THE ABNORMALLY HIGH NON-COSMIC RADIOACTIVITY IN NEANDERTHALS AND THE UNDERESTIMATED EFFECT OF ATOMIC TESTS ON HUMAN POPULATIONS IN CENTRAL AFRICA.

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ABSTRACT. 1) The "great" statistical anomaly of "natural" radioactive radiation. The "natural" radioactive radiation can be separated into two "independent" sources: cosmic one and terrestrial one or non-cosmic one. In order to have an over-optimized human intelligence, the sum of these two "independent" sources has been greatly minimized thanks to the fine tuning of physical constants, thanks to a very particular cosmic formation called the KBC Void and thanks to a very particular planetary formation in the case of the Earth itself.

2) The atomic tests on tropical islands between 1946-1967 (previously evacuated of all human life) have heavily irradiated these tropical islands and have therefore boosted the fungal diseases of tropical living organisms. The mosquito is one of the most mobile & dynamic tropical living organisms and therefore the most sensitive & susceptible to fungal diseases which greatly reinforce the supremacy of static life. Therefore, the atomic tests on tropical islands have had a very positive effect against malaria and all tropical diseases transmitted by mosquitoes.

1. The abnormally high non-cosmic radioactivity in Neanderthals.

The "great" statistical anomaly of "natural" radioactive background. The "natural" radioactive background can be separated into two "independent" sources: cosmic one and terrestrial one or non-cosmic one. In order to have an over-optimized human intelligence, the sum of these two "independent" sources has been greatly minimized thanks to the fine tuning of physical constants, thanks to a very particular cosmic formation called the KBC Void and thanks to a very particular planetary formation in the case of the Earth itself. Cosmic radiation is 0.3 mSv/year and noncosmic radiation of terrestrial origin is 0.7 mSV/year + radon. The negative impact of radioactivity on humanity does not only depend on its absolute value but also on the speed of humanity's evolution, both technologically and societally. The slower humanity evolves, the greater the negative impact of radioactivity on humanity for the same absolute value of radioactivity. The negative impact of radioactivity on humanity was by far the greatest when Neanderthals lived in caves with a very high exposure to radioactive radon gas while having an extremely slow societal & technological evolution. Their exposure to radon was about 5 mSv/year at this critical period instead of 1 mSv/year currently. In other words, Neanderthals were

Date: December 9, 2024.

extremely sensitive to the exposure of radioactive radiations because they were almost smart as us and because they had very little technological progress & societal progress for a better resilience to the exposure of radioactive radiations, while Neanderthals were exposed at least $6\times$ more to radioactive radiations with respect to other primates living in the trees of the tropical jungles. Therefore, the ratio between the cosmic rays and the total "natural" radioactive background was about 0.05, which is extremely "far" from the expected average value of 0.5. In a "reasonable" model of minimizing a sum of independent polynomial random variables, the probability of such a deviation is only 1.85% about. The explanation would then be the need to have a non-cosmic radioactivity much greater than a cosmic radioactivity so that an immense underground nuclear monster can exist and the human species can thus be sufficiently regulated on a small planet despite its extreme intelligence and its extreme use of technologies. 1.85% is also the survival rate of HIV without treatment and it is also the survival rate of humanity during the Cold War.

Remark 01: While the impact of a large radioactive background affects very negatively humanity in the case of an extremely slow societal & technological evolution, a small radioactive background affects positively humanity by facilitating significantly its evolution in the case of an extremely slow societal & technological evolution.

Remark 02 : Since the radon gas has a relatively large solubility in adipose tissues and since ovary are surrounded by Periovarian adipose tissues. Therefore, the radioactive radon gas inside Neanderthal caves can significantly impact the evolution of the whole human genome since the female genitalia has a significant absorbed dose. Indeed, the solubility of radon gas inside adipose tissues is 47% of the maximum solubility of the radon gas that is reached inside the red bone marrow and women have significantly more adipose tissue than men.

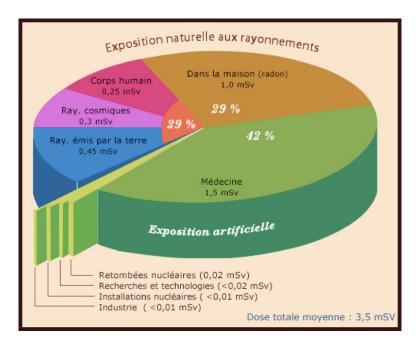


FIGURE 1. Natural sources of radioactivity exposures.

