

Christianity and
Copper Pollution: The
Origins and Responses
to the Ashio Copper
Mine Incident

James Harry Morris, MTheol, PhD, FRAS
Waseda University
morrisjamesharry@gmail.com



A Brief History of the Ashio Copper Mine

- Transformed into a profitable facility by Furukawa Ichibei 古河市兵衛 (1832-1901) due to:
 - 1. Environmental factors.
 - 2. Technological innovation.
 - 3. Reformation of traditional labour systems.
- Ashio as a centre of technological innovation.
 - Transportation systems.
 - Electrification of mining.
 - Hydroelectric plants.
 - Western methodologies.

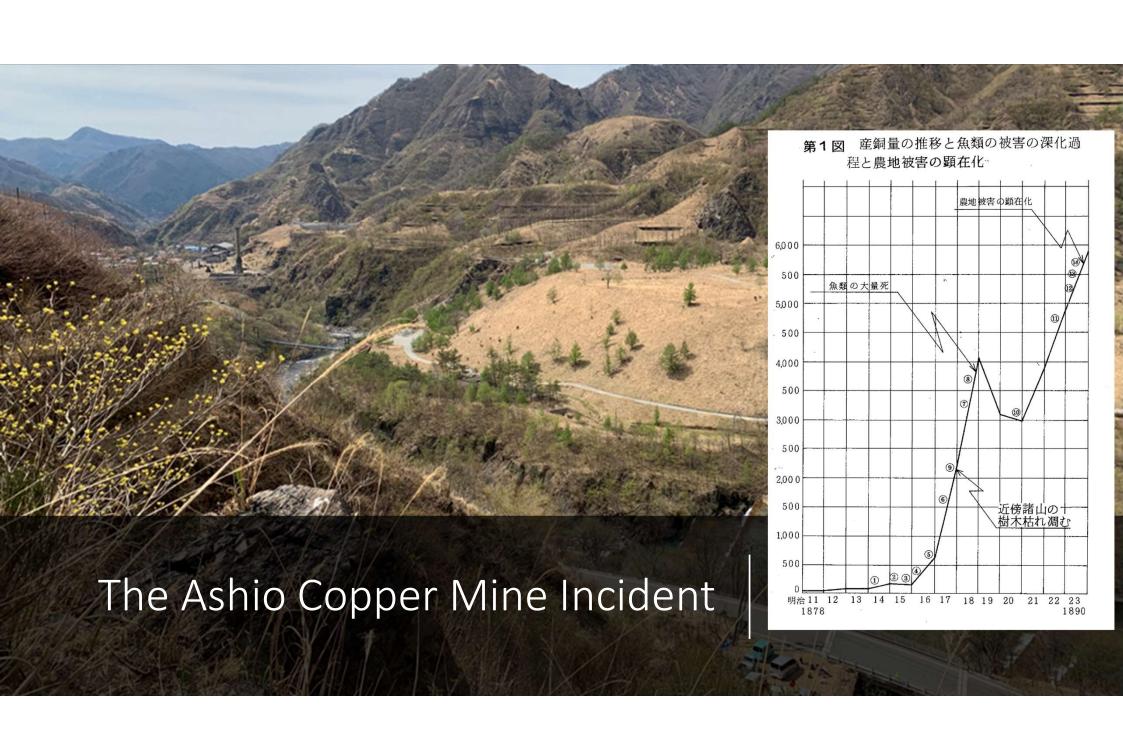
Increasing Production

Year	Furukawa's Total Production (Tons)	Ashio's Total Production (Tons)	Ashio's Production as a Percentage of Furukawa's Production	Furukawa's Production as Percentage of National Production	Percentage of Copper Exported from Japan
1882	737	132	17.9	13.1	49.4%
1883	1,671	637	38.7	24.7	-
1884	3,411	2,286	67	38.4	59.3
1885	5,250	4,090	77.9	49.8	-
1886	5,100	3,595	70.5	52.2	100.4
1887	4,455	2,987	67	40.3	-
1888	4,180	3,783	90.5	31.5	72.4
1889	5,999	4,839	80.7	36.9	-
1890	7,589	5,789	76.3	41.9	107.6
1891	7,681	7,547	98.3	40.4	-
1892	7,397	6,468	87.4	35.7	87.4
1893	6,928	5,165	74.6	38.5	-
1894	8,017	5,877	73.3	40.3	76.9
1895	6,587	4,898	74.4	34.5	-
1896	7,695	5,861	76.2	38.3	72.6
1897	7,964	5,298	66.5	39.1	-
1898	8,764	5,443	62.1	41.7	79.3
1899	9,191	5,763	62.7	37.9	-
1900	8,924	6,077	68.1	36.7	82



