

”二宮尊徳”のモデル

TANAKA, George / 田中, 穰二

(出版者 / Publisher)

法政大学工学部

(雑誌名 / Journal or Publication Title)

Bulletin of the Technical College of Hosei University / 法政大学工学部研究集報

(巻 / Volume)

14

(開始ページ / Start Page)

73

(終了ページ / End Page)

78

(発行年 / Year)

1978-03

(URL)

<https://doi.org/10.15002/00004170>

A Model of "Ninomiya-Sontoku"

George TANAKA*

Abstract

Ninomiya-Sontoku, one of the representative men in Japan, was a celebrated agrarian reformer, reliever and leader of farmrelief project. Since the era of Meiji his respectable way of life was always looked upon to by all of the primary schools of Japan.

His bronze statue, with a bundle of faggot on his back, opening a book on his hand, was erected in each and every school-yards all of the country.

The Moral and Economic Teachings of Sontoku effected a great and far-reaching influence on the present day life of the Japanese.

This paper, on that account, delt with Hōtoku-shugi of Sontoku and his farm-reformation model.

I. Introduction

Ninomiya Sontoku, called Kinjirō in his youth, was born in the seventh year of Tenmei (1787).

His father was a very poor peasant in a village in the province of Sagami. At the age of sixteen years, Sontoku was orphaned with his two little brothers, and the poor family broke up. Then he was placed under the care of one of his paternal uncles.

Under the eyes of his uncle he worked till very late every evening. Then he thought himself that he would not grow up to be an unlettered man, and he bought a copy of Confucius' "Daigaku" (Great Learning), and after the day's hard work he studied this classic till in the middle of the night.

But his uncle blamed Sontoku strictly for his wasteful use of precious oil.

Then he gave up his study until he could gain oil of his own to light. The next spring he found a little space on a river bank that belonged to nobody, and he sowed rape-seeds, and worked in this little field on all his holidays.

At the harvest time he gained a large bagful of the rape-seed. He took the seed to a neighboring oil factory, and exchanged it for a few gallons of the rape-oil. He was very glad that he could now begin again his study with his own oil, and returned his night study.

But there! His uncle said, "As I am supporting your livelihood, I cannot afford to let any of my men engage in such useless doing as your book-reading." Then, obeying his uncle's order, Sontoku left off his night study by the rape-seed-oil lamp. After the day's hard work upon the farm, he would weave strawmat or make straw-sandals. Such being the case, his studies ought to be continued on his way to and from the farm or hill where he was sent to work or fetch firewood every day.

* Prof. Dr. of Statistics

The rape-seed experiment taught him the value of serious labour, and then he wished to make another plan upon a larger scale.

Just at that time he found in the hamlet in which he lived a small spot where changed into a slough or muddy place by a recent flood. He marked out these places for his purpose.

He drained the muddy place, levelled its bottom, and prepared it for a small rice-field. In the spring season, he planted seedlings here, and bestowed a watchful care upon them.

The harvest season brought him a bagful of rice-grain in the husk. Then he learnt that Nature is faithful to the honest man of soil, and rewards him that obey her laws.

A few years afterward he left his uncle's house, and came back to his paternal house that now deserted for many years. With his industry and patience, he restored desolation of his native village into the state of being productive.

Before many years he was respected by the people of his neighborhood, and at last his fame reached to the ear of the Lord of Odawara. The Lord of Odawara was then the Prime-minister of the Shōgun Government. Sontoku was appointed by the Lord as an important member of carrying out reform in the feudal tenure of the Lord.

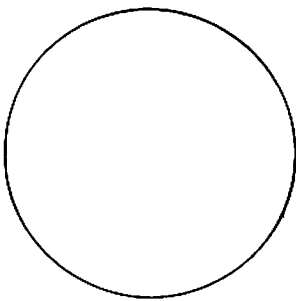
II. Hōtoku-Shugi (The Moral and Economic Teachings of Ninomiya-Sontoku).

"The Evening Talks of Ninomiya-Sontoku" was took down by one of his pupils Fukuzumi Masaé, and in this book, vol. 1. we find following:

"Our Venerator says, the path of human life is compared to a water-wheel. Half of the wheel goes round with the stream, and the other half of it turns against the stream. If all the set of the wheel sunk into the water, the set does not turn round and carried away by the stream. Whereas the set of the wheel is away out of the stream, the wheel does not turn round, and the stream will run away wastefully.

"Now, a Buddhist priest of high virtue, who retired from the world and abandoned all earthly ambitions, is compared to the water-wheel laid in the dried up river. While the people in general or laity who disregard their duty or doctrine, and seek to gain their self interest will be compared to the water-wheel sunk down into the water. Both of them are the useless existence to the social welfare. Accordingly the constant mean or the middle path is the most valuable.

* 万物化生、莫不以大極為元、伝曰、天地未剖、不分陰陽、渾沌如鷄子云。



一、大極之圖

"Half set of the wheel dipped into the water, and turn round following after the stream, and the other half of it goes against the stream, and working continually; this is the proper way to obtain success in working the water-wheel; this is in truth the most valuable mean of it.