(1) $P(0 \le X_1(\alpha) \le t_1) = Min(1, t_1^{\alpha})$ (2) $P\left(0 \le X_2\left(\beta\right) \le t_2\right) = Min\left(1, t_2^{\beta}\right)$ (3) $u \leq 10^{-3}$ (4) $P(X_{1}(\alpha) + X_{2}(\beta) = u \mid X_{1}(\alpha) \leq t_{1}) = \frac{\int_{0}^{Min(t_{1},u)} \alpha \ x_{1}^{\alpha-1} \beta \ (u - x_{1})^{\beta-1} dx_{1}}{\int_{0}^{u} \alpha \ x_{1}^{\alpha-1} \beta \ (u - x_{1})^{\beta-1} dx_{1}}$ (5) $P(0 \le X_1(2) \le 0.05 \mid\mid 1 - 0.05 \le X_1(2) \le 1 \mid X_1(2) + X_2(2) = u)$ $=2 P(X_1(\alpha) \le 0.05 \mid X_1(2) + X_2(2) = u)$ (7)= 1.45% $P(0 \le X_1(2) \le 0.05 \mid\mid 1 - 0.05 \le X_1(2) \le 1 \mid X_1(2) + X_2(4) = u)$ $\cong P(X_1(2) \le 0.05 \mid X_1(2) + X_2(4) = u)$ (10)

 $\approx 2.26\%$



FIGURE 2. Neanderthal paintings of La Cueva de las Manos, Neanderthal paintings of the Lascaux cave and the large 1937 oil painting "Guernica" by Spanish artist Pablo Picasso. When paintings and art are used as powerful tools to better manage dangers to humans that are not well identified by the scientific knowledge of the time.

The paintings of the Lascaux cave and the Pech Merle cave testify to a rare intelligence for this time and also testify to a minimal level of radon in these caves unlike La Cueva de las Manos. For Neanderthal man and his intelligence, the caves act as real NAZI gas chambers because of the high concentrations of radioactive radon gas. The drawings he painted over time in these caves indirectly testify to the level of his intelligence. Even more indirectly, the drawings that Neanderthals painted over time in these caves also testified to the gaseous concentrations of radioactive radon in these caves affecting their intelligence. The artistic fiber of humanity was therefore a very indirect way of minimizing & measuring its exposure to radioactive radon gas in Neanderthal caves. To "measure" & minimize its exposure to radon, Neanderthals therefore had to try to transcribe as much of their intelligence as possible in their drawings and also had to be able to feel as much as possible the intelligence of others through their drawings. To conclude, the radon in Neanderthal caves therefore forced humanity to overdevelop its artistic fiber, to have a more multitasking intelligence while being more specific, to have a less thick & more wrinkled cortex and thus increasing its mental blindness to the immense underground nuclear monster. Finally, Neanderthals are survivors of a kind of primitive cold war and Neanderthal cave painting has evolved into Disney's modernist art subjuging the immense underground nuclear monster. In conclusion, Neanderthal man is a survivor of a kind of primitive cold war and Neanderthal cave painting evolved into Disney's modernist art allowing the immense underground nuclear monster to be subjugated at certain critical moments.

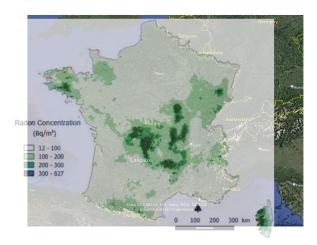


FIGURE 3. Map superposition of the radon concentrations in France and the geographic location of the Lascaux cave with Neanderthal paintings.

2. The underestimated effect of atomic tests on human populations in Central Africa.

The atomic tests on tropical islands between 1946-1967 (previously evacuated of all human life) have heavily irradiated these tropical islands and have therefore boosted the fungal diseases of tropical living organisms. The mosquito is one of the most motile & dynamic tropical living organisms and therefore the most sensitive & susceptible to fungal diseases which greatly reinforce the supremacy of static life. Therefore, the atomic tests on tropical islands have had a very positive effect against malaria and all tropical diseases transmitted by mosquitoes. Indeed, mosquito coinfected by vector-borne diseases and by fungal diseases (boosted & amplified by massive global irradiation) have a motility much more reduced and have much more difficulties to bite the human populations living in endemic areas. Therefore, the population of Central Africa was able to increase sharply just after the atomic tests on tropical islands between 1946-1967 and previously evacuated of all human life. More precisely, the population of Central Africa has a pronounced biphasic growth starting just after the atomic tests in 1946-1967 as it is also the case for the population of India and China. Finally, a significant number of countries were also able to eradicate malaria just after the Fukushima nuclear disaster. Indeed, thanks to a more pronounced global warming and to a lower latitude, the Fukushima nuclear disaster has probably irradiated many more more tropical mosquito spreading tropical Mosquito-borne diseases than the Chernobyl nuclear disaster.

