3. TSE & Creutzfeldt Jakob as a Result of Airborn Piezoelectric Nanocrystals, Heavy Metal Poisoning and Malnutrition.

Harald Kautz, CEO Aquarius Technologies, member of timeloopsolution consortium

Abstract

< English > Experiments with the transmissible agent of TSE showed that it withstands temperatures up to 800 deg°C, and therefore must be classified as being crystalline. In general the disease is associated to concretions of degenerated protein-prion-macromolecules. More detailed studies revealed that TSE-affected cows show a degeneration of the nervous tissue (protein-prioncopper-chains) that involves dissembling of the protective tubulin commonly caused by mercury poisoning, an extraction of copper from the nerve itself and a re-assembly of ferromagnetic nervous tissue composed of dissociated proteinprion chain-links and manganese, silver, barium or strontium. The newly grown tissue is ferromagnetic in nature, thus it is sensitive to electromagnetic fields, and additionally tends to interconnect to the barium and/or strontium on the surface of piezoelectric, barium based nano-crystals. It seems likely, that this crystal is the entity isolated as the transmissible agent - not the protein-prion chain links that should be destroyed at high temperatures. The crystals found being connected to the disease are compared to crystals originating from jet-engine based spraypyrolysis of particulate plasmas for military applications such as 3D battlefieldmonitoring, radar-range enhancement, columnar focal lenses and horizontal driftplasma antennas, containing piezoelectric (Ba, Sr_x)TiO₃. These piezo-crystals transform both electromagnetic and acoustic waves to electric current, eventually setting off neuroleptic chain-reactions that lead to the typical symptoms observed with TSE cows. Evaluating the overall picture of this pathogenesis parallels are discussed to the concept of self-assembling neuronal nano-bots designed to form artificial neuronal knots as an interface between radio-signals and neuronal activity. Implications are given, regarding the fact that the same condition is described with humans as Creutzfeld Jakob, and that the concept offers space for a symptom-free working-area in which external control of the nervous system might be possible without any symptoms that would be classified as a medical condition. The mechanism is discussed within the ideas of environmental medicine regarding degenerative and autoimmune disease in general.

Abstract

<Deutsch> Experimente mit dem BSE-Erregers haben gezeigt, dass dieser Erreger Temperaturen von bis zu 800°C übersteht, und daher als kristallin eingestuft werden muss. Normalerweise wird BSE mit der Ablagerung degenerierter Protein-Prion-Makromoleküle assoziiert. Detailliertere Studien haben gezeigt, dass BSE-kranke Kühe eine Degeneration des Nervengewebes (der Protein-Prion-Kupfer-Ketten) zeigen, die mit dem quecksilberbedingten Auflösen des schützenden Tubulin beginnt, infolge derer es bei gegebenem Kupfermangel zu einer Extraktion des Kupfers aus dem Nervengewebe kommt, und einer Neubildung von Nervengewebe aus Protein-Prion-Gliedern und Barium- oder Strontium-Ionen. Das neugeformte Gewebe ist ferromagnetisch und daher sensitiv gegenüber elektromagnetischen Feldern. Zudem hat es eine Affinität dazu, sich mit vorhanden Kationen in barium- oder strontiumbasierten nano-Piezokristallen zu verbinden. Diese Kristalle werden mit Piezokristallen verglichen die aus in Flugzeugtriebwerken betriebener Sprühpyrolyse von Partikelplasmen für militärische Anwendungen wie 3D Luftraumüberwachung, Radarreichweitenverlängerung sowie columnar focal lenses und horizontal driftplasma antennas stammen, die zum Teil aus piezoelektrischen (Ba, Sr_x)TiO₃-Kristallen bestehen. Die Piezokristalle verwandeln sowohl elektromagnetische als auch akustische Impulse in elektrischen Strom, der genau die neuroleptischen Kettenreaktionen auslöst, die möglicherweise die typischen Symptome des Rinderwahn ausmacht. Eine Gesamtbetrachtung der Pathologie offenbart eine große Ähnlichkeit mit einem Konzept selbstmontierender neuronaler Nanobots, die ausgehend von synthetischen funksensitiven neuronalen Knoten ein Interface zwischen Funksignal und neuronaler Aktivität herstellen sollen. Die Tatsache, dass dieselbe Pathologie beim Menschen als Creutzfeld Jakob beschrieben wird, und dass es jenseits der offensichtlichen Krankheitssymptome einen symptomfreien Arbeitsbereich dieser Technologie geben dürfte, legt Implikationen bezüglich einer möglichen Agenda hinter den Rahmenbedingungen, die zu dieser Pathologie führen. Der Mechanismus wird im Rahmen der Erkenntnisse der Milieumedizin über die Entstehung der degenerativen Alters- und Autoimmunerkrankungen diskutiert.

Keywords: <TSE> <BSE > <Rinderwahn> <Mad Cow Disease> <Creutzfeldt Jakob> <Dementia> <Parkinson> <environmental medicine> <Milieumedizin> <timeloopsolution> <Harald Kautz-Vella> <Harald Kautz> <timeloop protocol> <timeloop Protokol>

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Please also regard the other publications of this series:

ENVIRONMENTAL MEDICINES APPROACH TO GEOENGINEERING-INDUCED DISEASE

- 1. Do Autism-related Rope-Worms and Morgellon-Fruiting Bodies Display the Same Biotechnological Signature?
- 2. Fiber Disease, Intestinal Pseudo-Parasites, Delusional Parasitosis & Autism.
 The Multiple Facets of the Morgellon Condition Explained.

Including a guideline for diagnosis and a therapeutic protocol.

- 3. TSE & Creutzfeldt Jakob as a Result of Airborn Piezoelectric Nanocrystals, Organo-Phosphates, Heavy Metal Poisoning and Malnutrition.
- 4. Available Diets, Supplements and Remedies to Counteract Candida-Related Diseases, Autoimmune Diseases, Degenerative Old Age Diseases, Conditions out of the Autism-Spectrum and Cancer.

1. Introduction

Since 2004, the qualitative microscopy of rainwater in Germany shows repeating fallout of (Ba, Sr_x) TiO_3 , or crystals with identical electro-optical propertiesⁱ. Due to its nonsolubility in weak acids (Ba, Sr_x) TiO_3 is not detectable with standard environmental analysis. Piezocrystals do not occur in nature, the cheapest method of industrial production is spray pyrolysis during combustion at retrograde temperatures of 750-600 deg C^{ii} , a temperature-drop that is given in standard jet engines during normal flight. Exactly this chemical process is described as chemtrailing by educational papers in use at the US air force academyⁱⁱⁱ, and apparently this technology is airborne since latest 1996 in the United States and since 2003 in the countries that are members of the NATO partnership for peace. In all these countries, the effect of photoionization typical for rare earth-doped barium strontium titanate can be observed at cloud-free night-skies that in most of the days show haze and persistent contrails on the sunny side and a trail-free clear night-sky on the night-side of the sky. Neither water-vapor nor carbon dust photoionizes. (Ba, Sr_x) TiO_3 does.

