THE OBSERVATION OF THE EFFECT OF THE EXTERNAL QI OF QIGONG ON SYNTHESIS GAS SYSTEM

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Introduction

Previous experimental results indicate that the external Qi has certain influence on water and water-based solutions containing ions and organic solutes [1]. To broaden our understanding of the effect of the external Qi on non-living substances, an experiment was designed to determine whether external Qi affects a synthesis gas (syngas) system.

The syngas system ($H_2 + CO$), an extremely simple and basic raw material for organic chemical industry, is important to research in C_1 chemistry (i.e., chemical processes based on carbon monoxide, carbon dioxide, or methanol as the starting materials). The experimental research on the effect of the external Qi of Qigong on the syngas system will provide meaningful information on Qigong science as well as C_1 chemistry.

Experimental Design and Method

Apparatus and Samples

The Fourier-Transform Infrared (FT-IR) spectrometer, model 5DX, used in this set of experiments was supplied by Nicolet Company. The syngas system used in the experiments was made by mixing the following component gases in 1:1:1 ratio:

N_2 - high purity N_2 (99.9%), provided by Beijing Oxygen Factory;

H_2 - High purity H_2 (99.9%), provided by Beijing Hydrogen Factory; and

CO - 99% CO, provided by Beijing Institute of Chemical Engineering.

An *in situ* infrared (IR) cell was provided by the Catalytic Chemistry Group of Chemistry Department at Qinghua University. The IR cell had a stainless steel body with $NaCl$ salt plate windows and could withstand a temperature of 250^oC and a pressure of 250 atm. The syngas filled the space between the two $NaCl$ salt plates which were separated by about 1 to 2 mm.

Experimental Design

Chemical reactions of syngas usually proceed with a suitable catalyst at a high temperature of several hundred degrees Celsius and under a certain amount of pressure. For a Qigong master to affect the reaction of syngas system by emitting the external Qi, he must

spend a significant amount of his internal energy. Thus, during a specific period of time, this kind of experiments is only repeatable for a limited number of times. Additionally, the level of Qi emission is affected by the physical and mental conditions of the Qi emitter as well as the external factors, therefore, it would be unrealistic to expect a Qigong master to produce identical results for each Qi emission. Furthermore, a thorough understanding of the background conditions of the experiment, such as the sample inspection method and the control experiment, is needed to insure that the experimental results are actually caused by the Qigong master.

Sample Inspection Method

Because the experiment was to study the change of syngas system in an IR cell by the IR spectrometry, a rolling background subtraction method was used to eliminate the influence of air on syngas in an IR cell. The following method was used:

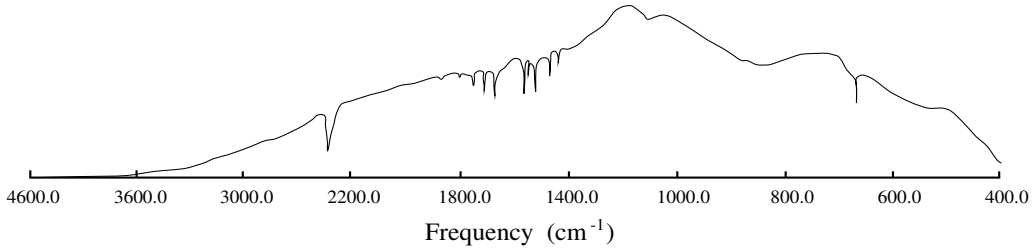

Figure 1: A typical infrared (IR) spectrum of air background. The IR spectrum was taken at 13^oC with a light flux of 22,000 lm/m^2.

Before each measurement on a sample, a background spectrum of the air inside the inspection chamber was taken using the IR spectrometer and saved into a computer. A typical air background is shown in Figure 1. Then, the syngas-filled IR cell was placed in the inspection chamber to take a IR spectrum from which the computer subtracts the background spectrum to yield a sample IR spectrum (shown in Figure 2). In every experiment, the air background and sample in the IR cell were analyzed sequentially by the IR spectrometer at an interval of 10-15 seconds. The interval was sufficiently short to eliminate the influence on syngas by the fluctuation of air composition. During the experiment, the IR spectrometer was also tested by known standard samples to verify the stability of the instrument and to remove the probability that the instrument was affected by a Qigong master.