Remark 01: Technical details of the Fukushima nuclear disaster may have boosted & amplified even further the massive irradiation of surrounding mosquito:

Since the Fukushima nuclear accident, over 1.3 million tons of nuclear wastewater have been collected, treated, and stored in an immense tank farm at the plant.

This immense tank farm of nuclear wastewater and its particular design have massively attracted & massively irradiated so many flying insects, including the surrounding mosquito. That effect could be even more pronounced for mosquito since mosquitoes use standing water to lay their eggs and standing water facilitates significantly fungal infections.

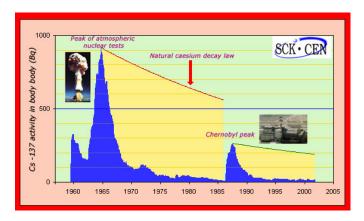


FIGURE 4. Progress of caesium 137 in the human body:

The activity of caesium 137 in the human body has been continuously monitored by the Mol laboratory in Northern Belgium for the past half century. Despite being far removed from the sites of nuclear tests and the Chernobyl accident, one can see very clearly the peaks in activity caused by the tests and, with a smaller magnitude, the peak of Chernobyl. In both cases, the decline of caesium 137 found in the body is much faster than the natural radioactive decline of a 30 years half-life. Even though caesium slowly enters the ground, the faster activity decline in humans has made it unnecessary for the Belgians to decontaminate their soil.

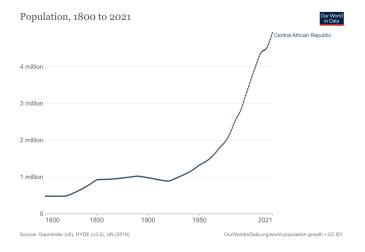


FIGURE 5. Demographics of Central African Republic, Data of Our World in Data, year 2022.

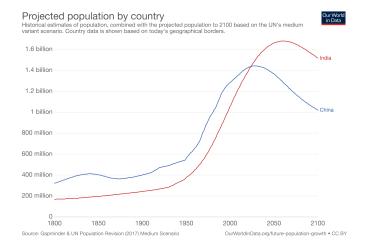


FIGURE 6. Demographics of India and China, year 2017.



FIGURE 7. Atomic test at the Bikini Atoll.



FIGURE 8. Atomic test at the Bikini Atoll.



FIGURE 9. Atomic test at the Moruroa Atoll.



FIGURE 10. Atomic sarcophagus at the Marshall islands.

3. Appendix

1- Did cavemen really live in caves and for how long at a time? More specifically, when and how did the transition from caves to built habitats happen?

Caves are damp and caves are musty but the problem is lack of good alternatives. The earliest constructed shelters were just leaves and bark draped across strategically placed logs - lean-to's and A-frames. They provided a place to crawl in out of the sun, but not much in the way of protection against rain or snow or hail, or even a brisk wind. No protection from predators. And they're not very pleasant, with all the insects that



FIGURE 11. Since the Fukushima nuclear accident, over 1.3 million tons of nuclear wastewater have been collected, treated, and stored in an immense tank farm at the plant.

make their homes in those leaves.

A cave can offer protection as good as a brick house, even against severe storms. And our ancestors didn't just pick any old cave, they chose carefully. Caves above ground level that wouldn't get flooded. And they improved them. You can drive out the damp and musty smell with a few fires, you can clean the debris on the floor and make it more usable, you can make your own light with a fire. You can make it more defensible by narrowing the entrance with piles of stones or thorn bushes. Caves are great for living in, compared to the alternatives.

The downside with caves is that you don't find them everywhere, but then again, human populations were very low compared to today, and there wasn't such a huge competition for the best sites. Another downside is that they tie you to a place, you can't take them with you. But humans were semi-sedentary for a long time before they became sedentary, and they would return to the caves repeatedly during the course of the year. For example, you might not need much shelter during the summer, so you can go foraging far afield or follow the herds. But for the winter, you could come back to your snug little cave and stockpile whatever food you could collect in a more defensible place.