The effectiveness of the process of nano-particle production in spray pyrolysis is 85% iv, thus 15% of the weak metal salts used as an additive in chemtrailing can be expected to be detectable as Barium or Strontium by standard environmental analysis. The evaluation of both dry and wet deposition collected by Bavarian and Brandenburg stateenvironmental monitoring revealed a relatively new aerosols-source of Barium that can be estimated to 865 tons of Barium per year raining down on the German territory. Assuming that these are the 15% weak chemistry left over from spray pyrolysis, as to be shown in chapter 3.2. the total amount of piezocrystals can be calculated to approx. 14.870 tons per year (assuming a Ba/Sr ratio of 1). Starting from these findings the question arose whether these piezocrystals can cause any damage to health or nature. Regarding plant-life, the crystals can explain retarded plant growth as seen in many areas of agriculture by absorption of 260nm cell-division signals (biophotons), and the occurrence of brown spots on the surface of leaves as a result of electric current set free by the piezocrystals when triggered by terrestrial microwave radiation vi. As to human health, Barium/Strontium-based piezocrystals have been identified by a study as the transmissible agent of mad cow disease (TSE)vii. However, in free nature the medical condition is not caused by the crystals alone, it requires both heavy metal pollution and

bfrom=pubmed on Dec. 16th 2012.

¹ The source of the picture preferes to stay anonymous out of security reasons.

ⁱⁱ Kammler, Hendrik K.; Mädler, Lutz; Pratsinis, Sotiris E.: Flame Pyrolysis of Nanoparticles. WILEY-VCH. Chem. Eng. Technol. 24 (2001) 6.

iii Chemtrails, Chemistry 131 Manual Fall 1990, Department of Chemistry, U.S. Air Force Academy,

^{iv} M. Enhessari, A. Parviz1 K. Ozaee, H. Habibi Abyaneh: Synthesis and characterization of barium strontium titanate (BST) micro/nanostructures prepared by improved methods. Int.J.Nano Dim.2(2): 85-103, Autumn 2011

^v Harald Kautz-Vella: The Chemistry in Contrails. Assessing the Impact of Aerosols from Jet Fuel Impurities, Additives and Classified Military Operations on Nature. OPEN Mind Conference, Oslo 2012. P. 42ff November 2016 online at: http://www.aquariustechnologies.de/veroeffentlichungen.html

vi ehd

vii M. Purdey: Elevated silver, barium and strontium in antlers, vegetation and soils sourced from CWD cluster areas: do Ag/Ba/Sr piezoelectric crystals represent the transmissible pathogenic agent in TSEs? US PubMed, US National Library of Medicine National Institutes of Health Online at: http://www.ncbi.nlm.nih.gov/pubmed/15236778?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_Discovery_RA&linkpos=1&log\$=relatedarticles&logd

a significant undersupply of copper for the animals to develop symptoms recognized as a serious medical condition^{viii}. With humans, the equivalent to TSE is Creutzfeldt Jakob.

The scientific explanation that TSE is caused by misfolded animal proteins leading to autoimmune reactions must be questioned for a couple of reasons. The temperature-resistance of the transmissible agent is one. A second one is that the human form of cannibalism-induced autoimmune-disease is well known and differs a lot from the claimed human form of TSE called Creutzfeld Jakob. Therefor we need to review alternative explanations.

The pathogenesis requires the destruction of the protective tubulin that is shielding the nervous system at the receptor cells, as accomplished by mercury poisoning, and a lack of copper that can be caused either by malnutrition ix, or – as in the case of the 1983 pandemic in GB – by a TCP-containing, copper-pulling chelate that was part of a mandatory treatment given to all cattle of the country. Since 1982 British farmers have been forced by law to treat their cows for warble fly with a pour-on systemic organophosphate called phosmet - originally formulated as a weapon by Nazi chemists during World War II. The money men were soon to realize its profit potential and after the war it was exclusively marketed as an agricultural pesticide by ICI. Later they renamed it to Zeneca^x. Under its influence, the stripped nervous tissue composed of protein-prion-copper-chains dissembles and re-assembles into protein-prionbarium/strontium/silver/manganese-chains, which might interconnect to barium/strontium-based piezocrystals available in the tissue, thus forming artificial neuronal knots that can be triggered by electromagnetic and/or acoustic wavesxi. The biochemistry of this condition was researched and described by M. Purdey on the basis of microscopy of affected cow-brains.

This analysis of the pathogenesis has an structural resemblance to a concept of self-assembling neuronal nano-bots discussed as one possible transhumanistic technology designed to create a read/write interface between radiosignals and the human nervous system. 3D-visualisation of these technologies show a spherical send/receive-unit, with tentacle-like artificial nerve tissue growing on top of this receiver interconnecting with the human nervous tissue^{xii}.

The question arises, whether there is a non-pathological state of this transhumanistic technology below the medical condition found as Creutzfeldt Jakob, that affects a higher percentage of the human population, and thus would be representing a working interface that can be abused to get access to the nervous system of individuals or as a

viii ebd.

ix Hiroshi Tomita: Trace Elements in Clinical Medicine. Proceedings of the Second Meeting of the International Socienty for Trace Element Research in Humans (ISTERH) August 28-September 1, 1989, Tokyo. Springerverlag, Tokyo, Berlin, Heidelberg, New York, London Paris Hong Kong 1990. P. 467.

 $^{^{\}rm x}$ Purdey M.: Ecosystems supporting clusters of sporadic TSEs demonstrate excesses of the radical generating divalent cation manganese and deficiencies of antioxidant co factors Cu, Se, Fe, Zn. Does a foreign cation substitution at prion protein's Cu domain initiate TSE? High Barn Farm, Elworthy, Taunton, UK. Med Hypotheses 2000 Feb;54(2):278-306

xi M. Purdey: Elevated silver, barium and strontium in antlers, vegetation and soils sourced from CWD cluster areas: do Ag/Ba/Sr piezoelectric crystals represent the transmissible pathogenic agent in TSEs? US PubMed, US National Library of Medicine National Institutes of Health Online at: http://www.ncbi.nlm.nih.gov/pubmed/15236778?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_Discovery_RA&linkpos=1&log\$=relatedarticles&logd bfrom=pubmed on Dec. 16th 2012.

 $^{^{}m xii}$ Nanobot replacing neuron. Original 3D animation by http://www.cg4tv.com/nanobot-neurons-3d-animation.html

measure of collective mind control.

