



**HAL**  
open science

# Uranium mines, death camps: the final transformation of the USSR into a giant death complex

Florent Pirot

► **To cite this version:**

Florent Pirot. Uranium mines, death camps: the final transformation of the USSR into a giant death complex. 2018. hal-01962079

**HAL Id: hal-01962079**

**<https://hal.science/hal-01962079>**

Preprint submitted on 20 Dec 2018

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# Uranium mines, death camps : the final transformation of the USSR into a giant death complex

Florent PIROT  
Independent PhD student

*Working paper*

**Made with PhD funding from the Région Auvergne-Rhône-Alpes in France**



This paper is to confirm with an actual giant case study the thesis that was elaborated by the reading of Machiavelli, Rousseau, Sismondi and explained using psychoanalysis with the innate bisexuality of the human being and its massive repression<sup>1</sup> : the organization of the lie to the self and the need to impose it to others while exerting violence upon others as a way to form a bubble ; and how socialism (as defined by Mises to encompass both national-socialism and the other forms of it) is both the prime example of such a lie, mechanized and industrialized using the mass media, and the « helping hand » for individuals to contribute to the repression of non-idealtypic (non-heterosexual) forms of sexuality, without which it would not be popular. Slave labor was recommended by Rousseau and Sismondi as a way to fill up the needs of the economy of socialist regimes (the topic of the thesis being the political economy of republicanism). Giant death complexes are demonstrated to have happened not only in Nazi Germany but also in the Soviet Union and in other socialist countries, demonstrating finally Von Mises' thesis.

The battle of Algiers seems to have given to the Soviet leaders the idea of a strict system of enforced disappearance of industrial size in which the uranium mines were the key element of destruction : death camps. The number of victims can be estimated to circa 27 millions over the whole period of activity of the mines.

Avraham Shifrin, one of the most important references on the Soviet Gulag, who testified in front of several US Congress panels, established in 1982 a list of extermination camps, in which it was known the prisoners would not come back alive, and includes in it mostly... uranium mines. Shifrin mentions death rates of almost 100 % in these uranium mines and lists 43 extermination camps in the second edition of his book (The First Guidebook to Prisons and Concentration Camps of the Soviet Union), amounting to several hundreds of thousands of prisoners in a given time.

1000 to 5000 prisoners *per camp* which have to *be renewed frequently*. The simple hypothesis which will be key in future research is that *this is a true horror story involving at least 20 millions of deaths, not only under Stalin but mainly under Krushchev and Brezhnev*. The author makes the hypothesis that Krushchev organized the “destalinization” propaganda mainly to hide far from the eyes *that part of the Gulag that was well and alive*. Brezhnev kept the thing exactly as it was. Stalin

---

1 In this paper <https://hal.archives-ouvertes.fr/hal-01925081>

was the ideal scapegoat. The author brings at the end arguments leading to the idea today's "penal camps" still involve work that is similar in uranium mines (with even satellite data) ; it is difficult to believe to any perestroïka on a subject so secret and involving atrocities of a level direr than the Holocaust, explaining quite naturally the demographic vacuum in the former Soviet Union (which is well known for falsification of statistical data) easy to see in all these suburban cities of concrete quite devoid of people. Low natality does not explain everything.

In this article the author suggests that the Gulags were replaced by a strict system of secret extermination in the end of the 50s, because of the progressive failure of the USSR to comply with its ideal socialist plans of world domination<sup>2</sup>, after a period of disinformation over the "destalinisation" and that uranium mines and the nuclear industry complex was the main tool. Enforced disappearance was clearly massively used. The development matches the period of the Alger battle that could have inspired it, confirming the hypothesis. Why the total absence of informations on Soviet terror under Brezhnev ? Already in 1944 the NKVD proudly claimed to produce 100 % of the Soviet uranium according to Anne Applebaum...

The Black Book of Communism mentions "death camps" created 22 April 1943 (the *katorgas*) : it includes "radium mines" (the source is Jacques Rossi's work). There are other sources confirming that the Gulag archipelago included death camps, where the conditions were intentionally so bad as to leave no chance of survival for prisoners. Uranium was used for prisoners condemned to death, they had to work in mines up to their death, in an accident, from cancer, or another illness. This is a dimension of Soviet history not intensely studied (the Gulag in itself has been studied much less intensely than Nazi camps), obviously because of the taboo surrounding uranium and its effects on human health. Hence, the extermination function of a number of Gulag camps in the « Archipelago » has been on the overall hidden until now. The Black Book also points to Lovetch, an "isolated" extermination camp opened "very late" (1959) in Bulgaria, not with uranium mining, but a true death plant, confirming again the idea of a transition to pure death camps under full secrecy after the "destalinisation show of propaganda". The Lovetch camp isn't an uranium mine but it was a death camp with prisoners forced to carry their own body bags, trucks rotations, the trucks being filled up with a required number of bodies to not lose space, the camp was « rapidly closed » but it suggests again a transition in the USSR toward a pure extermination system with this kind of small start up not linked to uranium but rationalized as Nazi death camps were. I claim that this system has been generalized in the Soviet Union at this time, with a two-floors system using the closed nuclear cities and that allowed a quasi perfect dissimulation. Lovetch was obviously a primitive experiment set up in emergency after the beginning of the international difficulties of the USSR, especially the break-up of the alliance with China. It certainly is this major first difficulty that started the final transformation of the Gulag, from pseudo-reeducation system (an issue delegated to psychiatric prisons for mind control) to giant extermination system, completing the work started in 1943 (exactly as Nazi Germany started to crumble slowly under the assaults of the Soviet army and as Stalin was sure to never be exposed by a rival power).

