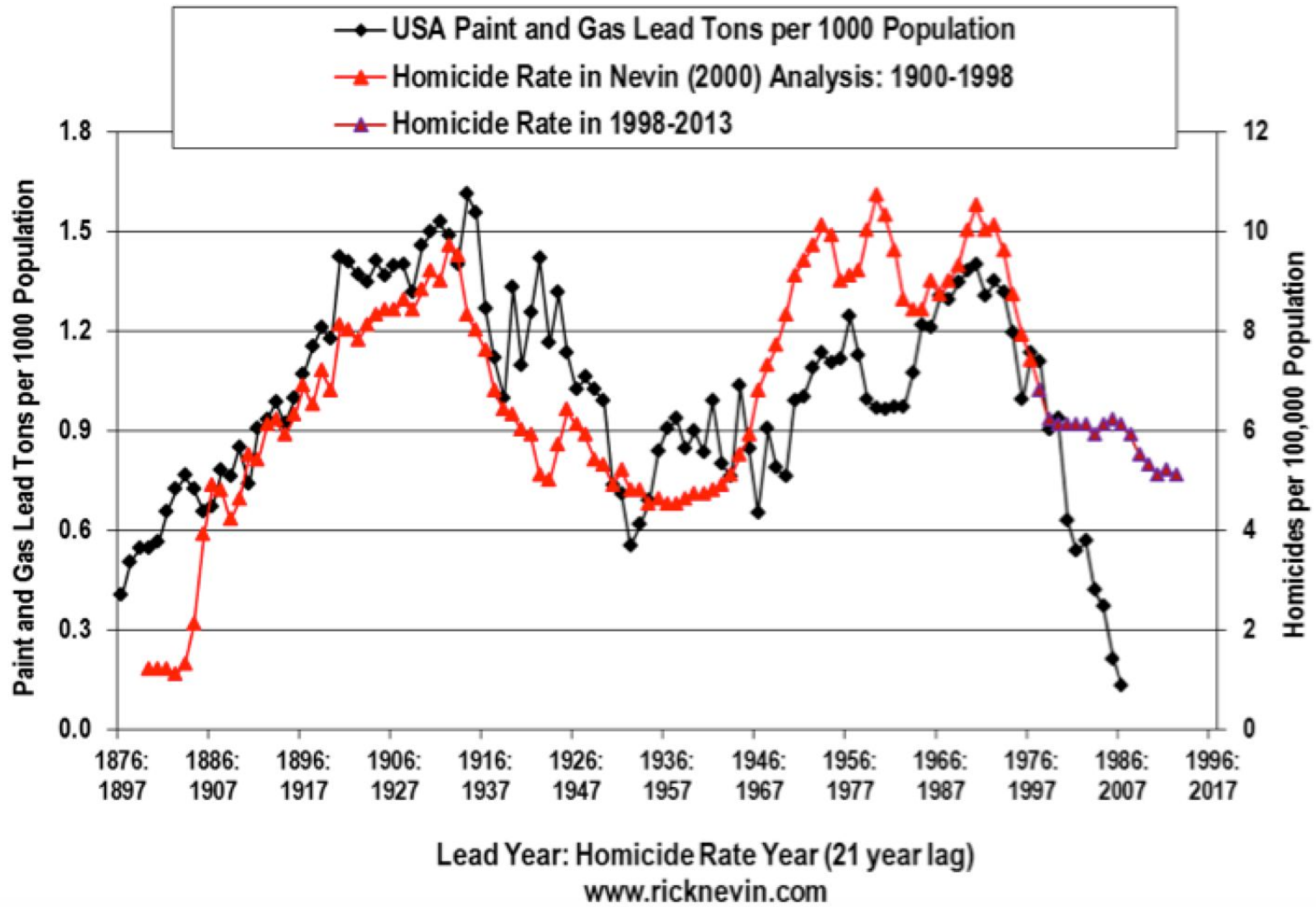
- dusík je potřeba i do výbušnin
- bojové plyny
 - chlor
 - yperit (hořčičný plyn)
- Zyklon A a druhá válka