2. Method

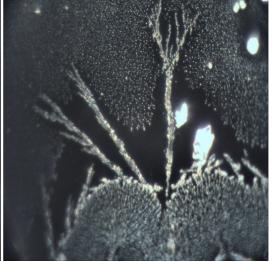
The ideas presented in this paper are mainly based on the work and understanding of M. Purdey, who at the time of the mad cow pandemic in GB in 1983 was running an ecological farm with a herd of cattle. Purdey back then refused the mandatory lice treatment for his cattle and as a result did not loose a single of his own cattle to the mad cow disease, while 4 newly acquired animals that had received the treatment died. From there on, he started his research to understand the disease and the reason why his cattle survivedxiii. When I discovered Purdeys work, my own background was in environmental monitoring, related to the damage caused by piezo-crystals to plant-life. I already had gathered a deeper understanding of the electro-optical properties of the crystals mainly derived from their role in military technologies and other high-tech applications like 4-beam coupling laser holography, as well as the interference of these materials with biophotons. Once becoming aware of the structural analogy of the medical condition (TSE/Creutzfeldt Jakob) and the concept of the transhumanistic technology, the parallel brought to discussion in this article is obvious.

3. Results

3.1. Detection of piezocrystals in the environment

The following pictures were taken from dried raindrops collected in Germany during the years 2004-2015. They are single but representative examples out of a history of monitoring that gathered thousands of pictures. The source wants to stay anonymous for security reasons, using the name *soyez humain* as a reference.





6

xiii Compare Mark Purdeys wikipedia file, at https://en.wikipedia.org/wiki/Mark_Purdey

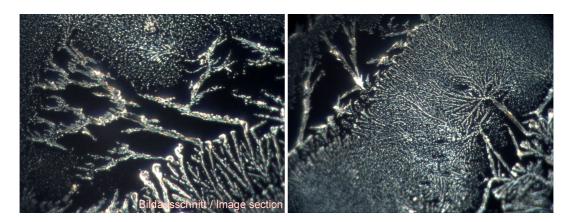


fig. 1-4: Four typical pictures of rainwater-microscopy conducted with a resolution of 1:5000. The crystalline structures are in the micron- and nanoscale. The self-organization of the crystal during the drying of the drops shows some kind of electromagnetic property that makes the crystals behave like little magnets aligning to each other.

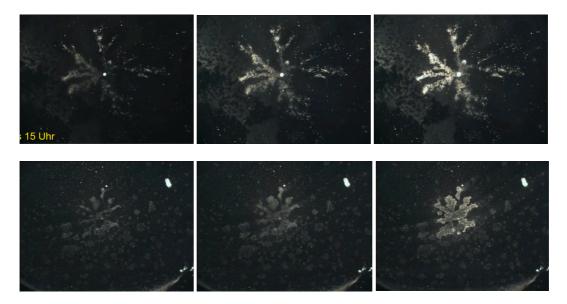


fig. 5-7; 8-10: These pictures are screenshots taken from film-sequences of dried raindrops. When the probes were exposed to the body-heat radiated from the tip of the scientist's finger, the crystals started glowing in white light. This effect can be explained by the ability of rare earth doted (Ba, Sr_x) TiO_3 to up-convert incoming photons, converting infrared to visible light.

This is a private publication with no commercial background.

Still, copyright fees for the pictures used need to be paid and sum up to an amount of several thousand dollars.

I decided to take this step, hoping that people who appreciate this work will be willing to contribute with donations to cover these copyright costs.

If you feel like contributing, please use the paypal-account with the eMail: kautzvella@gmail.com

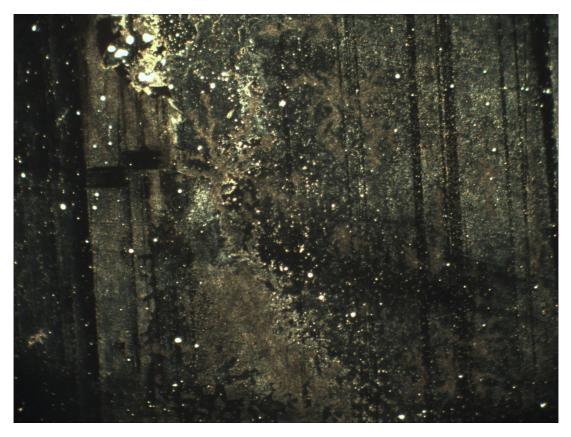


fig. 11: This slide shows the ability of the crystal-clusters to process binary and rectangular field structures as emitted by the associated cloverleaf antennas controlling the military technology associated to the crystal clusters in the sky.

Wikipedia describes the crystals properties as follows:

Barium titanate is a dielectric ceramic used for capacitors. $BaTiO_3$ ceramics with a perovskite structure are capable of dielectric constant values as high as 7,000; other ceramics, such as titanium dioxide (TiO_2), have values between 20 and 70. Over a narrow temperature range, values as high as 15,000 are possible; most common ceramic and polymer materials are less than 10.

It is a piezoelectric material for microphones and other transducers. The spontaneous polarization of barium titanate single crystals at room temperature range between $0.15~\text{C/m}^2$ in earlier studies, and $0.26~\text{C/m}^2$ in more recent publications, and its Curie temperature is between 120~and~130~°C. The differences are related to the growth technique, with earlier flux grown crystals being less pure than current crystals grown with the Czochralski process, which therefore have a larger spontaneous polarization and a higher Curie temperature.

As a piezoelectric material, it was largely replaced by lead zirconate titanate, also known as PZT. Polycrystalline barium titanate displays positive temperature coefficient, making it a useful material for thermistors and self-regulating electric heating systems.

Barium titanate crystals find use in nonlinear optics. The material has high beam-coupling gain, and can be operated at visible and near-infrared wavelengths. It has the highest reflectivity of the materials used for self-pumped phase conjugation (SPPC) applications. It can be used for continuous-wave four-wave mixing with milliwatt-range optical power. For photorefractive applications, barium titanate can be doped by various other elements, e.g. iron.

Thin films of barium titanate display electrooptic modulation to frequencies over 40 GHz.xiv

 $^{
m xiv}$ Compare wikipedia entry on Barium titanate: https://en.wikipedia.org/wiki/Barium_titanate

Piezocrystals are crystals with two distinct possible crystallographic geometries, rectangular and rhombic, both stable at room temperature, which can be switched by interaction with the surroundings. Stress and strain, light and other electromagnetic fields as well as applied current can be transformed by the crystal into a different expression out of the list of given possible interactions. The most common applications are the conversion of stress to electricity and of alternating current to sound pressure piezo-loudspeakers). This list includes photoionization, i.e. taking light in and expelling currentxv. With rare earth doped varieties, another electro-optical property is described as the ability to up-convert photons^{xvi}, which means taking in a number of photons in a row, and then emitting the total energetic content of the stored light as one single photon of double or triple frequency. These single photon emissions are longitudinal in character (being one traveling wave-front only) and this enables the crystal to show more exceptional properties used in non-linear optics. The term self pumped phase conjugation (SPPC) relates to higher-dimensional physics as researched in non-linear optics, including beam coupling, i.e. optical interference and partly annihilation of two or four light beams opening physics into a 4D space with variable scalar potential (annihilated fraction of the electromagnetic field density) as a forth dimensionxvii. The

xv Robert W. Boyd: Nonlinear Optics. Academic Press. Boston, San Diego, New York, London, Sydney, Tokyo, Toronto 1992. P. 415.