One has to take two factors into account, the permanent growing of the Soviet stockpile until the end of the 80s but also the use of fast breeder reactors ([explaining the Chernobyl disaster](#)) reducing the needs for workers. I believe the people used were mostly Russians because it had to happen far from the borders where foreign eyes and agents were MUCH more certainly present. The Soviet Union demonstrated massively its incredible expertise in organising the silent deportation of its own people. The movie STALKER and the 1971 book Roadside Picnic by A. and B. Strugatsky on which it is based also suggest a « leak » by dissidents attempting to warn the people of the USSR (the 1971 book is concomittant with Z. Medvedev's article, presented below). The « zones where experiments are done by aliens », with a huge amount of death traps, and few chances of return, evoke radioactive areas, birth defects, scientists doing experiments (as in the Butugychag) :

---

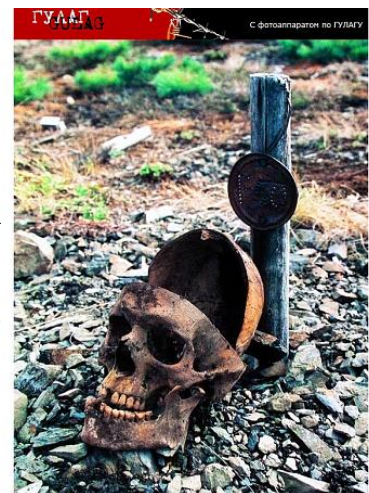
2 The progressive process of imperial disequilibrium of all socialisms is described in detail here in the first part of the thesis of the author <https://hal.archives-ouvertes.fr/hal-01869265/document>



*Illustration 1: This document has leaked from the Butugychag uranium death camp : scientists opened skulls to observe the reactions of the brain to uranium exposure*

An example among others is the Yachimov concentration complex in Soviet Czechoslovakia in the aftermath of the war. Anne Applebaum, world-famous expert on the Gulag, author of « Gulag, a history », mentions camps in the socialist Czechoslovakia in between the mid 40s and the mid 50s, where prisoners, obliged to dig uranium for the Soviet industry, where bound to die. To quote her book, « In retrospect, it is clear that political prisoners with long sentences – the equivalent of the Soviet katorga inmates – were sent to these mining camps in order to die. Although they worked extracting uranium for the new Soviet atomic bomb project, they were not given special clothing or any form of protection at all. The death rates are known to have been high – though how high, exactly, is still unknown ».

Anne Applebaum, in her book, does not mention in fact a lot of Gulag camps where the real intent was to KILL detainees (and not to exploit them to yield economic profit), outside this Czech example she mentions the Serpentinka camp in the Russian Far East (near



*Illustration 2: A memorial at the site of the Butugychag*

Magadan) where prisoners were quickly shot. Her work is a reference book but she also is the wife of a Polish diplomat (Radek Sikorski, who has been Minister for Foreign Affairs), thus not really likely to engage in a thorough denunciation of the dangers for health of uranium, for obvious



reasons (systematic use of DU by NATO, etc). She nevertheless indicates that the NKVD was proud to declare, in 1944, it was producing 100 % of the Soviet uranium, a proportion higher than for most other crops. It is sad that Applebaum did not mention Shifrin's work, while she knew him (she talks about him twice in the book, along with Medvedev (p.576 of the French edition) and, in the page just next to the discussion about NKVD and uranium mining, p.493 French edition). Because of this, her own project, which was intended to be an anthology on the Gulag, is highly incomplete. Jaurès Medvedev, biologist, author of books on the Gulag, known to have shed light on the Mayak catastrophe of 1957, says in an article that the first uranium gulags were established on Stalin's orders at the end of 1944 in Central Asia. He numbers 2 295 prisoners in 1945 and 7210 in 1950 in these Central Asian uranium mines. Thousands of forced "settlers", forcibly displaced (Tatars, Moldavians) were also compelled to work in uranium mines of the region at the same time. The Russian Far East Gulag also had many uranium mines, for instance in the Dalstroï and in the Chukotka (Arctic sea). A number of sources indicate that Dalstroï uranium mines had a bad reputation among prisoners, radioactivity (in addition to very bad working conditions, coldness and bad food) left no chance for survival and death happened generally "in a few months". Dalstroï uranium mines were part of a coastal complex of particularly harsh camps established on Stalin's personal orders, for "especially dangerous" political prisoners, e.g. Trotskysts, Mencheviks, S-Rs, and national groups, e.g. Ukrainians, that Stalin hated, and where prisoners "were not expected to leave alive" according to Medvedev, suggesting once again that uranium was used to organize death camps.

