THE EXTERNAL QI EXPERIMENTS FROM THE UNITED STATES TO BEIJING (CHINA) BY YAN XIN

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Introduction

In the past, Dr. Yan Xin[1] and his coworkers have conducted a number of successful Qigong experiments in China in which the external Qi emitted by Yan Xin 2,000 km away affected a variety of experimental samples which would not have been similarly affected under normal circumstance [1-8]. Two sets of new Qigong experiments were designed and carried out this time in which Yan Xin emitted external Qi from the United States to Beijing, China. The aim of these experiments was to test the effect of the external Qi emission from a different hemisphere, over 10,000 kilometers away and separated by the Pacific Ocean.

The purpose of the experiments was to produce effects via Qigong that could not have been produced by known physical methods. From December 1990 to April 1992, two sets of experiments were conducted: one was on the radioactive decay rate of the radioactive element ^{241}Am and the other was on the ultraviolet absorption of de-ionized water. Positive results were obtained: the half-life of ^{241}Am and the ultraviolet absorption of de-ionized water were significantly changed apparently because of the effect of the external Qi emitted more than 10,000 km away. We describe below the experimental procedures and the results. (The time indicated in this paper was all Beijing time).

The First Set of Experiment: Observation of Changes in the Radioactive Decay Rate of the Radioactive Element ^{241}Am

Experimental

From December 1990 to June 1991, we conducted new experiments on the effects of the external Qi of Qigong on the radioactive decay rate of the radioactive element ^{241}Am.

Every radioactive element has its specific half-life which is not affected by the external physical or chemical influence because it is the intrinsic property of an atomic nucleus. Similarly the radioactive decay rate should also not be affected by the external physical or chemical influence since it is determined by the half-life. This is a basic fact recognized in atomic physics for many years. However, can the external Qi change the radioactive decay rate?

[1]Because Yan Xin, with Yan as his family name, is a household name in China, his name will be referred to in this paper following the Chinese custom, while the names of others will be referred to following the English custom.

^{241}Am, an α particle emitter with a half-life of 458 years, was used as the radioactive source in our experiments. Figure 1 is a sketch of its decay schema. We have previously conducted external Qi experiments on the decay rate of ^{241}Am from September 1987 to March1988 and from early 1989 to May 1990. From September 1987 to March1988 we used a γ spectrometer to measure the γ decay rate of ^{241}Am. The result indicated that the decay rate of ^{241}Am was significantly changed by the external Qi emitted by Yan Xin from either close distances or ultra-long distances up to 2,000 kilometers [8]. From early 1989 to May 1990, we used a solid state nuclear trajectory tracking detector to again measure the change in the γ decay rate of ^{241}Am under the influence of the external Qi emitted by Yan Xin, and found a remarkable change in the decay rate of ^{241}Am of up to 10% in magnitude.

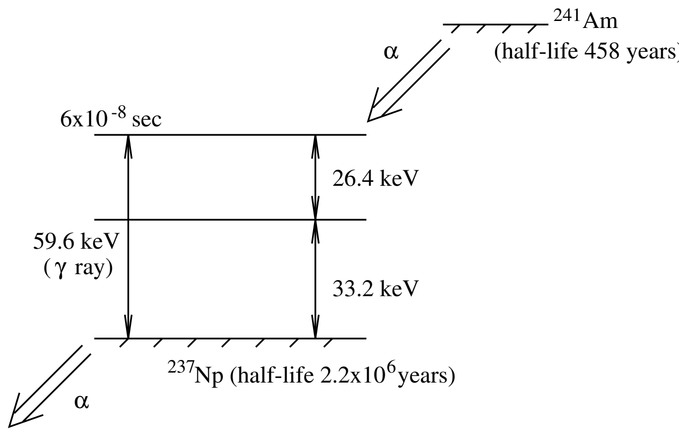

Figure 1: The schema of the major decays of ^{241}Am (details skipped).

In this new set of experiments, a solid state nuclear trajectory tracking detector was again used, and the radioactive source was also ^{241}Am, as in the previous experiments, with a strength of $0.01HC$. The solid state nuclear trajectory tracking detector CR-39 was made in the UK. It was a relative new device with a clean background and was easy to operate. After the exposure to irradiation, the CR-39 piece was etched, using the same method as before, that is, etched by $625N$, $NaOH$ for 9 hours at 70^oC.

This time a new irradiation device was designed. Two circular plates were supported by three poles, separated 2 cm apart. The radioactive source was fixed at the lower face of the upper plate (facing downward), the CR-39 piece (2.5×7.5 cm^2) was fixed on the upper face of the lower circular plate. Then, the CR-39 piece was covered by a $3mm$-thick plate which was slightly larger than the CR-39 piece. The plate had a circular hole of 16 mm in diameter to let α particles to pass through. In this way, the exposure area, which was determined by the area of the hole, was kept strictly constant for each measurement.