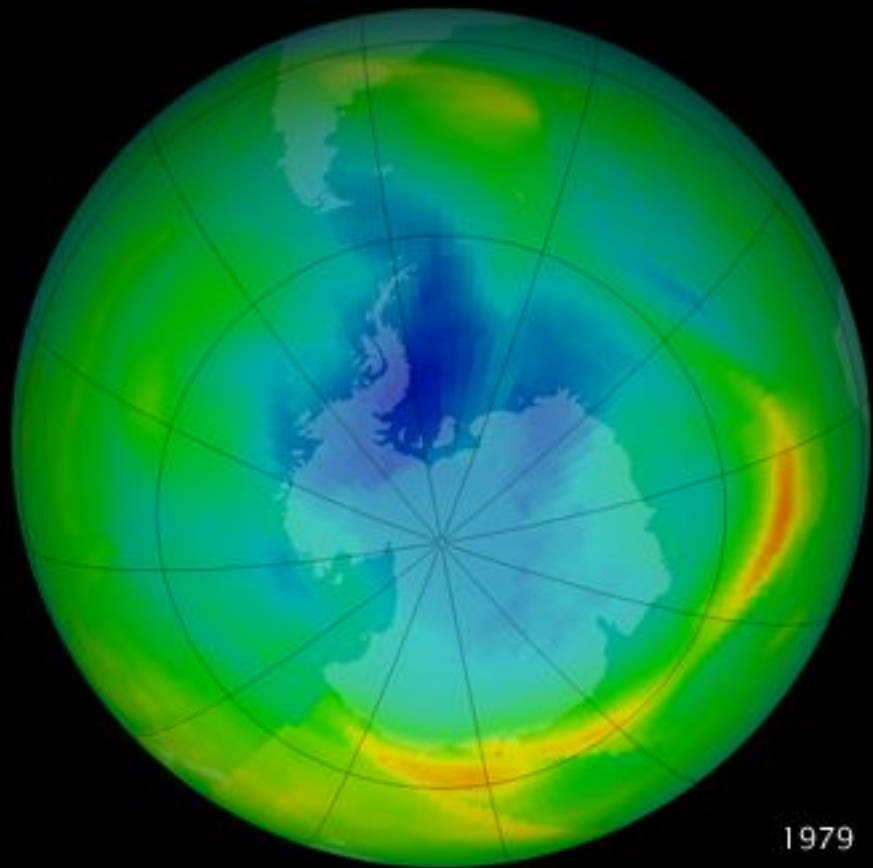


Thomas Midgley

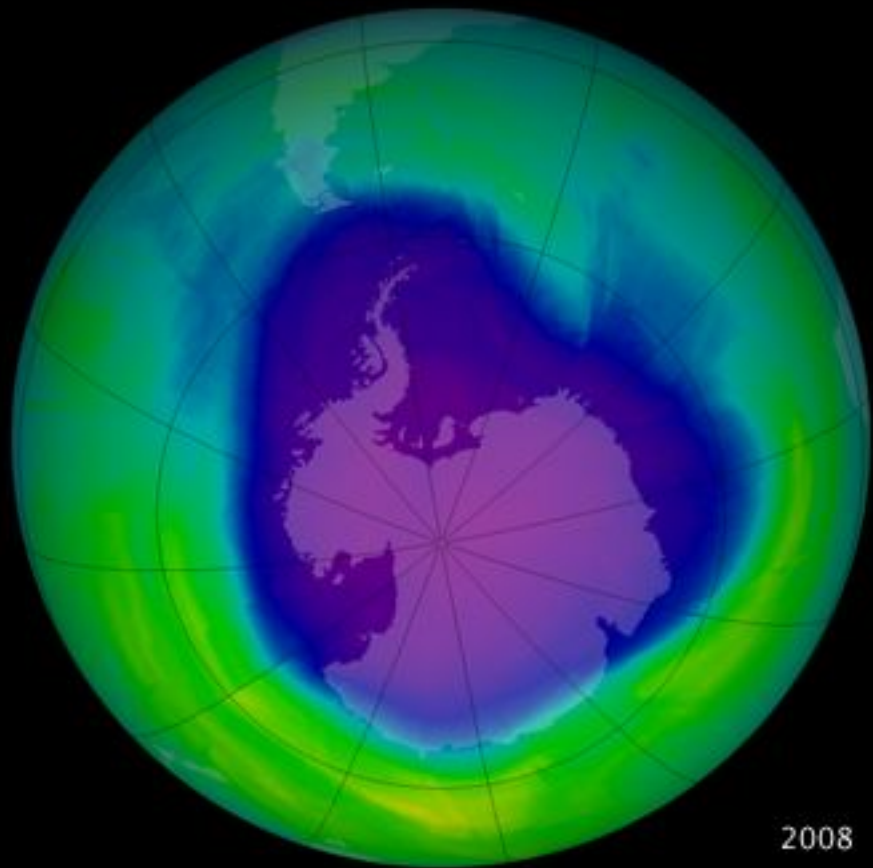
- dekorovaný chemik
- 1921, vynálezce olovnatého benzínu (TEL)
- 1928, vynálezce freonů (CFCs)







1979



2008

"Give your throat a vacation...

Smoke a **FRESH** cigarette"

IF the cigarette you have been smoking stings or burns your throat, switch to Camels and see the difference.

It's the peppery dust left in tobacco by inefficient cleaning methods that makes you cough.

It's the unkindly hot smoke of harsh, dried-out tobacco that burns and irritates your throat.

There is no peppery dust in Camels—that's whisked away by a special vacuum-cleaning process.