(Medvedev's article mentions a secret order by Stalin to send highly dangerous prisoners to forced work in these death camps. It is a translation, the translator says "*Obviously, it was supposed that they would not usually escape to freedom*" but as no Gulag inmate would be allowed to escape without being shot by guards, I believe it is a mistranslation of "to leave alive"). Another camp in the area, the Butugychag, included a complex of uranium mines for prisoners which, this has been proved, were the objects of a medical study involving brain dissections on corpses. The illustration of the article shows a dissection recorded on pictures, that survived.

Many sawed off skulls were also found in the area. The Butugychag was indeed a "penal camp" according to a testimony quoted in [http://gulag.ipvnews.org/article20060901\\_01.php](http://gulag.ipvnews.org/article20060901_01.php), with especially harsh conditions as well. A medical experiments laboratory was present in this very big complex of the Dalstroï, where Ukrainians were concentrated at the end of the 40s (again : Stalin hated Ukrainians, hence they constituted the perfect live stock for uranium mines). The purpose was both to extract uranium and to record medical data on human health under radiation exposure. On the Butugychag, an article by an Ukrainian human rights NGO is available in English <http://khp.org/en/index.php?id=1505150837>

The Chaunskyi mine in the Arctic coast is another example of camps that shared the common reputation of "death valleys" aimed at assassinating inmates. A website also mentions that uranium mines were for prisoners "condemned to death". ( [https://shapran.photoshelter.com/gallery/The-uranium-mines-of-Gulag-Chukotka/G00003\\_SXPlkZMbE/](https://shapran.photoshelter.com/gallery/The-uranium-mines-of-Gulag-Chukotka/G00003_SXPlkZMbE/) )

"Soviet Prisoners Exposed to Fatal Radiation in Uranium Mines (Associated Press, July 11, 1986) Two former inmates of Soviet labor camps told Britain's Independent Television network that prisoners were exposed to fatal levels of radiation in the 1970s while working in uranium mines. In the documentary The Nuclear Gulag, to be broadcast Saturday, a commentator states that prisoners died of cancer and other radiation-linked diseases after working without protective clothing in mines used to produce uranium for nuclear weapons. "They were aware they were dying of leukemia, even cancer or tuberculosis and so on," said Hartfeld, now a clergyman in Zurich, Switzerland. Six or seven prisoners committed suicide by blowing themselves up in the mines with dynamite, he said, and he had heard of prisoners escaping but they were always caught and "shot by soldiers." Hartfeld said he was breaking a 12-year silence about his experiences to expose conditions in the labor camps"

Chachulin told the interviewer there **were 4,000 to 5,000 prisoners working at Beshtau and more prisoners were delivered in trainloads every few months.**

He said that to ensure that no prisoner escaped by feigning death, guards smashed their skulls with hammers. The bodies were then thrown down a mine shaft and covered with dirt, he added.

The film included footage of what the commentator said was the Vladimir prison camp, 40 miles east of Moscow, with enclosed wooden walkways connecting the cell blocks.

Nikolai Sharegin, identified as a prisoner there in the 1970s, said **the walkways were enclosed** to maintain secrecy about the movements of prisoners

Shifrin also mentions a nuclear reactor in a Gulag camp in Wrangell island (Arctic sea, where the diplomat Raoul Wallenberg would have been detained according to other detainees that would have seen him here in 1962) used for live experiments on prisoners. Medvedev's article on the "Nuclear Gulag" is rich in information on the role of forced work in the construction of the first nuclear reactors and in enrichment plants. In Mayak, for instance, to salvage nuclear fuel and spare some uranium, the whole inmates of the camp surrounding the plant were compelled to take out from the reactor, without any protection, the used fuel (which had stayed months in the reactor, represented millions of Curies and was at up to 100°C) from their sleeves, even the supervisors (including a vice chief of the MVD (the organ in charge of the Gulag after the transformation of the NKVD), directly under the orders of Beria) died a few years after the operation as they stayed near the inmates manipulating the fuel, thousands of inmates manipulating more than 150 tons of used fuel. Medvedev's article show how prisoners were systematically used for the construction, daily operation and maintenance of nuclear reactors, enrichment plants, plutonium separation plants, and were of course frequently exposed to lethal doses of radioactivity (for instance in case of a bad manipulation leading to uncontrolled chain reaction in a nuclear warhead factory). (Medvedev's article is available <http://www.spokesmanbooks.com/Spokesman/PDF/medvedev69.pdf> )