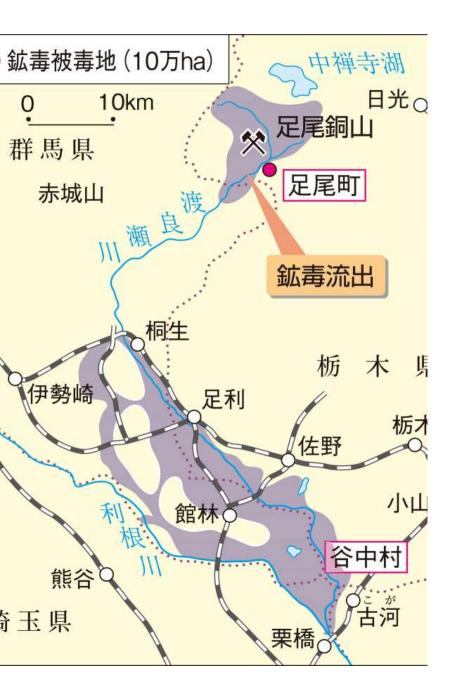
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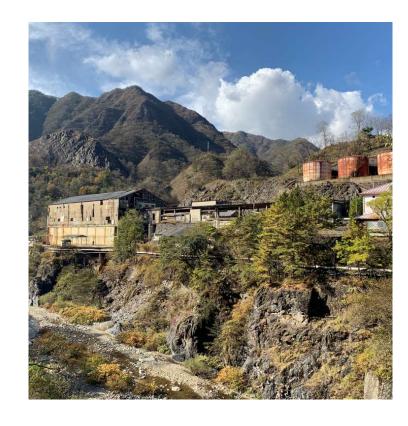
Smoke Pollution

...trees several hundred years old are killed as the roots become exposed to the poisons through the flow of rainwater. As a result, the recovery of forested areas becomes almost impossible...As trees are damaged and destroyed, the topsoil is washed away and the area is no longer able to retain water...the sulphurous acid and arsenic begins to attack horses, cows and all other animals, and soon the health of human beings living in the affected areas is seriously compromised.

Shoji and Sugai, "The Ashio Copper Mine Pollution Case," (1992): 40-41.

Effects of Pollution

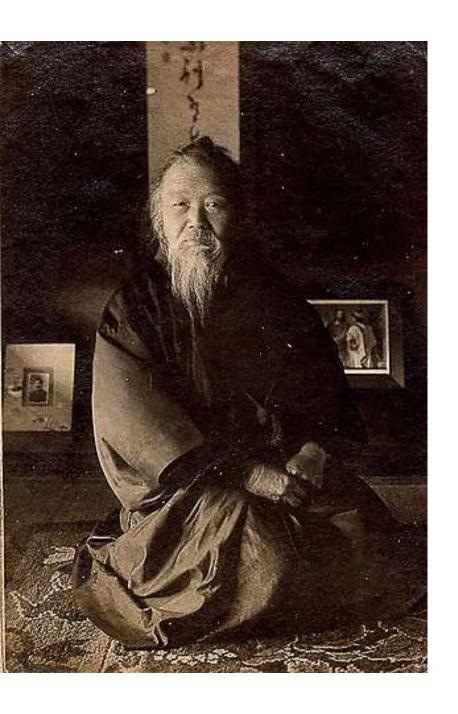
- Destruction of plant and animal life.
 - Riverside land in Ebise 海老瀬 village.
 - 1885-1889 an average yield of 207kg of barely, 162kg of wheat, 99kg of vegetables, 240kg of dyer's knotweed.
 - 1893 onwards no yields of any crop.
 - Matsugi 松木 village.
 - No crop yeilds from 1900.
- Poverty.
 - · Due to damage to field productivity.
- Health.
 - · Malnourishment.
 - Decrase in fertility rates.
 - Infant mortality rates double those of non-polluted areas.
 - · Breastfeeding issues.
 - High failure rate of military physical exams.
 - 69.29% failure for Aso 阿蘇 district applicants between 1887 to 1896 compared to 29.21% prefectural average.