Yunxin Liu, Wojciech A. Pisarski, Songjun Zeng, Changfu Xu and Qibin Yang: Tri-color upconversion luminescence of Rare earth doped BaTiO3 nanocrystals and lowered color separation. Institute of Modern Physics, Xiangtan University, Xiangtan 411105, China, Institute of Chemistry, University of Silesia, Szko

lna 9, 40-007 Katowice, Poland, Key Laboratory of Low dimensional materials and application technology, Ministry of Education, Xiangtan 411105, China.

As a transhumanistic concept: G. Chen, T. Ohulchanskyy, A. Kachynski, H. Ågren and P.N. Prasad: Intense Visible and Near-Infrared Upconversion Photoluminescence in Colloidal LiYF(4):Er(3+) Nanocrystals under Excitation at 1490 nm. ACS NANO 5, 4981, 2011.C. Yuan, G. Chen, P.N. Prasad, T.Y. Ohulchansky, Z. Ning, H. Tian, L. Sun and H. Ågren: Use of colloidal upconversion nanocrystals to energy relay solar cell light harvesting in the near infrared region. J. Mat.Chem. 22, 16709, 2012

VIJAYALAKSHMI, R.; RAJENDRAN, V. (Department of Physics, Presidency College, Chennai, TamilNadu, India): SYNTHESIS AND CHARACTERIZATION OF CUBIC BaTiO3 NANORODS VIA FACILE HYDROTHERMAL METHOD AND THEIR OPTICAL PROPERTIES. Digest Journal of Nanomaterials and Biostructures. Vol. 5, No 2, May 2010, p. 511 – 517.

xvii J.C. Maxwell: A Treatise on Electricity and Magnetism, in 2 Volumes, Oxford 1873, 2nd edition1881 (Publ. by W. D. Niven), compared to 3rd ed. 1891 (Hrsg. J. J. Thomson).

See also:

E. T. Whittaker, "On the partial differential equations of mathematical physics," Mathematische Annalen, Vol. 57, 1903, p. 333-355. 11 V.K. Ignatovich, "The remarkable capabilities of recursive relations," American Journal of Physics, 57(10), Okt. 1989, S. 873-878.

E. T. Whittaker, "On an expression of the electromagnetic field due to electrons by means of two scalar potential functions," Proceedings of the London Mathematical Society, Series 2, Vol. 1, 1904, p. 367-372.

Amnon Yariv, Optical Electronics, 3rd edn., Holt, Rinehart and Winston, New York, 1985. Chapter 16: "Phase Conjugate Optics - Theory and Applications."

David M. Pepper, "Nonlinear optical phase conjugation," Optical Engineering, 21(2), März/April 1982, S. 156-183. S. 156.

David M. Pepper, "Applications of optical phase conjugation," Scientific American, 254(1), Jan. 1986, p. 74-83. Especial regard the visual proof for time reversal. On p. 75

Carl Barus, "A curious inversion in the wave mechanism of the electromagnetic theory of light," American Journal of Science, Vol. 5, Fourth Series, May 1898, p. 343-348

T. E. Bearden and Walter Rosenthal, "On a testable unification of electromagnetics, general relativity, and quantum mechanics, Proceedings of the 26th Intersociety Energy Conversion Engineering Conference (IECEC '91), Aug. 4-9, 1991, Boston, Massachusetts, p. 487-492.

xvi Upconversion as a transhumanistic concept:

concept is of importance when it comes to the creation of an interface to biological entities, that process part of their biophoton-household (also single photon emissions)^{xviii} in the annihilated state^{xix}. The crystals have the power to interact with this light while being in the annihilated state of physics.

At this point it is important to realize that especially the ability to up-convert photons as shown by the pictures above is only given with rare earth doted varieties of barium strontium titanate, that do not occur in nature. Rare earth doting requires elements like europium and/or yttrium, which hints to a technological background that must be linked exactly to the properties of the doped crystals i.e. the technological possibilities they offer.

3.2. Calculation of total amounts

During the last decades various state institutes have analyzed dry atmospheric deposition (dust) and heavy metal content in organic matter (wet deposition), mainly by testing either dust deposition in a container covered by a roof to be protected from rain or by standardized grass samples grown for a period of 4 weeks. This study refers mainly to publications of the Landesumweltamt Brandenburgx and the Bayerisches Landesamt für Umweltx, two regional state authorities, and a few minor sources like ash analysis of biomass power plants run on grass. These measurements are available up to the year 2011. Due to the fact that the national Bundesumweltamt has since 2012 decided to only fulfill the "UN ECE Convention on long-range trans boundary pollution" and the EU law "Richtlinie 2008/50EG from May 2008" the national institutions are today not monitoring barium, strontium and titanium anymore.

The review of all the official barium deposit measurements available online showed a *decrease* in dry deposition by more than 90% during the last 15 years and in the same period of time an estimated *increase* of wet deposition of barium by close to 100%. This complete opposite development is remarkable. Dry deposition derives mainly from industrial pollution and uptake of dust from the ground. Wet deposition is associated to aerosols. Younger official data than 2011 are not available from official sources.

Robert G. Sachs, The Physics of Time Reversal, University of Chicago Press, Chicago, Illinois, 1987

See also

Bajpai Ram P.: Quantum coherence of biophotons and living systems. Indian J Exp Biol. 2003 May;41(5):514-27.

Korotkov K. Measuring Energy Fields. Proceedings of the International Conference "Vastu Panorama", Indoor, India, 2008.

Korotkov K. General principles of electrophotonic analysis. Proceedings of the International Scientific Conference "MEASURING ENERGY FIELDS", Kamnik, Tunjice, 2007, pp. 87-92.

Korotkov K., Williams B., Wisneski L. Biophysical Energy Transfer Mechanisms in Living Systems: The Basis of Life Processes. J of Alternative and Complementary Medicine, 2004, 10, 1, 49-57.

xx Landesumweltamt Brandenburg: Staubniederschlag und Niederschlagsdeposition. Studien und Tagungsberichte Band 36. Studien und Tagungsberichte, Schriftenreihe des Landesumweltamtes Brandenburg ISSN 0948-0838.

xxi Bayerisches Landesamt für Umwelt: Lufthygienischer Jahresbericht. See also: Bayerisches Landesamt für Umwelt: 30 Jahre Immissionsökologie am Bayerischen Landesamt für Umwelt

xviii Nissen, Ted M.A. M.T.: Ultra-weak Photon (Biophoton) Emissions (UPE)-Background Introduction, Copyright © September 2006 Ted Nissen, online October 23rd 20012 at http://www.anatomyfacts.com/research/photonc.htm

xix Bajpai Ram P., Bajpai PK, Roy D.: Ultraweak photon emission in germinating seeds: a signal of biological order. J Biolumin Chemilumin.1991 Oct-Dec;6(4):227-30.