The irradiation and etching of the CR-39 pieces were carried in Lab III of the Institute of High Energy Physics, Academia Sinica, 17 km away from the Positron Physics Lab. The particle track count was measured using an automatic Leiz MPV-TAPLUS multipurpose graphical analyzer at the Institute of Biophysics, Academia Sinica.

Results and Discussion

1) The First Experiment

The Qi emissions were carried out during the period of 2:00pm - 5:00pm, December 9, 1990. Prior to that time, two CR-39 control pieces (2.5×7.5 cm^2), A and B, were taken from

Lab III and exposed to the radioactive source for comparison purpose, hereafter denoted AI and BI. Then, the radioactive source was sent to the Positron Physics Lab to be treated by the external Qi emitted by Yan Xin from the United States for 3 hours. After the treatment, the Qi-treated radioactive source was sent back to Lab III. The lower halves of the CR-39 were then exposed to the Qi-treated radioactive source, denoted by AII and BII. Finally, the two pieces, A and B, were etched at the same time and sent to the Institute of Biophysics to measure the α particle track count. In this experiment, the exposure time was 1380"±5". The results from the first experiment are listed in Table 1.

Table 1: Results from the first external Qi experiment on ^{241}Am.

	α track count (a total of 896 views)	
	A	B
Before Qi treatment (I)	24101	24151
After Qi treatment (II)	24559	24588
II/I	+1.8%	+1.9%
Average	+1.85%	

The total experimental uncertainty was 0.7%, including the count uncertainty 0.2%, measurement reproducibility uncertainty 0.6%, and exposure time uncertainty 0.3%. Therefore the ratio of II/I had an uncertainty of 1.0%. The measured ratio increased only 1.85%, the statistical significance level α was about 0.8. Thus, we could not be positive that the increase was caused by the external Qi treatment.

2) The Second Experiment

This time, Yan Xin emitted external Qi twice, the first time during the period of 8*am* - 11*am* June 6, 1990, and the second 8*am* - 11*am* June 7, 1990.

As a control experiment, in the afternoon of June 4, 1991, two CR-39 pieces (2×5 cm^2) were exposed to the radioactive source. The exposure time was 1815"±5".

The first external Qi treatment was started in the afternoon of June 5, 1991. The radioactive source and its supporting frame were sent to the Positron Physics Lab, waiting for the external Qi treatment. The source was treated by the external Qi emitted by Yan Xin from the United States in the morning of June 6, 1991. The Qi-treated source and its supporting frame were sent back to the Cosmic Ray Lab. The lower halves of the first and second CR-39 pieces were exposed to the Qi-treated radioactive source for a period of 1815"±5", marked as A1 and A2 respectively. After the exposure, the radioactive source was sent back to the Positron Physics Lab (waiting for the second treatment).

The second external Qi treatment was conducted during the period of 8*am* - 11*am* in the morning of June 7, 1991. The radioactive source was treated again by the external Qi emitted by Yan Xin from the United States. After the treatment, the source and its supporting frame were sent back to the Cosmic Ray Lab. Then, the upper and lower halves of the third CR-39 plate were exposed to the doubly-treated source separately. The exposure time was the same as before. The two halves were marked as A3 and A4, respectively.

On June 8, 1991, three pieces of CR-39 plates were etched at the same time for 9 hours. The track size was about 11 with very clear tracks. The results from the second experiment are listed in Table 2.

Table 2: Results from the second external Qi experiment on ^{241}Am.

	α track count (a total of 1833 views)			
	First Plate		Second Plate	
Before Qi treatment (I)	B1	35482	B2	36839
After Qi treatment (II)	A1	38157	A2	39049
A/B	+7.5%		+6.0%	
Average	+6.8%			

After second Qi treatment	A3	33980
	A4	33923
	Average	33951.5
Comparison to A1, A2 before the second Qi treatment	to A1	-11.0%
	to A2	-13.0%
Average		-12.0%

Experimental uncertainty: counting uncertainty was 0.5%, measurement reproducibility uncertainty 0.2% and exposure time uncertainty 0.3%. Total uncertainty was 0.6% and the uncertainty in the ratio was 0.85%.

A 6.8% increase in the intensity ratio was 8 times larger than the experimental uncertainty of 0.85% and a 12% decrease in the intensity ratio was 14 times larger than 0.85%, the significance level in mathematical statistics $\alpha \ll 10^{-10}$, indicating that the results were statistically significant.

This result showed that the external Qi emitted by Yan Xin from the United States could also cause up to an astonishing 12% change in the radioactive decay rate of the radioactive source ^{241}Am, similar to the results from the previous experiments conducted in China.

