

I decided to choose a subject which is related more to my personal experience than to science itself.

I know that I am not a good storyteller, even if I speak in Japanese.

I cannot be half as poetic as Mr.

Imamura. Moreover, I think I am thoughtful I was still a little bit too young to talk about recollections

of my school days. When I was twenty years of age, every one, who was above twenty years of age, seemed to me old. When I was thirty,

every one, who was above thirty,

seemed old. At present I feel myself just the same way today, in spite

of the fact that my hair has become thin from my forehead.

However, if I count the number

of years that since I graduated

from Kyoto University, it is already

twenty one years. So I am convinced

that I am well qualified to talk

about my school days. ^{certainly}

2. In a word, my school life was

rather very common place. I was not a very

brilliant boy. Nor was I bold enough

to do something sensational, either good

Recollections of my School Days ①

Dec. 9, 1950, 7:45 p.m.
International House, N.Y.C.

1. Since I was asked to talk this evening (for Japan Society of C.N.), I have been wavering in choosing both my subject and language ~~to talk~~ ^{to talk} of course, it is much easier for me ~~to talk~~ ^{to talk} about science than anything else. Also it is easier for me to speak Japanese than English. However, I decided that in the opposite way. First of all, I would like to take advantage of this opportunity as one ~~last~~ ^{last} lesson in English for myself ~~with you~~ ^{with you}. When I went back to Japan last summer, I had to give speeches about twenty times during my three weeks stay there. A friend of mine told me: "You have such a good memory. You haven't forgotten a single Japanese word during your two years absence from Japan." So I answered said: "Of course, not. I have been talking speaking Japanese every day with my family." As a matter of fact, I tried several times to speak English with my wife and my sons. Every time we failed. After a few minutes, we found ourselves talking in Japanese.

four brothers and two sisters. Grand father and grand mother were also with us, when at that time.

We were compelled to live in a big house. ~~My~~ My father, ~~was~~ ^{was} wise, was not a rich man. ~~A university~~ ^{rich} professor cannot be a very rich man ~~anywhere~~ in the world.

However, life in Japan was much easier at that time than ^{at present} now. We felt no serious ~~economic~~ ^{economic} difficulties. The only trouble was that my mother had to be always very busy in bringing up children, taking care of her husband and parents. ~~She stayed~~ ^{she} I usually her practically always staying home. It was only once or twice a month that she went out for shopping.

You can imagine what ~~was~~ the atmosphere in our house was like.

I and my brothers spent most of our time by reading books. — Books of whatever kind which were near at hand. ~~It might be a novel,~~ Contemporary novels, Japanese classics, Chinese classics etc.,

②
or bad. However, there was a little bit of ~~difference~~ ^{peculiar} peculiarity in the background of my school life. I was born in Tokyo. Next year our family moved to Kyoto, since my father was appointed Professor of Geography in Kyoto University. My father was a ~~very~~ ^{a great} type of man, who ~~was~~ ^{is} interested in ~~various~~ ^{various} things. His profession was teaching and research in ~~glology~~ ^{anthro} and Geography. But ~~he~~ ^{she} ~~was~~ ^{was} ~~archeology~~ ^{archeology} too, and hence he had ~~an~~ ^{an} ~~interest~~ ^{interest} in ~~it~~ ^{it}. More generally, he was interested practically in everything old, ~~in~~ ⁱⁿ every kind of curios. Naturally, he was ~~interested~~ ^{interested} in Chinese paintings of medieval age, ~~and~~ ^{and} old books, ~~and~~ ^{and} ~~both~~ ^{both} Japanese, Chinese, and European. ~~He~~ ^{He} ~~was~~ ^{was} ~~quite~~ ^{quite} ~~interested~~ ^{interested} in ~~it~~ ^{it}. It was quite natural that he was influenced deeply by the old culture of our neighbor, China. He visited China four times, while he went to Europe only twice, he has never been in U.S. So our house was ~~an~~ ^{an} ~~interesting~~ ^{interesting} room of our house ~~was~~ ^{was} full of ~~old~~ ^{old} books and other ~~things~~ ^{things}. Most of them were old enough to appeal my father. Moreover our was a big family. I had

field of research

subject is ancient china, whereas I am a physicist, who is always fascinated by new and unknown things in nature.

At that time, at a very rate, all I did was to read too much influenced by the atmosphere of ^{my} ~~my~~ ^{some} ~~some course. I'd realize be aware of my natural trend or ability.~~

However, I ~~do~~ regret do not regret it. ~~but~~ ^{so} On the contrary, I have been ever grateful to my mentors.