In my view the last hopes of reeducation through torture and brainwashing were dropped at the end of the 1950s and while the Gulag as always had an economic purpose the system was turned into a fully secret death camp system – enforced disappearance being key (certainly imitated from the Battle of Algiers). The "closed cities" (a LOT of them were involved in the nuclear industry) as well could have served as detention centers. One hypothesis is that many persons were lured into them because of promises of good work & good privileges while secrecy allows a permanent flow of enforced disappearances *inside* the camps, that are in themselves forced work areas (they serve the nuclear factories, reactors...), used as well as *gateways for the uranium mining complex*. One public execution of a traitor and then no questions are asked on the permanent flow of disappearances in each closed nuclear city (to be compared with the isolated public execution at the beginning of the "proceso de reorganizacion nacional" of Videla, it's the same system which I am presuming to ensure fear and silence inside the closed cities). The association between a good work, good wages and military secrecy, leads to spread the idea that working there is a very rare chance, few people talk about it, most people offered to do it just jump on the train, hence lots of residential areas progressively losing inhabitants in silence. Communism destroying actual social links between individuals (absence of private trade means lack of social ties), few people ask questions about others and it keeps the thing secret much longer.

One may wonder how the Russian uranium mines are operated today. Transparency is absent on this sector, and information on the mines is scarce. There are still camps for forced work in Russia (more than 700 000 prisoners in 766 forced labour camps in 2007 according to this article <https://www.bu.edu/iscip/vol18/ponomarov.html> ) and it is highly tempting to suggest that this is used among other things for mining uranium and the nuclear industry. There are STILL penal camps near uranium mines and in this configuration it's difficult not to believe these camps are still served by prisoners. Mikhail Khodorkovsky (typically a very dangerous prisoner), for instance, was sent to serve his "sentence" in a penal camp close to Russia's biggest uranium mine in the Chita oblast...

I have to say I seriously question why all researchers after Shifrin "forgot" to study more closely uranium mining in spite of his well known book, of the article by Medvedev, of the TV documentary (cf AP press release), of the press articles around the book by Shifrin...

A simple estimation for the number of victims can be done by using data on the « anti-alcohol propaganda » : Mikhail Gorbachev has certainly closed down the mines and replaced them by massive plutonium production in fast-breeders. He had to organize the transition in silence by explaining the demographic gap without telling the truth on the uranium mines. The propaganda on the decrease of mortality linked to the anti-alcohol propaganda is dubious. It does not seem likely that any social attempt at making people pay, or fining them, to reduce alcohol propaganda, would work, it is a simple historical lesson of the study of state social programmes. The increase of mortality after the fall of the USSR is also extremely dubious (the « 17 million deaths of the transition »).

The Russian Federation, China, Turkey, Iran, Mongolia, Albania still have uranium gulags. The uranium laogais of China have been well documented by research. The Laogai system seems to be quite well involved in the nuclear industry and in uranium mining. To quote website tibetnature.net : During the 1960s and 1970s, prisoners including political prisoners were used to build China's nuclear infrastructures. In Amdo huge prison labour camps (laogai) are consistently placed next to nuclear missile sites. Next to the Terlingkha silos is the "Delingha Farm", which is one of the three largest labour camps in China today with a prison population estimated at 100,000. The two nuclear missile sites in central Amdo, Large Tsaidam and Small Tsaidam, also have sizeable labour camps alongside them. Prominent human rights activist and former Chinese political prisoner, Harry Wu, reports that labour reform camps in Amdo use prisoners to excavate radioactive ore. In addition, prisoners are forced to enter nuclear test sites in order to perform dangerous work. Common and political prisoners are also used in nuclear facilities in Lanzhou, Gansu Province (ICT 1993). The International Campaign for Tibet (ICT) confirmed in 1993 that prison labour was used in the building of nuclear installations at Lop Nor, the Ninth Academy (Koko Nor) and Lanzhou.