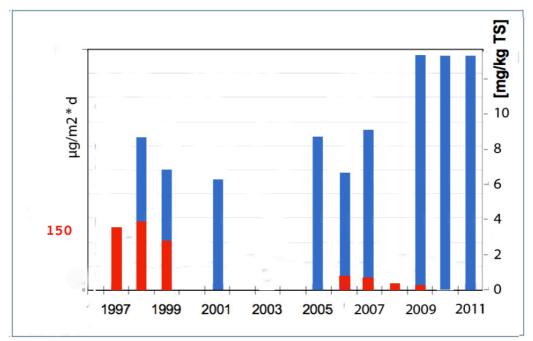


fig. 12: Comparison of wet (blue) and dry (red) deposition of Barium in Germany between 1997 and 2011. The data come from state-environmental monitoring in Bavaria and Brandenburg. Due to the different methods of measurement, the two scales are not comparable in total numbers, still the difference in tendency allows to draw a number of conclusions.

For 2012 we based the statistics on 60 available rain samples taken by private persons analyzed in certificated labs. These samples were collected and controlled by the initiative "Sauberer Himmel e.V.".

These findings need to be reviewed against the background of strongly reduced pollution by all other metals. The following graph shows lead as an example.

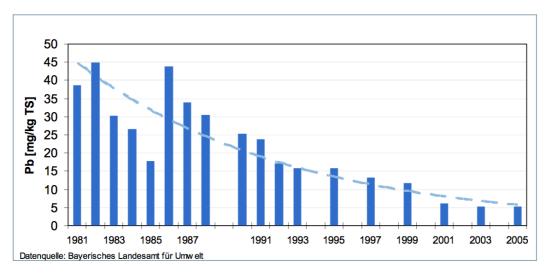


fig. 13: Lead in mg/kg dried grass samples (wet deposition) over the last 3 decades.

Both strontium and titanium have hardly been measured by the state-authorities. Dry deposition of Barium was reduced like most other pollutants from heavy industry. There is no source for barium on the ground, like mining or industry, that can explain the increased levels in pollution registered in the wet deposition. The high amounts of Barium seem to come straight with the rain – which hints to high-altitude-aerosols as a

source and thus to geo-engineering or spraying for military purposes.

The statistical evaluation of 72 rainwater samples by the author, gathered by the German "initiative for a clean sky" (Sauberer Himmel), indicates an amount of approx. 911 tons of barium falling out over Germany during the year 2012xxii.

The total ton-equivalent calculated from the grass samples can be estimated to contain 1625 t of barium in 2011 (on the bases of average hey-production per hectare), however this amount should also reflect the dry deposition as well as some barium taken up by the plants from the soil originating from mineral substratexxiii. It is important to note, that these values cover the value measured in the probes analyzed by "Sauberer Himmel e.V.".

If the original source of industrial barium pollution has been reduced by 90% during the 15 years as shown by the values for dry deposition, and the overall values including wet and dry deposition went up by intermediated 100% since 2001, there is no other explanation than a new source that is explicitly connected to aerosols brought down by rain registered in the wet deposition analysis only.

This new source then would be responsible for 90% of the total values in the year 2012. Therefore one should assume an atmospheric deposition of minimum 865 t of barium, originating from aerosols coming down with the rain from high altitudes, originating from this new source.

Indicating (Ba, Sr_x) TiO_3 in nature is difficult. Measurements of bio-available barium, strontium and titanium indicate elements in solution, but due to the non-solubility of (Ba, Sr_x) TiO_3 such measurements do not indicate those nano-crystals at all. An analysis of the total mineral content would correctly show Ba, Sr and Ti as single elements when performed with fluorine acid only, when nitric acid is used – which is the standard method – (Ba, Sr_x) TiO_3 would not show at all.

The measured numbers must origin from the leftovers of the crystal production conducted in spray pyrolysis. With a ratio of 15% detectable to 85% not detectable as described in literature about industrial spray pyrolysis we need to 5.666 fold the calculated number to come to the amount of Barium bound in not detectable nanocrystals.

865 t x 5.666 = 4901 t

This multiplies to 4901 tons of Barium bound in undetectable nanocrystals.

Let's assume that the actual crystallography is a (Ba_{0.5}, Sr_{0.5})TiO₃.

To make it calculable in reference to the atomic weight of the single elements we note (Ba, Sr) 2 TiO_3 .

The atomic weight of the elements involved is:

Ba = 137,33 g/mol; Sr = 87,62 g/mol; Ti = 47,87 g/mol; O = 16 g/mol

xxii Harald Kautz-Vella: The Chemistry in Contrails. Assessing the Impact of Aerosols from Jet Fuel Impurities, Additives and Classified Military Operations on Nature. OPEN Mind Conference, Oslo 2012. November 2016 online at: http://www.aquarius-technologies.de/veroeffentlichungen.html

The total molar mass of the molecule would be:

137,33 g/mol + 87,62 g/mol + 2x47,87 g/mol + 6x16 g/mol = 416,69 g/mol

The amount of crystal-bound barium needs to be multiplied by 416,69/137,33 to calculate the amount of piezocrystals airborn, which would make a total of 14870 tons of $(Ba_{0,5}, Sr_{0,5})TiO_3$ per year.

Just to repeat the number: This calculates to **14.870** tons of material classified as bio-hazardous by state authorities in its likely function of being the transmissible agent of TSE raining down on Germany every year.

Due to the unknown ratio of barium to strontium this number might vary. However, the range of possible values can be estimated. Both $(Ba_{0,25}, Sr_{0,75})TiO_3$ and $(Ba_{0,75}, Sr_{0,25})TiO_3$ are common crystals. To give a span of variability of the value: the total amount of could easily both double to 29740 tons or be reduced by 1/3 to 9913 tons.