The Second Set of Experiments: Observation of Changes in the Ultraviolet Absorption of De-Ionized Water

Experimental

Previous experiments indicated that, after being treated by the external Qi from Qigong masters, the ultraviolet absorption spectrum of de-ionized water had noticeable and long-lasting changes. The water treated by external Qi is usually called message water. It is a common practice that Qigong masters ask patients to drink the message water or rub it on diseased skin during a Qigong healing session. The changes in the ultraviolet absorption can therefore be used to detect the effects of external Qi, specially the strength of the external Qi emitted Yan Xin some 10,000 *km* away.

Sample Preparation

20 *ml* de-ionized water was put inside a 25 *ml* square plastic bottle with a lid tightly closed. For each test, three samples were used.

Experimental Procedure

Before each test, three samples were put in a designated Qi- receiving room at the Institute of High Energy Physics in Beijing, China. After the external Qi treatment by Yan Xin from the United States, the samples were taken out of the room and sent to an analytical lab 1 *km* away for measurements of ultraviolet absorption using a Rigaku UV-265 spectrophotometer with a wavelength range from 200 *nm* to 400 *nm*. The spectra thus obtained were compared to that of the control sample (de-ionized water untreated by external Qi) which was a horizontal straight line. During the whole experiment, the lids of the bottles containing the samples were kept tightly closed until the start of the measurement and no physical or chemical interference was applied to the samples.

Results and Discussion

In October 1991, four tests were performed on the 6th, 8th, 17th and 18th of the month. The time of the external Qi treatment was 7:30*am* - 10:00*pm* for all the tests and the conditions are listed in Table 3 and the results are shown in Figures 2-5.

Table 3: Results from the first round of external Qi experiments on de-ionized water.

Test Date	Sample Number	Measurement Time	Result
10/6/91	38, 39, 40	10/10/91	Figure 2
10/8/91	41, 42, 43	10/10/91	Figure 3
10/17/91	B1, B2, B3	10/24/91	Figure 4
10/18/91	C1, C2, C3	10/24/91	Figure 5

Figures 2-5 showed that the spectrum of each test sample in the experiment underwent noticeable changes. The fact, that the absorption curves of the three samples treated at the same time were close to be parallel, removed the suspicion of accidental change in one sample. The time of the external Qi treatment was between 8:30*am* and 12:30*pm* for all the tests. The results from the three tests with twelve samples demonstrated that the external Qi emitted by Yan Xin at locations 10,000 *km* away could still affect de-ionized water and change its ultraviolet absorption spectrum.

In April 1992, four more tests were performed. The conditions of the experiments are listed in Table 4 and the results are shown in Figures 6-9.

Table 4: Results from the second round of external Qi experiments on de-ionized water.

Test Date	Sample Number	Measurement Time	Result
4/21/92	1, 2, 3	4/22/92	Figure 6
4/21, 4/22/92	4, 5, 6	4/22/92	Figure 7
4/27/92	7, 8, 9	5/7/92	Figure 8
4/27, 4/28/92	10, 11, 12	5/7/92	Figure 9

The results again demonstrated that the emissions of the external Qi by Yan Xin from 10,000 *km* away were successful in changing the ultraviolet absorption spectrum of de-ionized water.

In the test conducted on April 21 and 22, the changes in the ultraviolet absorption spectrum were larger in magnitude for two consecutive days than for the water treated for only one day, see Figure 7. But the tests conducted on April 27 and 28 did not show the same correlation, see Figure 9.

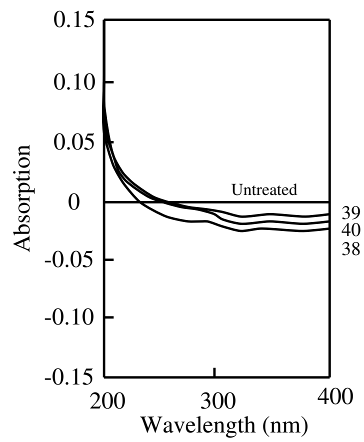

Figure 2: The ultraviolet light absorption spectra of Qi treated de-ionized water (samples 38, 39, and 40) compared to that of untreated de-ionized water (straight line).

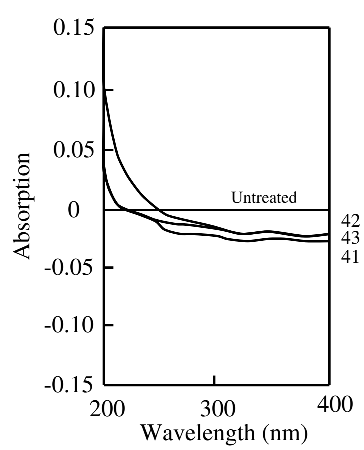

Figure 3: The ultraviolet light absorption spectra of Qi treated de-ionized water (samples 41, 42, and 43) compared to that of untreated de-ionized water (straight line).

