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LOOKING AROUND with

[redacted]

Recent Soviet experiments in remote viewing and animal telepathy have produced some significant, well-controlled results. This work was described at the Seminar on Applied Anomalous Phenomena, in the Xerox center at Leesburg, on 1 December 1983 by Doctor Russell Targ, who had just returned from Russia where he visited several Soviet Psi facilities.

(U) The Soviet scientific community is rather hesitant about Psi research, (telepathy, clairvoyance, poltergeists, etc.), but a theory of low-frequency radio propagation has been devised to justify some telepathy phenomena, and the Soviet Academy of Sciences (SAS) has established a separate department to deal with this work. The "Department for Research on Theoretical Problems" is headed by Professor Andrianka, who is an Academician and who is the only member of this unusual department.

(U) Much of the unclassified Soviet work takes place in hospitals around Moscow and is concerned with measurement of subtle physiological changes, particularly in GSR (galvanic skin response), that would correlate with response to some stimulus, including the onset of hypnosis.

(U) There are apparently problems of image and semantics, for the research center in the hospital is called the "Center for the Non-Drug Treatment of Mental Problems," while the Academy of Sciences calls it the "Department for Special Problems." There are also doctrinal problems, for a Soviet scientist named Kagan published a definitive book on information theory in which he explained Psi phenomena in terms of low-frequency radio propagation. Psi experiments in Russia, the US, and elsewhere which appear to show precognition do not fit this radio model and produce curious reactions by the Soviet scientific community, as noted below.

(U) The concentration of the Psi research in hospitals is also based on this radio model, for the Soviet medical researchers have been doing a lot of work in treating cancer patients and others with low-frequency radio waves (in the 10-Hz to 100-Hz range) and have discovered that during this treatment the patients have mystical experiences, relax, and some appear to experience cures. The experiments are conducted without any specific theory. Targ found that this resulted in a lot of hospital visits in the Moscow area, to see the ELF (extremely low frequency) equipment and hear about the experiments.

(U) Dr. Targ, the visiting scientist, had worked in various areas of hard science, including lasers and wave physics, for GTE before moving to SRI in the early 1960s to pursue a NASA-funded project for an ESP teaching machine. Since then he has worked on a number of Psi projects at SRI and recently formed a company to do applied Psi work. His emphasis has been on controlled experiments in remote viewing and precognition.

(U) At the August 1983 meeting of the International Society on Psychic Research, a Soviet theoretical physicist, Guberev, suggested he come to Moscow as a tourist to see the Soviet work. Targ, who had worked on Defense contracts, refused to go to Russia as a tourist, fearing that the Soviet authorities might detain him, but said that he would be happy to go as an officially invited guest of

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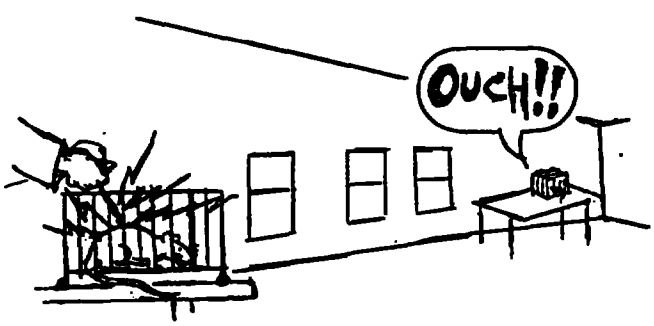
the Soviet Academy of Sciences (so that the Soviet authorities could not misconstrue the purpose of his visit). The official invitation arrived two days after the KAL 007 shootdown. Targ decided to accept the invitation, he said, because he felt the KAL incident was a result of a refusal to communicate (viz., neither the Japanese nor Soviet air controllers would notify each other of the divergence from the flight path), and he thought his visit would help to counteract the deterioration of US-USSR scientific communications. He took his daughter, who is fluent in Russian, as a translator. At the end of September Targ, his daughter, and a colleague arrived in Russia via Interflug. (The other airlines had suspended service to Russia.)

(U) Targ was careful to preface his exposition with the caveat that he could report only what the Russians had told him of their work. He did not see any experiments conducted and, although he had known Guberev for about ten years, he could not prove that all the results reported to him were not intentional disinformation.

(U) His impressions were that the Russians had a number of smart people, such as Guberev, doing good controlled experiments on remote viewing. A 1976 IEEE paper by Targ on remote viewing had been translated into Russian, as had the 1982 paper on Psi phenomena by Dr. Robert Jahn, Dean of Engineering at Princeton, which was published in the prestigious IEEE Proceedings and soon translated. In general, Targ found, the Russians were up-to-date with US work in this field.