3.3. Description of the role of the piezocrystals in TSE/Creutzfeldt Jakob

In one of his later studies M. Purdey examined the condition of TSE occurring in the North American TSE Cluster zones. At that point, he still was convinced, that the piezocrystals he observed as part of the medical condition were initially formed inside the body. In the abstract of his paper he states:

Summary High levels of Silver (Ag), Barium (Ba) and Strontium (Sr) and low levels of copper (Cu) have been measured in the antlers, soils and pastures of the deer that are thriving in the chronic wasting disease (CWD) cluster zones in North America in relation to the areas where CWD and other transmissible spongiform encephalopathies (TSEs) have not been reported. The elevations of Ag, Ba and Sr were thought to originate from both natural geochemical and artificial pollutant sources - stemming from the common practice of aerial spraying with 'cloud seeding' Ag or Ba crystal nuclei for rain making in these drought prone areas of North America, the atmospheric spraying with Ba based aerosols for enhancing/refracting radar and radio signal communications as well as the spreading of waste Ba drilling mud from the local oil/gas well industry across pastureland. These metals have subsequently bioconcentrated up the foodchain and into the mammals who are dependent upon the local Cu deficient ecosystems. A dual eco-prerequisite theory is proposed on the aetiology of TSEs which is based upon an Ag, Ba, Sr or Mn replacement binding at the vacant Cu/Zn domains on the cellular prion protein (PrP)/sulphated proteoglycan molecules which impairs the capacities of the brain to protect itself against incoming shockbursts of sound and light energy. Ag/Ba/Sr chelation of free sulphur within the biosystem inhibits the viable synthesis of the sulphur dependent proteoglycans, which results in the overall collapse of the Cu mediated conduction of electric signals along the PrP-proteoglycan signaling pathways; ultimately disrupting GABA type inhibitory currents at the synapses/end plates of the auditory/circadian regulated circuitry, as well as disrupting proteoglycan co-regulation of the growth factor signaling systems which maintain the structural integrity of the nervous system. The resulting Ag, Ba, Sr or Mn based compounds seed piezoelectric crystals which incorporate PrP and ferritin into their structure. These ferrimagnetically ordered crystals multireplicate and choke up the PrP-proteoglycan conduits of electrical conduction throughout the CNS. The second stage of pathogenesis comes into play when the pressure energy from incoming shock bursts of low frequency acoustic waves from low fly jets, explosions, earthquakes, etc. (a key eco-characteristic of TSE cluster environments) are absorbed by the rogue 'piezoelectric' crystals, which duly convert the mechanical pressure energy into an electrical energy which accumulates in the crystal-PrPferritin aggregates (the fibrils) until a point of 'saturation polarization' is reached. Magnetic fields are generated on the crystal surface, which initiate chain reactions of deleterious free radical mediated spongiform neurodegeneration in surrounding tissues. Since Ag, Ba, Sr or Mn based

piezoelectric crystals are heat resistant and carry a magnetic field inducing pathogenic capacity, it is proposed that these ferroelectric crystal pollutants represent the transmissible, pathogenic agents that initiate TSE^{xxiv} .

The following figure is one of the pictures of an affected brain he took with a microscope.

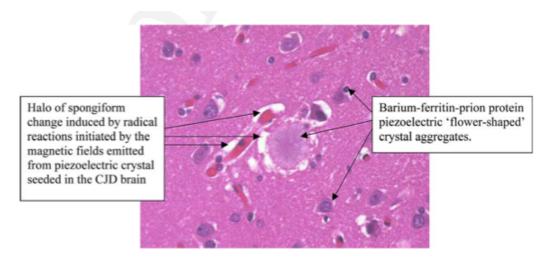


fig. 14: Brain microscopy published by M. Purdey.

Later, Purdey focused on the geographic distribution of Creutzfeldt Jakob hotspots and could proof a significant correlation to nearby military bases used for air-combat training or industrial sites for ammunition production. In this paper he already speaks about airborn piezocrystals responsible for the nucleation of the growing crystalline structures in the brain:

This paper exposes the flaws in the conventional consensus on the origins of transmissible spongiform encephalopathies (TSEs) which decrees that the protein-only misfolded 'prion' represents the primary aetiological transmissible agent, and then reviews/presents the emerging data which indicates that environmental exposure to metal microcrystal pollutants (sourced from munitions, etc.) represents the heat resistant, transmissible nucleating agents which seed the metal-prion protein (PrP)-ferritin fibril crystals that cause TSE. Fresh analytical data is presented on the levels of metals in ecosystems which support populations affected by clusters of variant Creutzfeldt- Jacob disease (vCJD), sporadic/familial CJD, and the scrapie types of TSE that have emerged in the UK, Sicily, Sardinia, Calabria and Japan. This data further substantiates the abnormal geochemical template (e.g., elevated strontium (Sr), barium (Ba) and silver (Ag)) which was observed as a common hallmark of the TSE cluster ecosystems across North America, thereby supporting the hypothesis that these microcrystals serve as the piezoelectrion nucleators which seed the growth/multireplication of the aberrant metal-PrP-ferritin fibril features which characterise the neuropathology of the TSE diseased brain. A secondary pathogenic mechanism entails the inactivation of the sulphated proteoglycans which normally regulate the mineralisation process. This can be induced by a rogue metal mediated chelation of free sulphur, or by contamination with organo-sulphur pollutants that substitute at natural sulphur bonds, or via a mutation to the S-proteoglycan cell line; thereby enabling the aberrant overgrowth of rogue fibril crystal formations that possess a piezoelectric capacity which compromises the ability of the contaminated individual to process incoming acoustic/tactile pressure waves in the normal way. The crystals transduce incoming sonic energy into electrical energy, which, in turn, generates magnetic fields on the crystal surfaces that initiate chain reactions of free radical mediated

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xxiv M. Purdey: Elevated silver, barium and strontium in antlers, vegetation and soils sourced from CWD cluster areas: do Ag/Ba/Sr piezoelectric crystals represent the transmissible pathogenic agent in TSEs? US PubMed, US National Library of Medicine National Institutes of Health Online at: http://www.ncbi.nlm.nih.gov/pubmed/15236778?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_Discovery_RA&linkpos=1&log\$=relatedarticles&logd bfrom=pubmed on Dec. 16th 2012.

spongiform neurodegeneration. Metal microcrystal nucleating agents provide a group of plausible aetiological candidates that explain the unique properties of the TSE causal agent – such as heat resistance, transmissibility, etc. – which the protein-only prion model fails to fulfill. This paper also discusses the possible nutritional measures that could best be adopted by populations living in high risk TSE ecosystems; as a means of preventing the successful implantation of these rogue microcrystals and their consequent hypermineralisation of the soft tissues within the CNSxxv.

While Purdey relates the presence of piezocrystals to the use or production of ammunition, one might as well relate it to the presence of low flying jets using JP-8 with 2% standard military additives (with classified ingredients) plus combat-additives that lower the flame point and might also contain barium and strontium salts for chemtrailing.