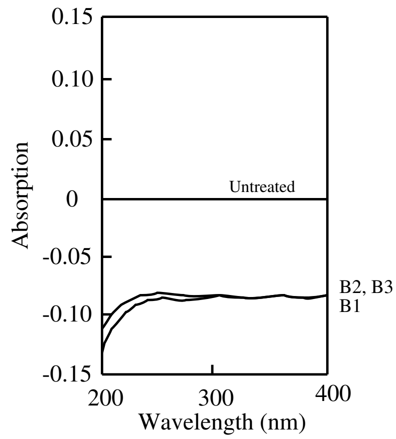

Figure 4: The ultraviolet light absorption spectra of Qi treated de-ionized water (samples B1, B2, and B3) compared to that of untreated de-ionized water (straight line).

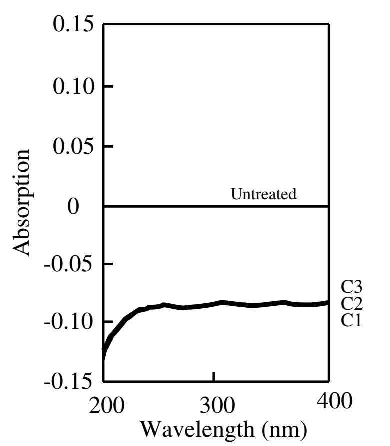

Figure 5: The ultraviolet light absorption spectra of Qi treated de-ionized water (samples C1, C2, and C3) compared to that of untreated de-ionized water (straight line).

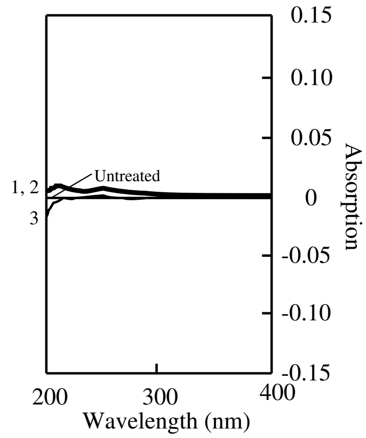

Figure 6: The ultraviolet light absorption spectra of Qi treated de-ionized water (samples 1, 2, and 3) compared to that of untreated de-ionized water (straight line).

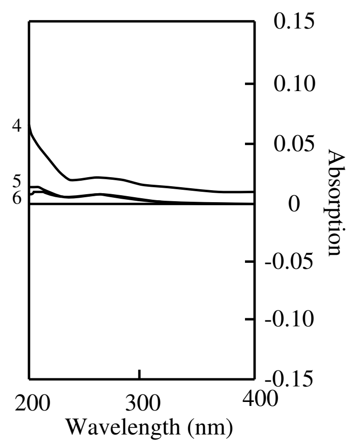

Figure 7: The ultraviolet light absorption spectra of Qi treated de-ionized water (samples 4, 5, and 6) compared to that of untreated de-ionized water (straight line).

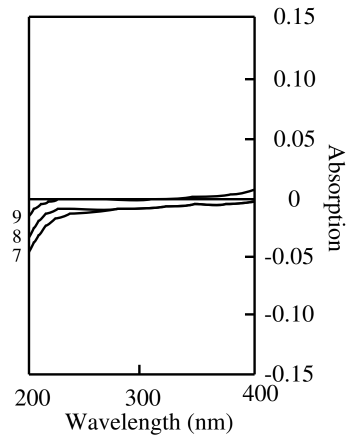

Figure 8: The ultraviolet light absorption spectra of Qi treated de-ionized water (samples 7, 8, and 9) compared to that of untreated de-ionized water (straight line).

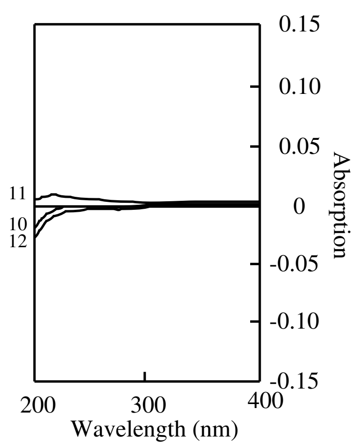

Figure 9: The ultraviolet light absorption spectra of Qi treated de-ionized water (samples 10, 11, and 12) compared to that of untreated de-ionized water (straight line).

Conclusions

The results from the two sets of experiments demonstrated that the external Qi emitted by Yan Xin from the United States could cause an astonishing 12% change in the radioactive decay rate of the radioactive source ^{241}Am, as well as significantly affect de-ionized water and change its ultraviolet absorption spectrum.

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