(U) Psi work is regarded seriously at high levels in the Soviet scientific (and defense circles, Targ found, because the scientists had to clear their work with the Soviet military authorities before disclosing it or letting him into their labs. Targ found that there were closed facilities, unambigously presented to Targ as not permitted for him to visit.



(U) Most of the experiments are done in or near major hospitals in Moscow. One large experiment in "rat telepathy" was disclosed to Targ. Rats raised together were separated into two groups. They were shock-conditioned separately, in standard Pavlovian fashion, by being shown a light, followed soon afterwards by an electric shock. The rats learned that the light was associated with the shock and would manifest fear at the light. Then two cages were connected by a modem, at various distances. Some experiments used cages more than a kilometer apart. A computer would call up one of the cages and shock one of a pair of rats. Apparatus measured the galvanic fear reaction of the unshocked rat when the warning light was turned on in the other one's cage.

(U) A large computer in the hospital was used to process the galvanic response data. Fast Fourier Transforms (FFTs and autocorrelation were used to detect changes in the GSR (galvanic skin response) in response to some stimulus. Targ said that the computer looked like a PDP.

(U) The signal-to-noise ratio of the GSR data in the rat experiment was clear and the analysis was considered (by the Russians apparently) as a trivial application of a mathematical algorithm. The experimenter was apparently Guberev, whom Targ has known for a decade. Targ could not vouch for the experimental data. The experimenter wanted to use computer analysis of GSR data to find the exact instant that a subject drops into a hypnotic trance. This is somewhat controversial, because it is apparently widely believed in the US that there are no known physiological correlates to the hypnotized state, i.e. no measurable difference. Guberev claims that there are unambiguous GSR changes at the crossover point.

(U) GSR changes are also monitored in medical experiments which use 10-Hz to 100-Hz radiation to treat various illnesses. Because of translation problems, the Russian descriptions of the experiments were incoherent to Targ (his daughter translated), however cancer treatment was one of the ELF applications. Targ said that different stochastic modulations, including high-frequency noise, were impressed on the ELF carriers.

(U) Their Soviet host, Barazin, took them on a tour of "the Department for Research on Special Problems." Targ thought this was the Soviet analog of the US phrase "anomalous problems" that masks Psi experiments with an ambiguous, scientific-sounding name.

(U) Targ and his party presented the SRI work in remote viewing to two kinds of audiences:

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[] medical people and psychologists, and

[] physical scientists.

The standard format was for Targ to give his talk in English, after which his daughter would give the same material in Russian. The medical people had good questions on experimental technique; e.g., the signal-to-noise ratio of the data, the mental processing, how the remote viewers felt during the viewing experiments, etc. Targ felt that they had all read the relevant US papers. But the physicists were another matter.

(U) When Targ's daughter began to present the Russian-language version of the SRI work to the audience of physicists, all went smoothly until she reached the part about precognition, at which point there was an uproar. She could scarcely finish a sentence. For two hours the physicists interrogated her mercilessly, demanding an explanation of how the Psi subjects did the precognition; i.e., a physical theory that would account for the phenomena. Because Kagan's book on information theory explained Psi phenomena as ELF radio, the SRI precognition results conflicted with this (approved) theory. The Soviet physicists refused to hear any data until Targ could provide them with a theory which they could accept, one that provided a model for precognition.

(U) The Targ party visited Yuri Guliyayev, an Electrical Engineer who is the director of "the Soviet version of the IEEE" (probably the Popov Society). There was noticeable antagonism between the Academy of Science people and the electrical engineering society. His SAS host drove him to the door of Guliyayev's institute but would not enter. Yuri Guliyayev wanted to know who Andrianka was, looked him up in a directory, and announced to Targ that he was an Academician and that his Department in the Academy had only one member.

(U) Guliyayev knew all about US Psi work, including Psi experiments on US submarines. Targ found that the Russians seemed to know everything that was going on in the US, (apparently even unpublished work) but wanted to talk about what the Russians were doing. Yuri Guliyayev is doing tests in bioradiation, repeating what Vasiliev did, to see all the RF, IR, and other electromagnetic energy coming out of people's bodies, and to correlate this with different physical states. Yuri kept saying that he was doing physics, not ESP. But Targ noted that Guliyayev's work is almost the same as what "aura readers" are doing in spectraphotometry. The Targ party was given a paper that rather sketchily described the Soviet work in bioradiation.