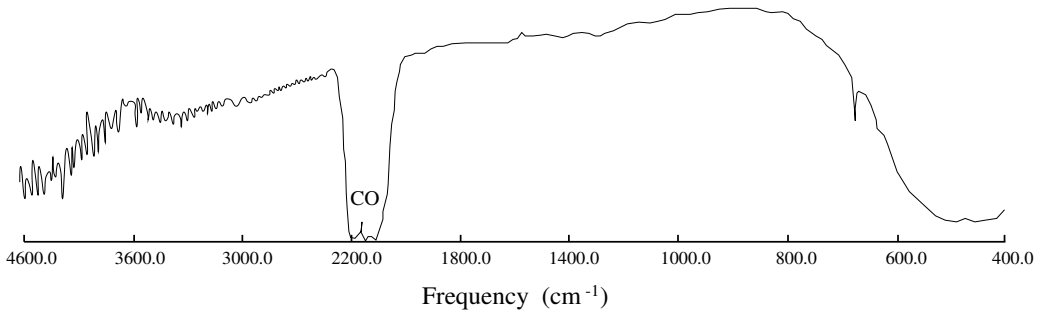

Figure 2: An IR spectrum of syngas untreated by the external Qi of Qigong after the subtraction of air background. The IR spectrum was taken at 13^oC with a light flux of 7,000 lm/m^2.

Control Experiment

To eliminate the possibility that the syngas in IR cell underwent spontaneous change, the syngas (H_2:CO:N_2, 1:1:1, 30 atm) was monitored for one week in the IR cell without receiving external Qi. No change was detected in the spectrum (Figure 3), thereby demonstrating that the syngas was stable in the IR cell before any external Qi treatment.

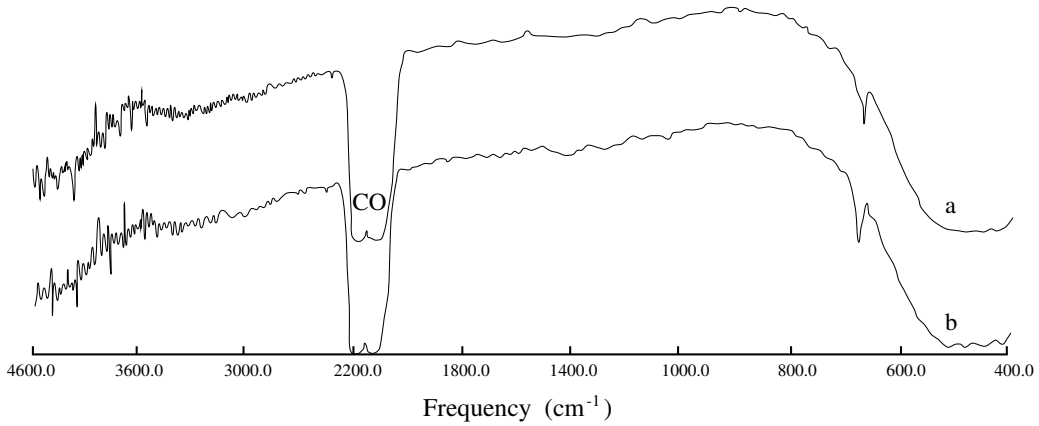

Figure 3: IR spectra of the syngas taken during a week-long monitoring at 13^oC with a light flux of 7,000 lm/m^2, a) at the beginning of the monitoring, and b) on the 7th day of the monitoring. Note that the spectrum of the syngas does not change with time at room temperature.

The External Qi Experiment

The whole IR cell was inflated with high purity N_2 before being filled with syngas (H_2:CO:N_2, 1:1:1, 30 atm). The spectrum of the sample taken was stored in a computer. Five minutes before Qigong master emitted external Qi toward the syngas in the IR cell, the cell was put inside of an appointed room which was locked afterward. Then, the Qigong master, Dr. Yan Xin[1], emitted external Qi to the syngas at various distances (from a few kilometers to hundreds of kilometers) for 5-15 minutes. After the end of the external Qi emission, we opened the door of the Qi receiving room and took out the IR cell to analyze the syngas in the cell by the IR spectrometer. A total of six experiments were conducted, and their conditions and results are listed in Table 1.

Results and Discussion

The spectrum of syngas treated by external Qi was compared to that of syngas not treated by external Qi. Two new peaks at 2,362.5 cm^{-1} and 2,340 cm^{-1}, which are the characteristics of vibration of C-O bond of CO_2, were found in the spectrum after the external Qi treatment, (see Figure 4). This result demonstrated that the syngas in the IR cell produced CO_2 under the action of external Qi. Interestingly, the CO_2 produced in the IR cell decayed and finally disappeared two hours after the end of external Qi emission.

The experiment indicated that the external Qi from a Qigong master catalyzed the disproportionated reaction: $2CO \rightleftharpoons C + CO_2$.

[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.

Table 1: A summary of the conditions and results of the six Qigong experiments on syngas system.