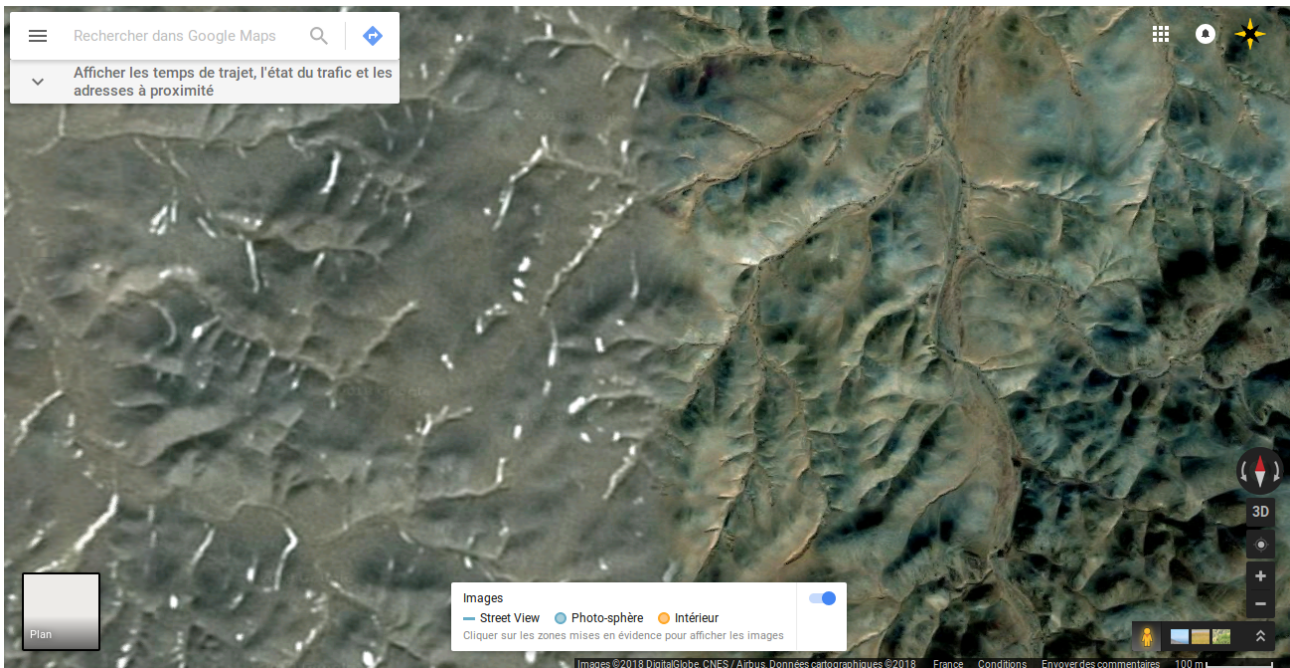
This website also underlines how plants for the "manufacture of nuclear weapons", located close to Tibetan villages, have created huge levels of diseases and stillbirths that are typical of the worst levels of contamination (when the levels of uranium contamination are extremely acute, there are less birth defects and much more stillbirths).

In the book *New ghosts, old towns...* by Seymour & Anderson, it is reported that uranium mining is ongoing in Guljia, as of 1996, with inmates of the Laogai. The "huge 731 mining complex (...) within which is a highly secret laogai operation known as the Gray (Huise) uranium mines (...) this institution is the grimmest laogai unit that our research turned up". 731 is simply a military designation that is absolutely a transparent reference to the Japanese Unit 731 used for research on biological weapons and other tools of dirty warfare (chemical weapons, flamethrowers, injections of seawater and of animal blood, x-rays...). The book by Seymour & Anderson mentions a death rate of prisoners of "between 10 & 20% per year" in the Gray uranium mine.

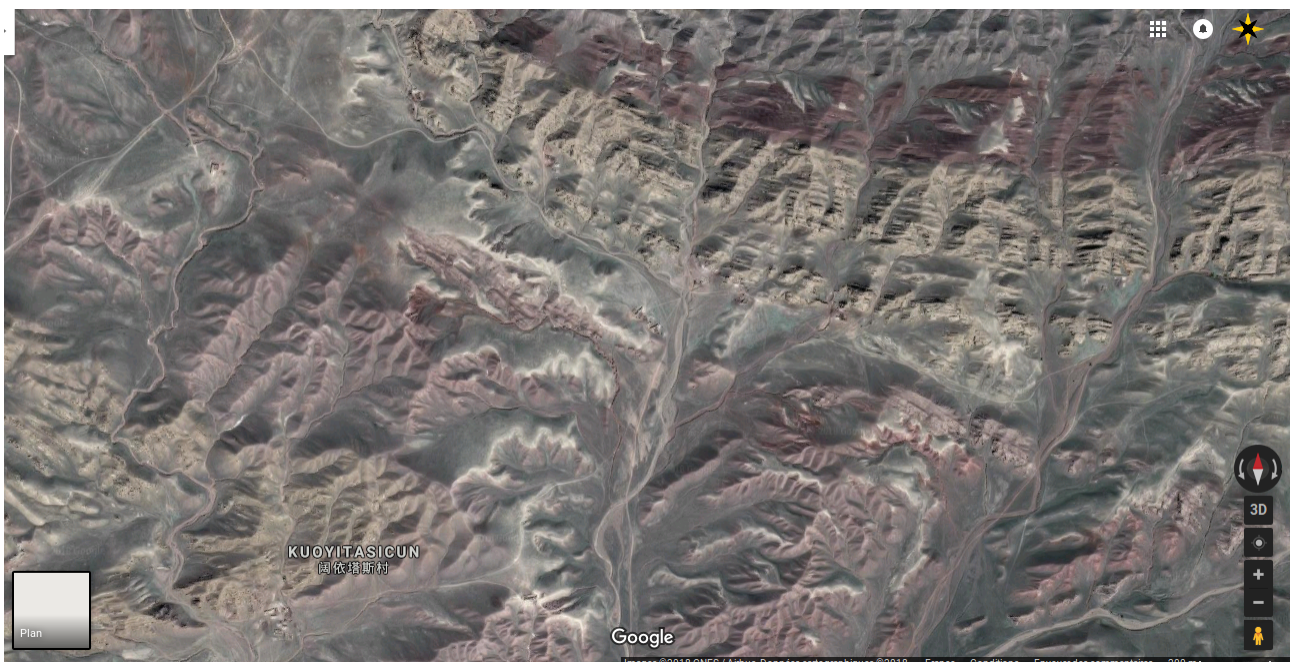
There is no direct proof that these prison camps *are* being used as extermination camps, to eliminate dangerous inmates, yet the use of the number 731 in the denomination of one such camp and the experiment are good elements and the satellite survey, using Google Satellite and the « pixel censorship » points to an actual massive mining complex with thousands and thousands and thousands and thousands of pixel crosses (small black crosses added on the satellite image) in the area of Huise. Identical phenomenons have been seen in the province of Harbin (also geologically uranium-rich), elsewhere in the east of China, in the south of Mongolia near the Chinese border...