"It is the same with our society. We have to sow the seeds follow after the laws of nature, and cut and clear the weeds oppose against the will of nature, and true to your will, attend closely to your occupation. Keep down your greed, and have the obligation to work."

Fig. 1 Taikyoku (the Absolute or the First Cause)

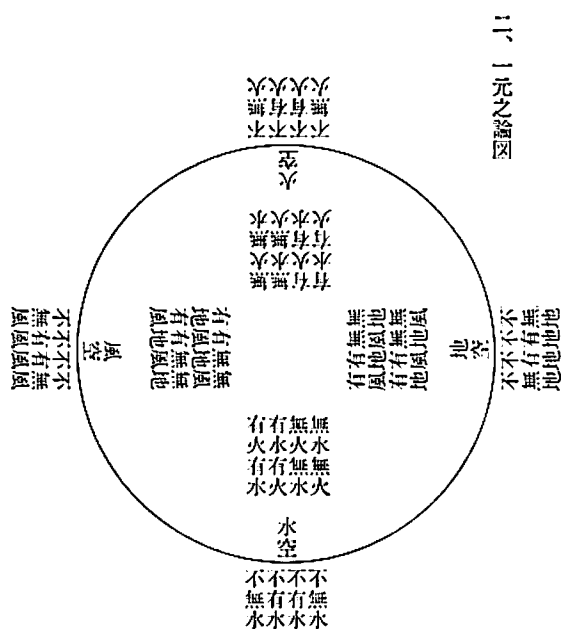


Fig. 2 Ichigen-ron

* There were nothing in the universe that did not grow out of the Taikyoku (the Absolute or the First Cause). One of the commentaries says that before the heavens and the earth were not divided into two parts, and did not get separation between the cosmic dual forces, there spread over chaos like an egg.

As you have made out in the beginning passage, Sontoku considered that the valuable mean of our moral principle lies between duty and greed.

The way of his conception is showed generally by Taikyoku (the Absolute or the First Cause, fig. 1), Ichigen-ron (Idealistic monism, fig. 2) and Gogyō-bumpai (the five natural elements, fig. 3).

These figures appear in his pages of "Sansai Hōtoku Kim-mō roku" (written 48 years of age). Sansai means: heavens, earth and human being, and Kim-mō means valuable golden fur. Instead of the five natural elements (i.e. emptiness, air, fire, water and earth) there interchanged the position: benevolence, righteousness, propriety, wisdom and sincerity.

This is called "Gogyō-haitō no Zu" (five elements allotment). Let us consider the whole of one's "actions" as the universe. In the following discussion, the universe will be denoted by X.

A and B are subsets of X consisting respectively, of all actions for which statements "an action is egoistic" and "an action is altruistic" are true.

Let us consider the following conditions:

- (i) $A \subset B$: if an action is egoistic then it is altruistic.
- (ii) $B \subset A$: if an action is altruistic then it is egoistic.

When the condition (i) is true, it may be called "capitalism." If the condition (i) and (ii) are true, it may be called

"Hotoku-shugi."

In Hotoku-shugi, it follows

$$A=B: (\text{egoistic actions})=(\text{altruistic actions})$$

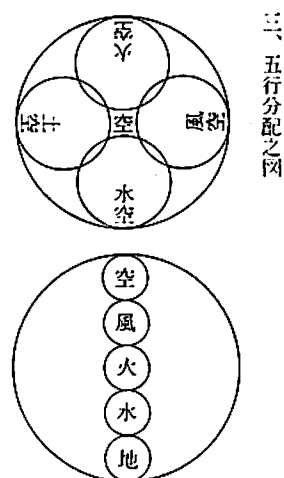


Fig. 3 Goyō-bumpai

In this case, "egoistic" and "altruistic" become synonymical, and the meaning of Hōtoku-shugi cannot be expressed correctly by this synonym.

In Hōtoku-shugi, one may cognize everything between the egoism and the altruism.

To express Hōtoku-shugi, we will use "three valued logic." A small letter x be a element of the universe X , that is $x \in X$.

The proposition " $x \in A$ " is denoted by a , and " $x \in B$ " by b , $a: x \in A$, $b: x \in B$. The proposition a is true or false will be expressed by 1 or 0. The proposition a is neither true nor false, will be expressed by $\frac{1}{2}$, that is:

a is true: $a=1$

a is false: $a=0$

a is neither true or false: $a=\frac{1}{2}$

The proposition b also take values 1, $\frac{1}{2}$, 0.