Time	System	Room Temperature	Communication Method	Distance	Results
12/22/1986	$H_2 + CO$	13^oC		3 m	CO_2 appeared
1/5/1987	$H_2 + CO$	13^oC	Telephone	7 km	CO_2 appeared
1/8/1987	$H_2 + CO$	11^oC	Telephone	7 km	CO_2 appeared
1/9/1987	$H_2 + CO$	11^oC	Telephone	7 km	CO_2 appeared
1/12/1987	$H_2 + CO$	10^oC	Telephone	1,900 km	CO_2 appeared
1/17/1987	$H_2 + CO$	11^oC	Telephone	1,900 km	CO_2 appeared

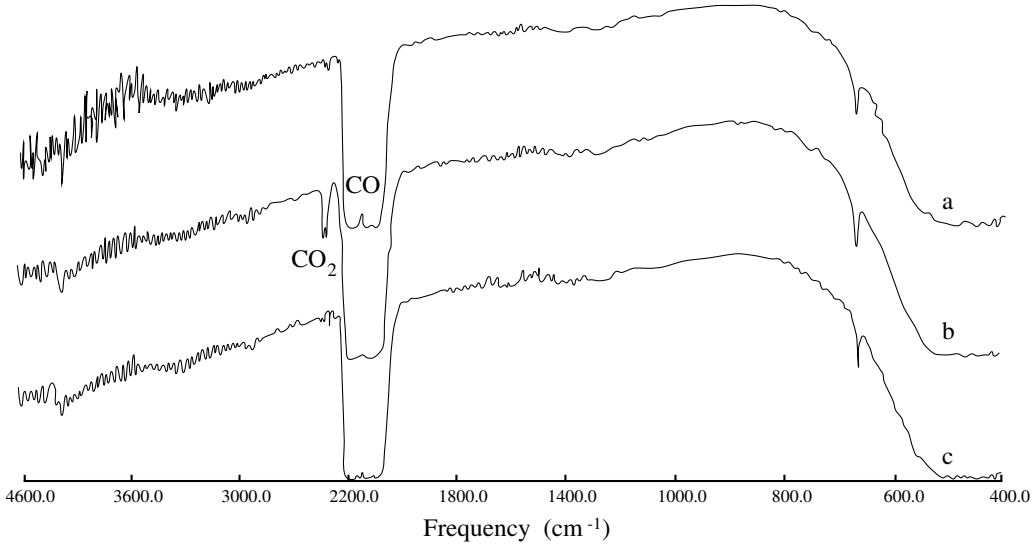

Figure 4: IR spectra of the syngas showing the production of unstable CO_2 catalyzed by external Qi: a) before the external Qi treatment; b) 30 minutes after the external Qi treatment; and c) 2 hours after the external Qi treatment. The spectra were taken at 13^oC with a light flux of 7,000 lm/m^2.

Dr. Yan was then asked if he could produce more of the CO_2 and let the CO_2 stably exist in the IR cell. In the next experiment, after the emission of external Qi on syngas by Dr. Yan, more CO_2 was produced in the syngas-containing IR cell than in the previous experiment. To verify that CO_2 was stable, the gas mixture was monitored in the IR cell for 4 days using the IR spectrometer. The results indicated that CO_2 did not disappear this time (Figure 5).

In this experiment series, two experiments were conducted during which Qigong master emitted external Qi from Guanzhou to Beijing (1,900-2,000 km). The results indicated that CO_2 was produced in the IR cell (Figure 6). However, the amount of CO_2 produced in these experiments was a little less than those produced in the 10 km Qi experiments (Figure 6).

Stable CO_2 is also produced in the Fischer-Tropsch (F-T) synthesis [2] and in the production of methyl alcohol, in which catalysts and high temperatures are required. The relationship between thermodynamic equilibrium constant and temperature for the reaction