In Mongolia a particular screenshot allows to see precisely the censorship : white eraser is used in an old satellite image, and the updated image to its right has black crosses :



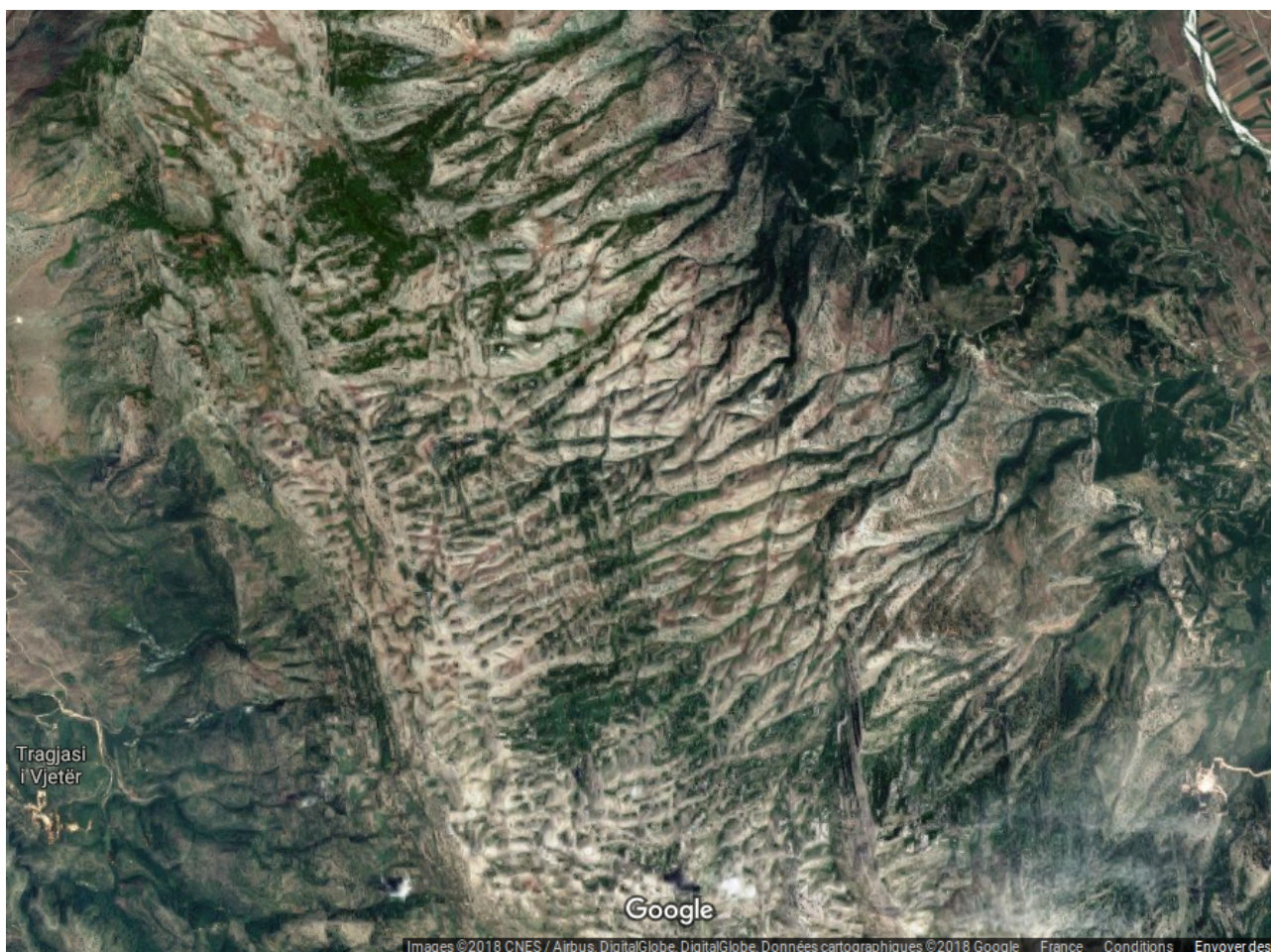


Modern mining uranium death camps have been found, with identical black crosses, in Iran, Turkey, and Albania as well as the Russian far-north and Daghestan. Here are some examples, taken freely :