For the propositions a and b ,

$a \wedge b$ (a and b),

$a \vee b$ (a or b)

\bar{a} (not a)

$a \rightarrow b = \bar{a} \vee b$ (if a , then b)

are given by the following table:

a	b	$a \wedge b$	$a \vee b$	\bar{a}	\bar{b}	$a \rightarrow b$	$b \rightarrow a$	$a \wedge \bar{a}$	$b \wedge \bar{b}$
1	1	1	1	0	0	1	1	0	0
1	$\frac{1}{2}$	$\frac{1}{2}$	1	0	$\frac{1}{2}$	$\frac{1}{2}$	1	0	$\frac{1}{2}$
1	0	0	1	0	1	0	1	0	0
$\frac{1}{2}$	1	$\frac{1}{2}$	1	$\frac{1}{2}$	0	1	$\frac{1}{2}$	$\frac{1}{2}$	0
* $\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
$\frac{1}{2}$	0	0	$\frac{1}{2}$	$\frac{1}{2}$	1	$\frac{1}{2}$	1	$\frac{1}{2}$	0
0	1	0	1	1	0	1	0	0	0
0	$\frac{1}{2}$	0	$\frac{1}{2}$	1	$\frac{1}{2}$	1	$\frac{1}{2}$	0	$\frac{1}{2}$
0	0	0	0	1	1	1	1	0	0

* indicating Hōtoku-shugi.

Hōtoku-shugi in three valued logic, we consider following condition:

$$(1) (a \wedge \bar{a}) = (b \wedge \bar{b})$$

$a: x \in A$: an action x is egoistic.

$\bar{a}: x \notin A$: an action x is not egoistic.

$b: x \in B$: an action x is altruistic.

$\bar{b}: x \notin B$: an action x is not altruistic.

The condition (1) is expressed in words:

An action is egoistic, and not egoistic, that is, an action is altruistic and not altruistic.

From the condition (1), the next follows

$$(2) (b \wedge \bar{b}) = (a \wedge \bar{a})$$

In words:

An action is altruistic and not altruistic, that is, an action is egoistic and not egoistic. From the table, the conditions (1) or (2) hold, only and only if

$$(3) \quad a = \frac{1}{2}, \quad b = \frac{1}{2}$$

If we compare the conditions (1) or (2) with Fig. 2 (Ichigenron), their forms are resemble closely.

III. The Farm-reformation Model

At first Sontoku restored his family house to its former condition and then he reconstructed many abandoned villages and hamlets in the Kanto district and its vicinity. The method of proceeding of his reconstruction, as stated in the first section, was infusing his idea powerfully into the farming population, carrying out a survey scrupulously, and decided his own way in doing his process.

He made the model of his project, expressing in figures, and put it into practice. The models of reconstruction planned by him at the districts of Hattori, Sakura-machi, Aoki-village, Karasu-yama, Odawara and Ōiso. Nirayama, Shimodate, the region under the direct control of Tokugawa Shōgunate, Nikkō and Sōma are very famous.

When he was carrying his plan into execution at Nikkō, Sontoku closed his life in the autumn of the three year of Ansei (1856, a few years before the era of Meiji), aged seventy.

His model was calculated at compound interest method. As the initial investment, some one develops a new rice field of 1 "tan." We will compute the yield on the assumption that from 1 "tan," a rice of 1 "koku" is yielded.

First year: from 1 "tan" \rightarrow 1 "koku" is yielded. Within 1 "koku," p "koku" ($0 \leq p \leq 1$) is saved to invest for developing a new rice field in the next year.

It is also assumed that from the investment of p "koku," a new rice field of $p \cdot q$ "tan" is developed. If we put $r = p \cdot q$, then a rice field of $(1+r)$ "tan" is obtained at the beginning of the second year.

Second year: from $(1+r)$ "tan," $\rightarrow (1+r)$ "koku" will be yield.

Within $(1+r)$ "koku," $(1+r) \cdot p$ "koku" is saved to invest a new rice field. It is assumed that from the investment of $(1+r) \cdot p$ "koku," a new rice field of $(1+r) \cdot pq = (1+r)r$ "tan" is obtained. The total area of the rice field will be $(1+r)^2$ "tan" at the beginning of the third year. At the beginning of n -th year, the total area of the rice field becomes $(1+r)^{n-1}$ "tan."

n -th year: from $(1+r)^{n-1}$ "tan" $\rightarrow (1+r)^{n-1}$ "koku" will be yielded.

As the initial investment, the money or rice is loaned by the person A. The person A transfers p "koku" to the person B.

In the second year, A and B transfer $(1+r)p$ "koku" to the person C, and so on. As the total, the yield and the rice field will become that mentioned above.

To achieve the above plan during the thirty or sixty years, it is necessary that all attendants cognize "Hōtoku-shugi".

Acknowledgement

The author wishes to thank Dr. Keiji Kamiya, Honorary Professor of Tokyo University and President of Japanese Hōtoku-sha for his invaluable advice.

Without his kind advice, this paper will not be written.

References

- Ninomiya Sontoku, Series of Japanese thoughts. 52. Iwanami 1973.
Keiji Kamiya: Sontoku's Model and Modern Economics, Kuonno Michishirube, p. 445-454. Shizuoka-shimbun-sha.1975
Keiji Kamiya: Thoughts of Sontoku, Daichi: No. 853, 854, 855, 856, 857. Japanese Hōtoku-sha, 1977-78.
T. Sueki: Japanese rational thought reexamination of Ninomiya Sontoku, Methods and Problems of the History of Thoughts, p. 313-351, Tokyo University Press 1973.
Complete works of Ninomiya-Sontoku, Ryukeishosha, Tokyo, 1978.