(U) There was also an experiment with a noted psychic, Nina Kalada. The Russians report that she can read a page in a book in another room, with results well above random. For example, she might be asked to read the first line of page N of a book with a certain title in a library in the next room. Her results were well above random, according to the Russians, as long as she had feedback of results, i.e., could see immediately how close she came. When she was sent out of the room during the verification and not allowed to know how well or poorly she had done, her results were no better than random. Dr. Targ felt that this meant that documents in locked in safes in the US Embassy in Moscow were safe from Ms. Kalada, since she would not get the feedback necessary to produce successful results. He said he assumed that espionage was the point of the research.

(U) One of the asides in the journey was a trip to a "free market" in Leningrad, where fresh fruit and vegetables can be purchased by approved people at black market prices in large armory-sized covered markets. Because of the shortage of fresh fruit and vegetables in Russia, only certain foreigners and Russians are allowed into these markets. Russians approached the Targ party before they went, in an effort to get them to change some money or make some purchases on their behalf. Targ, fearing he was being set up for a police trap, refused. His scientific friends then confirmed that this was a standard ploy, to implicate visiting foreigners in some illegal activity. At the food market, the police refused to allow Targ to take any photographs at all and interfered with his efforts to do so. Apparently fresh fruit is so hard to obtain that they did not want any photographic evidence that it was available at all.

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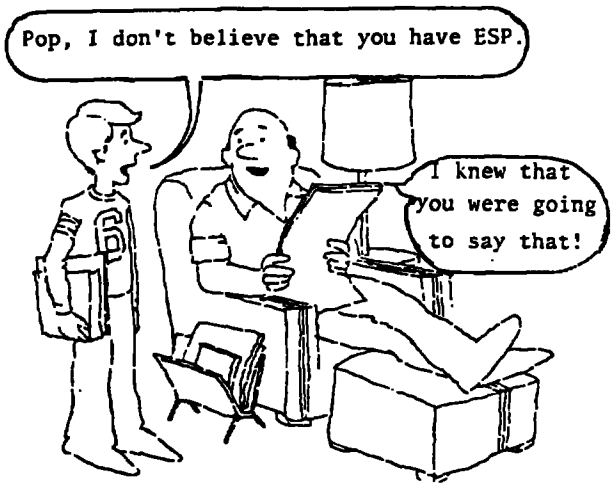

(U) From Leningrad their Russian hosts took them on an unscheduled side trip to Yerevan, capital of Soviet Armenia. Targ, apprehensive about what might happen, resisted, saying it was not on his itinerary and he would not go to Armenia. The Russians replied that there had been a large-scale experiment in remote viewing and the Armenian scientists wanted to see Targ and his party—in Armenia. Professor Rubiky Gasumsan, of the Department of Psychology, had done experiments with graduate students. Apparently they were given no choice, and had to go to Armenia. In the remote viewing experiments, an architect picked a number of sites in the city that had distinctive features. These locations were sealed in envelopes and picked at random. Students, called "guards," were used to escort the "agent" to the site, which they only learned about by opening the envelope while on the way. The other member of the RV (remote viewing) pair sat in a lab and waited until the "agent" reached the site. Then he described what he thought the agent was looking at. (This is similar to the SRI experiments.) The Armenian scientists described work which had strikingly successful results.

(U) Targ and his party were then taken on a brief holiday, still protesting, to a remote place in the mountains of Armenia to see "the church at the end of the world." It was only when they were in the back of the Intourist bus, far away from all witnesses, that the Armenian scientists revealed what they really wanted to talk about. They had encountered precognition of targets before the "agent" reached the site to be viewed. The student in the lab, even when he was told that the agent was not yet in place, would go ahead and describe the remote site anyway.

(U) The problem for the Armenians was what to do with the data. They have trouble dealing with the data at the labs in Yerevan and in the Academy of Sciences. Targ and the Armenians had a long discussion on protocol, i.e., the form for such experiments, similar to US protocol analyses.

(U) (Obviously, they were using Targ to "publish" results that they could not publish in Russia, because they conflicted with accepted theory, and staged his visit so they could talk to him and still deny things afterwards, if there were any repercussions. Add in the potential for disinformation, and the situation has various possibilities—a commentary on being a scientist in Russia.)

(U) Summarizing, Targ said there were a lot of hospital visits to show ELF signals and apparatus which caused the subjects to have mystical experiences, and so on.

(U) In reply to a question, Targ said he had made informal agreements to do long-distance remote viewing experiments between the USSR and the US, providing the "communications" between the US and Soviet scientific parties were good enough. He has not started this work because of communication problems.

(U) What the secret Soviet work in Psi applications might be was neither known nor hinted at in Targ's exposition.

(U) Apparently there were no live demonstrations of anything for the Targ party and no detailed papers that they could take out.