3.4. Description of the role of organophosphate in TSE/Creutzfeldt Jakob

Organophosphates seem to have a short term as well as a long term neurotoxic impact on mammals and humans. The short term effects are well researched, the main effect is a blockage of the Calcium receptor in the nerve cells**xxvi*:

Organophosphate poisoning results from exposure to organophosphates (OPs), which cause the inhibition of acetylcholinesterase (AChE), leading to the accumulation of acetylcholine (ACh) in the body. Organophosphate poisoning most commonly results from exposure to insecticides or nerve agents. OPs are one of the most common causes of poisoning worldwide, are usually associated suicides in agrarian areas. There are around 1 million OP poisonings per year with several hundred thousand resulting in fatalities annually.

Organophosphates inhibit AChE, causing OP poisoning by phosphorylating the serine hydroxyl residue on AChE, which inactivates AChE. AChE is critical for nerve function, so the irreversible blockage of this enzyme, which causes acetylcholine accumulation, results in muscle overstimulation. This causes disturbances across the cholinergic synapses and can only be reactivated very slowly, if at all. Paraoxonase (PON1) is a key enzyme involved in OP pesticides and has been found to be critical in determining an organism's sensitivity to OP exposurexxvii.

Beyond this effect, in his article "High-dose exposure to systemic phosmet insecticide modifies the phosphatidylinositol anchor on the prion protein: the origins of new variant transmissible spongiform encephalopathies?" M. Purdey described a secondary long-term damage that is related to the disassembly of the PrPCu chains that form the nerves.

Compulsory exposure of the UK bovine to exclusively high biannual doses of a 'systemic' pour-on formulation of an organo-phthalimido-phosphorus warblecide, phosmet, during the 1980s (combined with exposure to the lipid-bound residues of 'bioconcentrated' phosmet recycled back via the intensive feeding of meat and bone meal), initiated the 'new strain' modification of the CNS prion protein (PrP) causing the UK's bovine spongiform encephalopathy (BSE) epidemic. A lipophilic solution of phosmet was poured along the bovine's spinal column, whence it penetrated and concentrated in

xxv M. Purdey: Metal microcrystal pollutants: the heat resistant, transmissible nucleating agents that initiate the pathogenesis of TSEs? US PubMed, US National Library of Medicine National Institutes of Health Online at: http://www.ncbi.nlm.nih.gov/pubmed/15908137 on Dec. 16th 2012.

xxvi See also: Johnson, P.S., Michaelis, E.K. OP interactions at the NMDA receptors in brain synaptic membrane. Mol Pharmacol. 1992;41:750–760.

xxvii Wikipedia entry on organophosphates

phospholipids of the CNS membranes, covalently modifying endogenous phosphorylation sites on phosphatidylinositols (PIs) etc., forming a 'toxic membrane bank' of abnormally modified lipids that 'infect' any membrane proteins (such as PrP) that are programmed to conjugate onto them for anchorage to the membrane. Thus, phosmet invokes a primary covalent modification on PrP's PI anchor which, in turn, invokes an overall diverse disturbance upon CNS phosphoinositide second messenger feed back cycle, calcium homeostasis and essential free radicals; thus initiating a self-perpetuating cascade of abnormally phosphorylated PI-PrP that invokes a secondary electrostatic and allosteric disturbance on the main body of PrP impairing tertiary folding. Chaperone stress proteins conjugate onto misfolded PrP blocking its sites of proteolytic cleavage. Fresh epidemiological evidence is presented and experimental evidence referenced that adds support to a multifactorial hypothesis which proposes that BSE is a hitherto unrecognized and previously unmanifested class of subtle chronic phosmet-induced delayed neuro-excitotoxicity in the susceptible bovinexxiii.

Two other fields of research, in which TCP/TCOP poisoning has been discussed is the gulf war syndrome and problems with cabin air toxicity in commercial flights. A number of papers dealing with the gulf war syndrome relate the damage observed mainly to direct contact with the standard NATO fuel JP-8, or the contact to its burning residues. During combat the fuel was intentionally evaporated on the hot exhaust pipes of tanks to cover the following soldiers in heavy smoke. The intoxication by cabin air in civil airplanes is related to fumes generated by TCP additives in lubricating oils in the turbines. All civil airplanes (except Boing 787) collect the air to maintain cabin pressure from the bypassing air-stream in the turbines. Although the bypass should not have any connection to the combustion chambers especially older turbines leak those fumes into the bypass. TCOP has been found in hundreds of pilots and flight attendants that showed neurodegenerative symptoms.

3.5. Comparison to widely discussed nano-bot concepts

Transhumanism is projecting the fusion of biology and artificial intelligence to a superbeing with a technological hive-consciousness, best displayed by the Borg in the Star Trek series. The evaluation of these technologies by the review of transhumanistic research itself reveals that in theory there are three different connecting points targeted by transhumanism:

- the nervous system, an idea of this concept is displayed by a quite viral 3D visualization with the title "Nano-bot replacing neuron", that can be easily be found on the internet. It shows a concept of self-assembling nano-bots that displays spherically shaped receiver-units grow tentacles that interconnect with the existing nervous tissue, forming new radiosensitive neuronal knots.
- an external interference with the DNA-light-communication, accomplished by quantum dot dyes stored in plasmonic antennas and hexagonal plasmonic-photonic crystals^{xxix}.

xxviii https://www.scienceopen.com/document?vid=22bb28ef-7d31-426a-99ac-92be62b1d0fa. Online on November 6th 2016.

xxix Ding B., Hrelescu C., Arnold N., Isic G., Klar T. A.: Spectral and directional reshaping of fluorescence in large area self-assembled plasmonic-photonic crystals. Nano Letters, Vol.013, p.378-386 (2013) Also: Woller J. G., Hannestad J. K., Albinsson B.: Self-assembled nanoscale DNA–porphyrin complex for artificial light harvesting. Journal of the American Chemical Society, Vol.135, p.2759-2768 (2013) Also: Sagun E., Knyukshto V. N., Ivashin N. V., Shchupak E. E.: Photoinduced relaxation processes in self-assembling complexes from CdSe/ZnS water-soluble nanocrystals and cationic porphyrins. Optics and Spectroscopy, Vol.113, p.165-178 (2012) Also: Aqueous self-assembly of an electroluminescent double-helical metallopolymer. Journal of the American Chemical Society, Vol.134, p.19170-19178 (2012)

- an internal interference with the DNA-light-communication by the quasi viral infection of the nuclei with synthetic RNA strands, that combine a opto-genetic unit with a base-pair-transistor-chain that reacts on 8x50 millisecond sine-signal-sequences in the Gigahertz range to control the opto-genetic unitxxx.