I have realized fully realized ~~that~~ the importance of ^{personal} ~~personal~~ background in the research work in developing our work, if we intend to do really creative work. ~~even~~ ⁱⁿ science

This is even true some time to some extent even in pure natural science.

Of course it is impossible, in general, to measure ~~the~~ exactly the ~~relative~~ ^{advantage} ~~advantage~~

or disadvantage or disadvantage of a certain environment in early years on the ~~later~~ ^{career} the success or failure in later years. However, in my own case, I can say more definitely than many other cases.

We believe they are something simple and fundamental, — something eternal — a perfect harmony of nature various parts of nature. We are endeavouring to discover them.

We don't know why our world is constructed in such a way. Probably science cannot answer the question. This is already a very deep question.

Moreover, probably there is even deeper question: Why we human beings can understand nature?

Why we can grasp nature more if it is possible for us to grasp nature in terms of few fundamental principles, which can be expressed by simple mathematical formulae?

Probably we cannot easily answer such questions. Moreover, we must admit a kind of harmony between man and nature. ~~between~~ ~~our~~ ~~universe~~ and ~~our~~ the polyphonic world. The presence of this

Flourish sense of harmony seems to me a gift to the most important

Air telegrams
radio
television (4)

ultimate goal

What is the purpose of the fundamental researches in sciences pure science? You may think of inventions, machines, you may even think of the atomic bomb. They are very important, but they are not the main ultimate goal of pure science. They are rather byproducts or the results of ~~is~~ to outcome of sciences, desirable or undesirable.

What we really want to know is the truth of our world. We believe that the truth can be expressed in terms of a few fundamental principles or natural laws. They can be expressed in mathematical formulae. So great scientists of modern ages discovered some of them. These natural laws turned out to be unexpected simple to us scientists, although they look quite complicated to laymen. We don't know yet recall of the fundamental laws to cover thought to embrace all types of natural phenomena. However, we are firmly convinced that there must be in nature the most ~~few~~ laws, which ~~substantive~~ ^{be given} all the ~~various~~ varieties of natural phenomena.

since 17th century.
~~power~~ Unfortunately, in ~~the~~ Asia
the Far East, the great thinkers
traditions of ancient great
thinkers in ~~the~~ China and India
could not flourish as much as
in the West. ~~Unfortunately, Japan~~
~~had to~~ For more than a thousand
years, Japan has been greatly
influenced by Chinese and Indian
thoughts. But, unfortunately,
the true spirit of ancient
great thinkers seemed to have
disappeared very much ~~and~~
changed from ~~to~~ such that
in Japan - I mean small
scale diminished in scale.
We can trace the ~~tradition~~ find the
trace of really great tradition
of ancient times only in literature
and art of small scale such as
tea ceremony ~~and~~, ~~keburi~~ etc.
So I think it ~~was~~ might have
been very important for my
future to be more interested
connection with Chinese
classics than average Japanese
of my generation.

(5)

qualification for a really creative scientist. In fact, we find here the essential difference between greatest physicists and all others. Of course, many of us have a feeling of this kind. However, greatest scientists believe in me having more firmly than others, — sometimes consciously, sometimes even unconsciously.

I don't know how such a feeling was furnished. However, it is clear that it was already present in the minds of great thinkers even before the actual development of modern science. In ancient Greece, we find the best examples. ~~Plato~~ India and China are not — to a lesser extent — in ancient India and China.

The great tradition in Greece ~~started~~ Chinese classics — to have ~~continued~~ for many centuries, but continued down to the modern times in the ~~western~~ European and in Near East and through many centuries, ~~and~~ revived in the form of gave rise to the modern sciences

② However, the really ~~importance~~ importance of modern scientific thoughts began to influence me, only when I was in the Middle School.

1. I do remember clearly ~~on~~ the beginning: When one day, when I was 1st or 1.5 years of age, my teacher of biology in our middle school ~~was~~ told us about evolution: Lamarckism, Darwinism, Perinistic and Fatalistic Attitude, (Principal Mori: English literature.)

2. Fascination of New Physics

3. Interest in Humanity
Tolerance or Mentality
of mind

4. Sense of Harmony
statistical versus deterministic
discontinuous versus continuous
static dynamic v. static.
Predetermination v. Creative
Evolution.

5. Atmosphere of Kyoto.