Beginning with the Aurignacian, we see improvements in building technologies, such as the widespread use of animal hides to make tents or huts. But caves didn't go out of style. We have examples of people living in caves right up to historical times.

2- The USSR has likely poisoned its own local population with Russian poisons during some Soviet atomic tests or during some Soviet "nuclear accidents"

in order to stage an extreme danger of radioactivity and to stage a greatly exaggerated danger of radioactivity produced by these nuclear activities. These staged events were very effective in creating a great nuclear phobia in the West and thus, to considerably reduce the exposure of the world population to radioactivity. In this way, the world population remained much more susceptible to Russian viruses. Unknowingly until 1990, Russia thus played a very positive role in reducing the risk of global fungal pandemics by trying to dominate/rule the world with Russian viruses.

The Russian poisons were, for example, alpha emitters that fixed themselves to the bones and liver in order not to expose the genitals to radioactivity and thus, not to create mutations that could make the offspring resistant to Russian viruses.

Country/territory	Countries certified malaria-free ^{a, b, c,} d, e	Countries where malaria never existed or disappeared without specific measures ^f
Africa		
Algeria	2019	
Cabo Verde	2024	
Lesotho		2012
Mauritius	1973	
Seychelles		2012
Eastern Mediterranean		
Jordan		2012
Egypt	2024	
Kuwait		1963
Lebanon		2012
Libya		2012
Morocco	2010	
Qatar		2012
Tunisia		2012
United Arab Emirates	2007	

FIGURE 12. Countries and territories certified malaria-free by WHO.

Europe		
Albania		2012
Andorra		2012
Armenia	2011	
Austria		1963
Azerbaijan	2023	
Belarus		2012
Belgium		1963
Bosnia and Herzegovina	1973	
Bulgaria	1965	
Croatia	1973	
Cyprus	1967	
Czechia		1963
Denmark		1963
Estonia		2012
Finland		1963
France (Metropolitan)		2012
La Réunion (France)	1979	
Germany		1964
Greece		2012
Hungary	1964	
Iceland		1963
Ireland		1963
Israel		2012
Italy	1970	
Kazakhstan		2012
Kyrgyzstan	2016	
Latvia		2012
Lithuania		2012
Luxembourg		2012

FIGURE 13. Countries and territories certified malaria-free by WHO.

Malta		1963
Monaco		1963
Montenegro	1973	
Netherlands (Kingdom of the)	1970	
Norway		1963
Poland	1967	
Portugal	1973	
Republic of Moldova		2012
Republic of North Macedonia	1973	
Romania	1967	
Russian Federation		2012
San Marino		1963
Serbia	1973	
Slovakia		1963
Slovenia	1973	
Spain	1964	
Sweden		1963
Switzerland		1963
Tajikistan	2023	
Turkmenistan	2010	
Ukraine		2012
United Kingdom of Great Britain and Northern Ireland		1963
Uzbekistan	2018	

FIGURE 14. Countries and territories certified malaria-free by WHO.

Americas		
Antigua and Barbuda		2012
Argentina	2019	
Bahamas		2012
Barbados		1968
Belize	2023	
Canada		1965
Chile		1968
Cuba	1973	
Dominica	1966	
El Salvador	2021	
Grenada	1962	
Jamaica	1966	
Paraguay	2018	
Saint Kitts and Nevis		2012
Saint Lucia	1962	
Saint Vincent and the Grenadines		2012
Trinidad and Tobago	1965	
United States of America	1970	
Uruguay		2012

FIGURE 15. Countries and territories certified malaria-free by WHO.

South-East Asia		
Maldives	2015	
Sri Lanka	2016	
Western Pacific		
Australia	1981	
Brunei Darussalam	1987	
China	2021	
Cook Islands		1963
Fiji		1963
Japan		2012
Kiribati		2012
Marshall Islands		1963
Micronesia (Federated States of)		1963
Mongolia		1963
Nauru		1963
New Zealand		1963
Niue		1963
Palau		1963
Samoa		1963
Singapore	1982	
Tonga		1963
Tuvalu		2012

Figure 16. Certification of malaria elimination, 1955–2024:

Countries that have achieved at least 3 consecutive years of zero in digenous cases are eligible to apply for a WHO certification of malaria-free status.

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