*Illustration 3: Working on the hills, concentrated in small squadrons of inmates*





*Illustration 4: Tree cutting and beginning of mining - see the top area*

A single testimony on Twitter was read saying that « Turkey is delocalizing concentration camps in Turkey ». The Turkish camps are certainly recent and the purge after the coup attempt is certainly used as a way to fill up rapidly the needs of the national nuclear complex. The Iranian complex is ancient. More examples in this link : <https://depleteduranium.org/2018/10/24/uranium-mining-death-camps-in-mongolia-iran-and-turkey/>

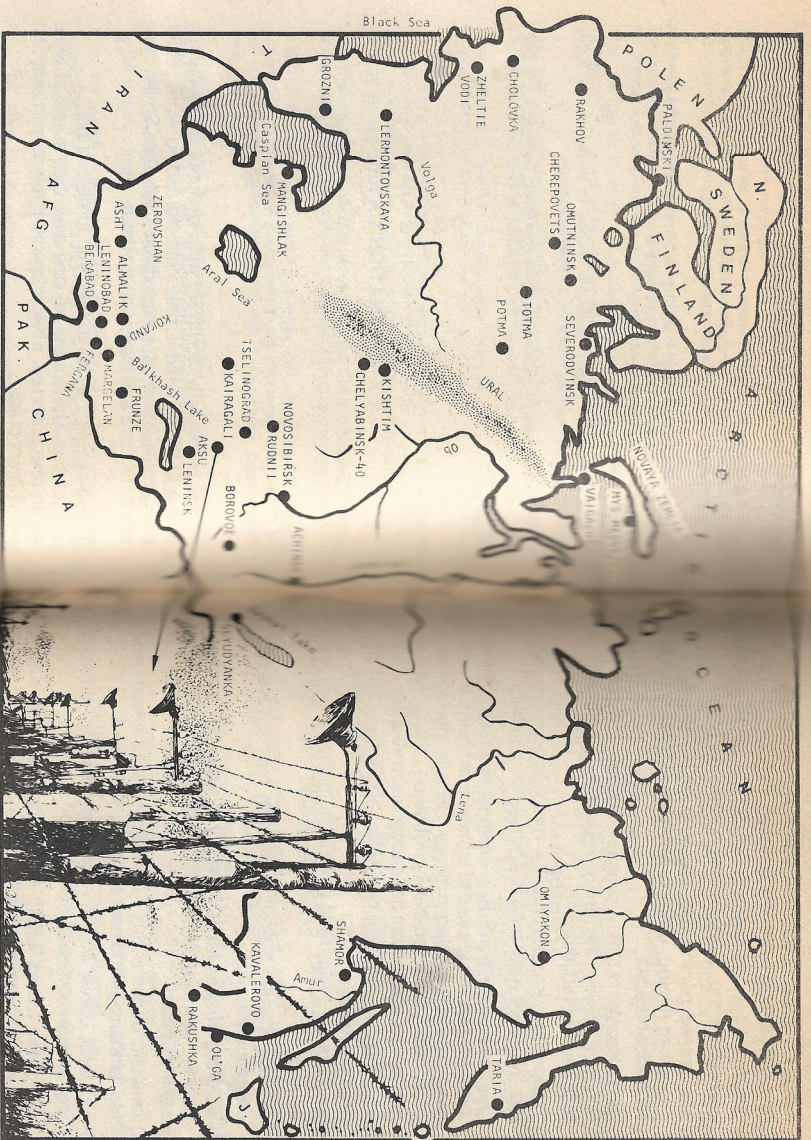
The depleted uranium weapons of the Western countries (which are a weapon of genocide, since the antitank power is achieved with nuclear fission) are the reason why this massive genocide and democide in enemy countries was concealed. After the death of Andreï Tarkovsky in December 1986, the uranium gulags of the Soviet Union left the media.

## **Annex :**

The two pages of the book by Avraham Shifrin :



## EXTERMINATION CAMPS



Here follows a list of these camps<sup>1</sup>:

- 1) *Paldiski* Bay, Estonian S.S.R. – cleaning of the nozzles of atomic-powered submarines;
- 2) *Severodvinsk*, Arkhangelsk Region – cleaning of the nozzles of atomic-powered submarines;
- 3) *Omitninsk*, Kirov Region – uranium mining; the entire work area is exposed to radiation;

<sup>1</sup>Those place names listed without the name of a Soviet Socialist Republic (S.S.R.) are located in the Russian Soviet Federated Socialist Republic (R.S.F.S.R.) – trans.