There are no stale, crumbly, parched tobaccos—the fine Turkish and mild Domestic tobaccos of which Camels are blended come to you in prime, factory-fresh condition, thanks to the Humidor Pack.

This scientific germ-safe wrapping—not plain ordinary Cellophane, but moisture-

proof Cellophane which costs nearly twice as much—seals in all the natural aroma and freshness, seals it so tightly that wet weather cannot make Camels damp, nor drought weather make them dry.

Camels are milder and more throat-friendly because they are dust-free and fresh.

Give your throat a vacation, switch to Camels for just one day. Then leave them—if you can.

There is CAMEL QUARTER HOUR featuring Menton, Boreano and Easy Wave — Camel Goldcrest, American Jockey Brand — Columbia System — every night except Sunday.



CAMELS

Mild... NO CIGARETTE AFTER-TASTE



Don't remove the moistureproof wrapping from your package of Camels after you open it. The Humidor Pack is protection against dust and germs. In offices and homes, even in the dry atmosphere of artificial heat, the Humidor Pack delivers fresh Camels and keeps them right until the last one has been smoked.



D.D.T.

Powerful Insecticide
Kills Mosquitoes & Fleas

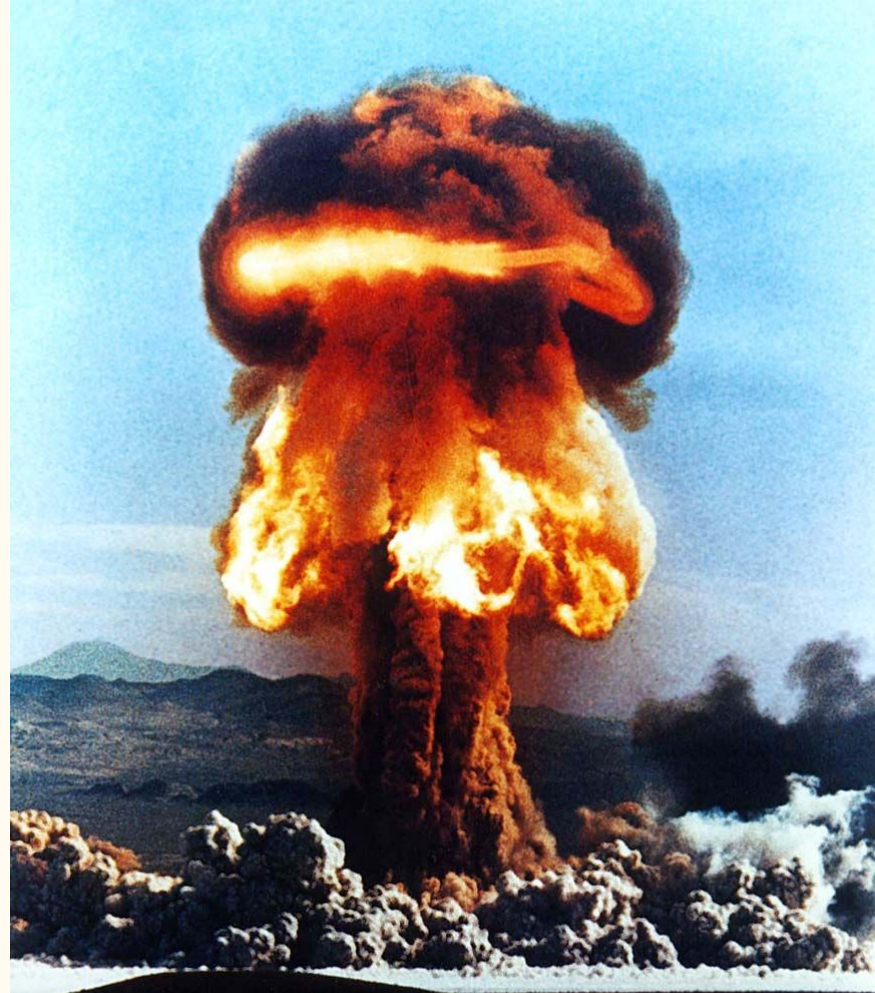
Kills 7000 Insects Per Gallon

Manufactured by
Dow Chemical Company, Inc.
6000 Market Street, Philadelphia, Pa.
U.S. Dept. of Health, Public Health Service



Vývoj jaderných zbraní

- Ernest Rutherford
- Německo vs. USA
 - <http://dai.ly/x24gwgc?start=913> - 15:13-20:13
 - <https://vimeo.com/128088968> - 15:06-21:21
- vnější/vnitřní racionalizace
- dopad na budoucnost
 - Hirošima, Nagasaki
 - Studená válka
 - energetika



Etika a regulace vědy

- kdo je zodpovědný za výsledky?
- lze věda oddělit od politiky?
- kdo by měl rozhodovat o směřování?