To understand the nature of the first concept, we might look into details of how such a technology self-assembles:

Nanorobotics is the technology of creating machines or robots at or close to the microscopic scale of a nanometer (10⁻⁹ meters). The prefix "nano," in scientific terms is considered to be known as the ultra-small units. Nano described as engineering notation is 10^{-9} , or one billionth of a meter. Advanced nanobots will be able to sense and adapt to environmental stimuli such as heat, light, sounds, surface textures, and chemicals; perform complex calculations; move, communicate, and work together; conduct molecular assembly: and, to some extent, repair or even replicate themselves. Nanotechnology is the science and application of creating objects on a level smaller than 100 nanometers. The concept of nanotechnology is the "bottom up" creation of virtually any material or object by assembling one atom at a time. Nanomanufacturing is the creation of materials and products through: (1) Direct Molecular Assembly (DMA) discrete, directed assembly of individual atoms and molecules into macroscale materials and products; (2) Indirect Crystalline Assembly (ICA) - creation of conditions that foster the growth of nanoscale crystals that are then combined into macroscale materials and products; or (3) Massive Parallelism Assembly (MPA) - the creation of many nanomachines or nanobots whose operating parameters cause them to work synergistically to assemble atoms and molecules into macroscale materials and products. Molecular self-assembly strategies involve the formation of nanometer scale objects and materials in the absence of significant external control^{xxxi}.

Although it might be difficult to prove the intent behind this scenario, mostly due to the complete compartmentalization of the single aspects and components, it is easy to identify the structural resemblance of the pathogenesis of TSE and Creutzfeldt Jakob with the successful self-assembly of a nano-bot.

3.6. Synergistic toxicity during flight situations

When arriving at traveling altitude every passenger can observe that the plane enters a silver-grey layer of dust or ice-crystals, which reaches from horizon to horizon. Obviously, this layer is generated by the exhaust of airplanes. The air is taken into the plane with no nano-filtering unit in-between. From personal experience I can say that after a couple of hours of flight time, the respiratory system is extracting crumbs of a white dust and/or milky mucous. The color definitely shows that this is not carbon dust, but very likely (Ba,Sr_x)TiO_3 and Al_2O_3^xxxii or MgOxxxiii nano-crystals. Aluminum and manganese oxide are the other types of nanocrystals often found in rain samples, displaying a whisker crystallography as shown in the picture below:

xxx etc-group: extreme genetic engineering. An introduction to synthetic biology. January 2007.

Written confession of a retired technical director formerly AIT, Austria, responsible fort he technical development of project "Rabe Neu".

xxxi http://www.nanobotmindcontrol.com/

xxxii Generated by spray pyrolysis at 1700 degC retrograde to 1500 degC as found in afterburner technology.

xxxiii Generated by spray pyrolysis at 750 degC retrograde to 600 degC as found in normal jet engines.

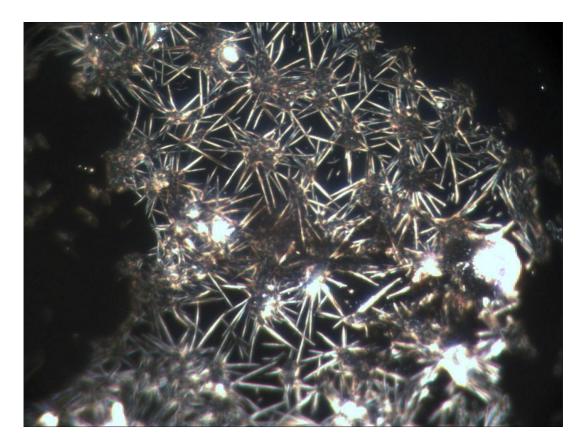


fig. 15: Whiskers from rain samples collected in Germany. Whiskers were used as a material for ultra light concrete in the 60s, but have been banned from commercial use because they have been found to cause cancer.

 (Ba, Sr_x) TiO_3 and Al_2O_3 whisker are the two compounds used as "zapped plasma "for military radar technologies. Together with a possible contamination of the cabin air with TCOP, two compounds that are suspected to cause the secondary type of neurodegenerative disease that leads to TSE and Creutzfeldt Jacob as described by Purdey are airborne inside the airplane. Today it is common among pilots and flight attendants to test the immune system regarding its ability to detox TCOP to evaluate the risk of suffering from neuro-degenerative disease^{xxxiv}.

4. Discussion

Regardless the possible intent behind this scenario, fact is that there are approx. 15000 tons of bio hazardous piezoelectric material airborne, raining down on a country of the size of Germany every year, and very likely this situation is representative for all countries that joined the NATO Partnership for Peace.

Medically, the condition Creutzfeldt Jakob is the tip of the iceberg pinpointing to a moderate neurodegeneration that is diminishing the living quality of the general public. Today, in Germany 50% of the people age 65 or above suffer from one or another degenerative old age disease, and even many younger people who might still "function" complain about a loss of their ability to concentrate and memorize accurately. Purdey suggested in his last paper to look at the other degenerative conditions as possible

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xxxiv According to information given by a former pilot that had to quit his job due to neurodegeneration caused by cabin air toxicity.

variations of the CFJ pathogenesis involving different metals replacing the copper instead of barium/strontium/silver. In a similar way lead could be responsible for ALS, manganese for Parkinson, aluminum for Alzheimer and dementia.

Whether there is intent behind this or not, the responsible people mainly in the military domain should be stopped polluting the planet with piezo-crystals, regardless the war games they feel obliged to play. An international agreement must be negotiated and put into power to take down all rocket shields and ban chemtrailing.

As it has been done with the Boing 787, all airplanes need to be equipped with an air supply that does not utilize air from the turbines to maintain cabin pressure.

Regarding a possible intent, radio-signals should be analyzed to identify a possible mind control signature, the source of signals if found should be traced back to the transmitting antenna systems, and the responsible people for these antenna systems should be taken into custody for the violation of the Nuremberg treaty, which makes any medical experimentation without the knowledge and agreement of the patient illegal.

All people who today put their effort into whitewashing climate engineering, should become aware that the agenda they drive forward for future application is not only illegal but also already in place, and once this awareness becomes public, they should expect being held responsible for supporting this agenda, that – even if not lethal to everybody – is a form of bio-terrorism.

However, there might be a possibility to reverse the condition on a personal level. This is a decision that can be and only can be made by every single individual. An overview on promising and approved protocols, supplements and remedies is given in the article "Available Diets, Supplements and Remedies to Counteract Morgellon-Related Disease, Degenerative Old Age Disease and Conditions out of the Autism-Spectrum".

5. Acknowledgements

I want to thank and honor M. Purdey for his brilliant mind and his courage to research and expose the agenda behind TSE. Even though he died of brain cancer, I want him to know that his voice was heard.

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7. Graphics

- fig. 1-11: soyez humain (anonymous; personally known to the author)
- fig. 12-13: Harald Kautz, data by German state environmental monitoring
- fig. 14: M. Purdey: Elevated silver, barium and strontium in antlers, vegetation and soils sourced from CWD cluster areas: do Ag/Ba/Sr piezoelectric crystals represent the transmissible pathogenic agent in TSEs?
- fig. 15: soyez humain (anonymous; personally known to the author)

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