(U) Other papers at the SAAP meeting covered a lot of US work in sensing objects underground, or at some distance, and also covered criminological applications to get clues to serious crimes. The Chinese had also reported experiments in seeing printed materials through sealed envelopes, in which a successful "read" set off a number of field sensors and also gave a "blurred photographic impression" of the string of five Chinese characters when a success occurred. There was audience interest in using these remote sensing and underground and undersea detection techniques to find submarines and missile silos. Possibly the Russians, who seem to be abreast of US work, have similar interests.

(U) A recent Congressional Research Service (CRS) study by Christopher Dodge (83-511 SP) cited other Soviet Psi work, noting considerable Soviet interest in remote hypnotic manipulation and dowsing for water, oil, and minerals. This is referred to in Soviet literature as the "biophysical or biolocational effect." Psychokinesis (PK or Polterism, in which the mind affects physical objects) and psychic healing have also attracted Soviet interest. The Soviets claim that

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scientific studies of dowsing have yielded significant results. (US researchers make the same claim.) Therefore, dowsing is taught to professional mineralogists and geologists at Tomsk Polytechnical Institute. The CRS report says there are various speculations that the USSR is spending tens of millions of dollars on Psi experiments and applications directed to military research, but this is unconfirmed. A paper, "Psi in the USSR: Applied Aspects" by L. Vilenskaya, Applied Psi Newsletter, Vol. I, no 1, 1982, pp. 4-5. Bulgaria and Czechoslovakia also conduct Psi research and applications, according to the CRS report.

Analysis

~~(FOUO)~~ The ability to read a page of a book in another room (the Kalada experiment) would have security implications for COMSEC if it worked reliably. The Russians could, for example, use such a technique to determine whether a pinched keylist was in use in an embassy coderoom.

~~(FOUO)~~ The GSR research, using FFT and autocorrelation to detect the instants at which subjects are responding to stimuli or becoming hypnotized, could be applied to electronic interrogation and debriefing techniques. One of the key factors in Psi experiments is determining when the Psi subject is reliably reporting Psi experiences, and US experimenters have been using voice tremor analysis and pupil dilation photographs to bracket valid episodes. The Russians are undoubtedly aware of this work, and if they are able to develop very good methods for determining when people are responding correctly to an interrogation, they would be able to apply it to non-Psi interviews. The rat telepathy experiments, if applied to humans, might give them ways of determining when agents are under stress, e.g., after they have been arrested. The dowsing (i.e., biolocation of specific distant objects such as ships, computers, nuclear weapons, etc.) would have obvious intelligence applications if it worked as well as conventional intelligence techniques.

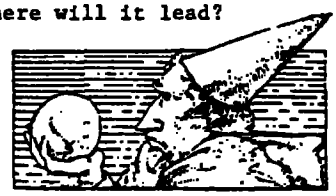
Generally, there is a problem in getting the Psi subjects to repeat their work because of emotional factors--at least in the US.

~~(C)~~ Summing up, Psi work is still very nebulous and unpredictable. There is a lot of doubt about it. In spite of this, the Russians are openly experimenting in certain areas where they apparently feel there is an acceptable theoretical base (e.g., ELF radio and biolocation), while they reject other unacceptable Psi effects. They are obviously keeping up with the work in the US and other countries. The establishment of a one-man department in the Academy of Sciences implies that the established disciplines don't want to be closely associated with Psi work, but possibly the Russians feel the experimental results are too strong to be ignored. The difficulty Russian scientists are having with precognition, for which there is no approved theory, is somewhat comical, but probably no different from the general attitude in Western science.

~~(C)~~ One of the subtle undercurrents of Targ's visit was his concern about being arrested, the arbitrary way in which the Russians made him go to Armenia (as if he had no more rights than a Soviet citizen), and his inability to get sufficiently detailed expositions of the Russian work--in a field in which he has been a leading researcher for over 20 years--to determine whether anything he was told was true or false. If he actually does some joint experiments with the Russians, the nature of the results and their interpretation should be interesting.

~~(C)~~ Another subtle point, noticeable because it was never mentioned, was the "human element" of Soviet Psi work. In the US, much of the current work is in trying to improve the rapport between the experimenter and his subjects, trying to find more people with Psi abilities, and then getting them to cooperate in Psi experiments. The key to success in US experiments has apparently been the emotional factors of getting the Psi subject to feel the work is important, and also for the experimenter himself to be equally committed to the importance of the work. This of course makes it difficult to repeat experiments, because the emotional charge cannot be sustained. On the basis of Targ's exposition, this matter of subject cooperation and the emotional component of the work did not come up at any point in the Soviet work.

(U) There is probably food for thought, on several levels, in this unconventional Soviet development. What are they up to? What does it mean? Where will it lead?



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