- 4) *Tof'ra*, Vologda Region – underground uranium mining, uranium enrichment facility;
- 5) *Cherepovets*, Vologda Region – open-pit uranium mining, uranium enrichment facility; an extensive area around the mine is exposed to radiation;
- 6) *Cholovka*, Zhitomir Region, Ukrainian S.S.R. – underground uranium mining;
- 7) *Zhél'tye Vody*, Dnepropetrovsk Region, Ukrainian S.S.R. – underground uranium mining;
- 8) *Lermontov*, Stavropol' Territory – underground uranium mining;



- 9) vicinity of *Fakhtov*, Transcarpathian Region (restricted military district) – open-pit uranium mining; the surrounding area is exposed to radiation;
- 10) *Groznyi*, Chechen-Ingush A.S.S.R. – underground uranium mining, uranium enrichment facility;
- 11) *Mangyshlak peninsula* (Caspian Sea), Kazakh S.S.R. – uranium mining, uranium enrichment facility; work on nuclear reactor;
- 12) *Aksu*, Kazakh S.S.R. – uranium mining, uranium enrichment facility; the entire region is exposed to a high-level of radiation;
- 13) *Tselinograd*, Kazakh S.S.R. – open-pit uranium mining; the entire work area is exposed to radiation;
- 14) *Borovo*, Kazakh S.S.R. – open-pit uranium mining; the work area is exposed to radiation; although a large health resort is located in this very vicinity, the government has characteristically refrained from warning holiday guests against the dangerous radiation;
- 15) *Karagaily*, Kazakh S.S.R. – open-pit and underground uranium mining;
- 16) *Al'malyk*, Kazakh S.S.R. – underground uranium mining;
- 17) *Rudnyi*, Kazakh S.S.R. – uranium mining, uranium enrichment facility;
- 18) *Achinsk*, Krasnoyarsk Territory – open-pit uranium mining, uranium enrichment facility in the "Glinozemnyi" plant;
- 19) *Leninsk*, Uzbek S.S.R. – underground uranium mining, uranium enrichment facility;
- 20) *Fergana*, Uzbek S.S.R. – underground uranium mining, uranium enrichment facility;
- 21) *Margelan*, Uzbek S.S.R. – underground uranium mining, uranium enrichment facility;
- 22) *Kokand*, Uzbek S.S.R. – underground uranium mining;
- 23) *Leninabad*, Tadzhik S.S.R. – underground uranium mining, uranium enrichment facility; the high level of radiation in the area constitutes a serious health hazard;
- 24) *Sovetabad*, Tadzhik S.S.R. – underground uranium mining;
- 25) *Bekabad*, Tadzhik S.S.R. – underground uranium mining, uranium enrichment facility;
- 26) *Asht*, Tadzhik S.S.R. – underground uranium mining; area exposed to high-level radiation;
- 27) *Zeravshan*, Tadzhik S.S.R. – underground uranium mining, uranium enrichment facility;
- 28) *Frunze*, Kirgiz S.S.R. – underground uranium mining, uranium enrichment facility;
- 29) *Chelyabinsk-40*, Chelyabinsk Region – work in a nuclear warhead plant;
- 30) *Kyshtym*, Chelyabinsk Region – mining and enrichment of uranium for further use in the nuclear warhead plant in Chelyabinsk-40;
- 31) *Novosibirsk* (northern settlement), Novosibirsk Region – work in the "Khimkontsentrat" and "Khimapparat" plants for the production of nuclear warheads;
- 32) *Oimyakon*, Yakutsk A.S.S.R. – underground uranium mining;
- 33) *Siyudyanka*, Irkutsk Region – mica-cleaving (women's camp);
- 34) "Dubrovlag" (Pot'na), Mordovian A.S.S.R. – glass-grinding without ventilation;
- 35) *Vaygach Island* (Arctic Ocean) – uranium mining, uranium enrichment facility;
- 36) *Cape Medvezhii*, *Novaya Zemlya* – uranium mining, uranium enrichment facility;
- 37) *Tar'ya Bay*, Kamchatka Region – cleaning of the nozzles of atomic-powered submarines;
- 38) *Rakushka Bay*, Primorsk Territory – cleaning of the nozzles of atomic-powered submarines;
- 39) *O'iga Bay*, Primorsk Territory – uranium enrichment facility;
- 40) *Kavalerovo*, Primorsk Territory – open-pit uranium mining; danger zone containing deadly radiation;
- 41) *Shamor' Bay*, Primorsk Territory – uranium mining, uranium enrichment facility; zone of deadly radioactivity.

Our research center has conducted a special investigation of the death camps in the Soviet Union. Unfortunately, we were not able to include all our findings in the notes to the map. Those interested, however, may receive additional information on request.