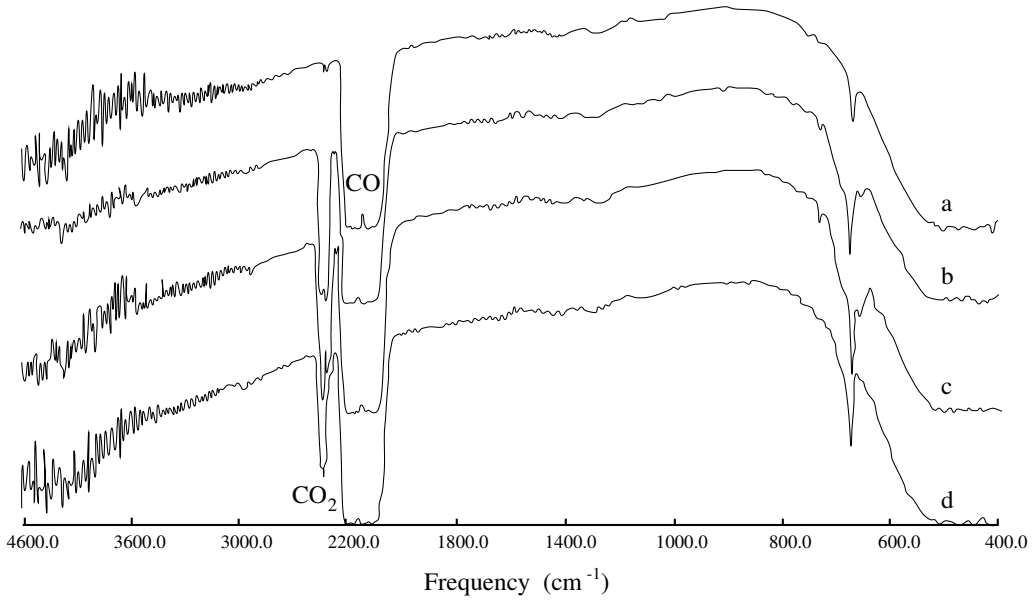

Figure 5: IR spectra of the syngas showing the production of stable CO_2 catalyzed by external Qi: a) 15 minutes before the treatment of external Qi; b) 30 minutes after the treatment of external Qi; c) one day after the treatment of external Qi; and d) four days after the treatment of external Qi. The spectra were taken at 13^oC with a light flux of 7,000 lm/m^2.

is listed in Table 2.

Table 2: Thermodynamic equilibrium constant K at different temperatures for the reaction $2CO \rightleftharpoons CO_2 + C$.

$K = P_{CO_2}/P_{CO}^2,\ atm^{-1}$			
400 K	500 K	600 K	700 K
2.1×10^{13}	6.1×10^{8}	5.9×10^{5}	4×10^{2}

From the thermodynamic point of view, a low temperature favors the disproportionated reaction, but the kinetic rate constant for CO_2 production is extremely small under this condition such that no CO_2 is practically produced. However, there was more CO_2 produced than what the chemistry would expect in the syngas system under the external Qi emission for a short period. The disproportionated reaction in the syngas mentioned above is only an inference. Specifically, because of the small volume of the IR cell (volume 0.16 ml, light distance 1-2 mm) the presence of carbon, which should have been produced in the reaction, could not be measured.

The most dramatic result of these experiment was that Qigong master Dr. Yan Xin affected the samples at various distances. In these experiments, Dr. Yan was between 7 km to 2,000 km away from the location of the test samples when he emitted the external Qi. It is extremely remarkable for a Qigong master to influence the molecules of substance over such a long distance. This fact cannot be accounted for by any known scientific explanation at the present time.

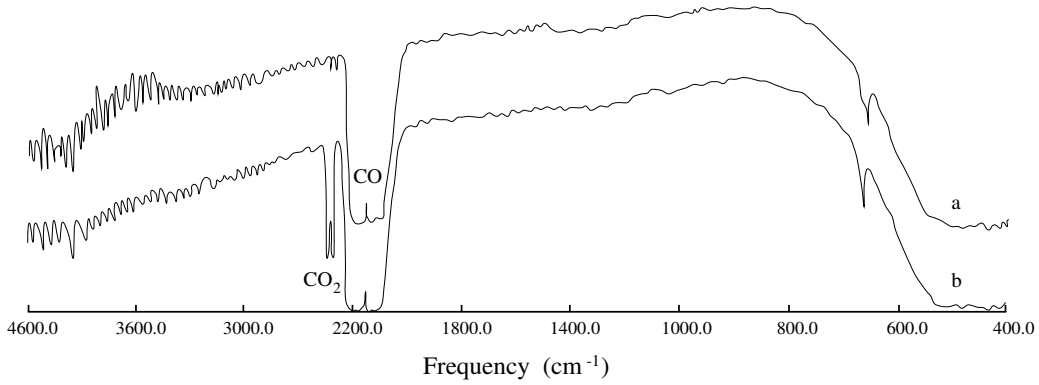

Figure 6: The IR spectra of the syngas in an IR cell: a) 10 minutes before the treatment of external Qi; b) 45 minutes after receiving external Qi emitted by Qigong master Yan Xin 1,900 km away. The spectra were taken at 13^oC with a light flux of 7,000 lm/m^2.

Conclusions

The above described experiments confirmed that at room temperature and without catalysts, CO_2 can be produced in the synthesis gas system by only the external Qi treatment from a Qigong master at a distance. These experiments indicated that a Qigong master was able to achieve certain designed experimental goals using Qigong methods. Clearly, the principle and mechanism of the Qigong process needs further investigation. This work is just a beginning on the long road to explore the mystery of influence of the external Qi on non-living substances.

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References

[1] Yan, Xin; Li, Shengping; Yu, Jianyuan; Li, Baike; and Lu, Zuyin; Ziran Zazhi (Nature Journal, in Chinese), Vol. 11, pp. 567- 571 (1988).

[2] Anderson, R.B.; The Fischer-Tropsch Synthesis, Academic Press, Inc., New York, New York (1984).