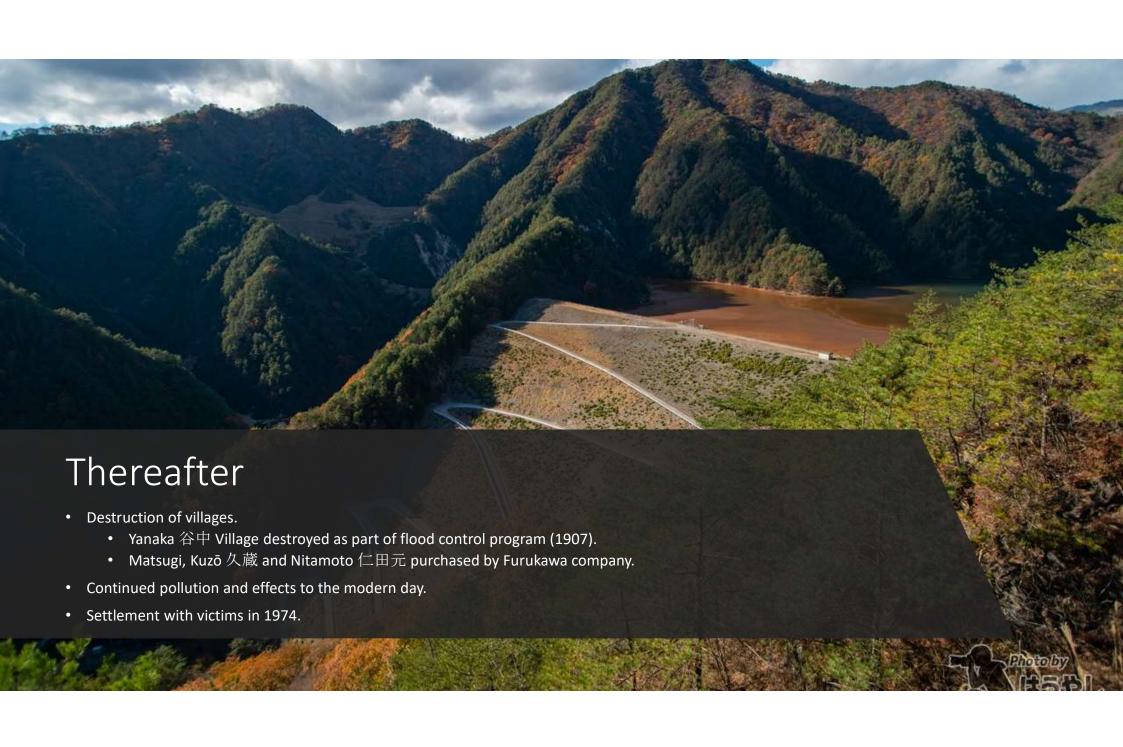
1896 and 1897

- Floods in 1896 damaging:
 - 46,723 hectares.
 - 22,529 homes.
 - 23 Million Yen worth of damage (87 Billion 400 Million Yen today).
- Formation of protest movement with participation form prominent political and religious figures.
- Marches to Tokyo in March 1897.
- Government enquiry 1896.
- Government directives issues in December 1896, May 1897, 1901 and 1903 requiring action from Furukawa.



1900-1901

- Kawamata 川俣 Incident (February 13).
 - Re-emergence of Ashio's pollution within media.
- Suicide of Furukawa Tameko 古河為子 (November 30, 1901).
- Tanaka Shōzō's 田中正造 (1841-1913) attempt to directly appeal to the emperor (*Jikiso* 直訴) (December 10, 1901).
- Government decision to supplement directives and instate flood controls.





Theologizing about the Ashio Copper Mine Incident

Background

The headstrong modernization of the preceding two decades continued, but attitudes towards it changed. Most people found themselves proud of their Constitution and agreed with the spirit of the Rescript on Education. The major problem was how on the basis of the conservative consensus one should deal with specific problems as they developed. Concern over some of these policies gradually bred a lack of confidence in the new institutions.

The uncertainty was reflected in vigorous demands for change.

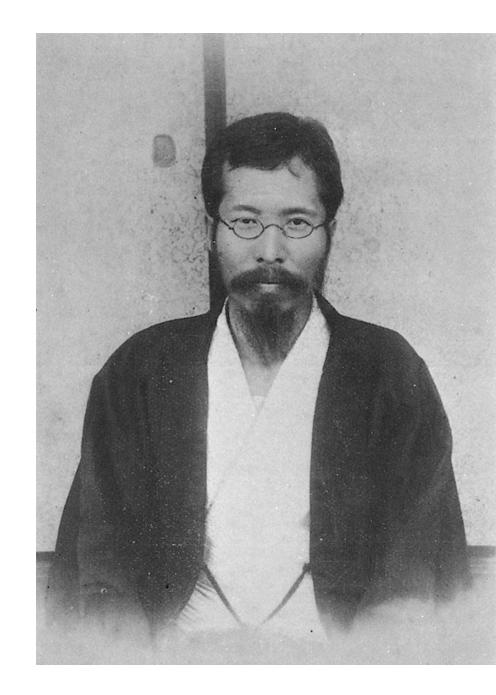
Bamba and Howes, "Introduction: The Setting for Japan's Pacifism," (1978): 18.



Christians and Socialists

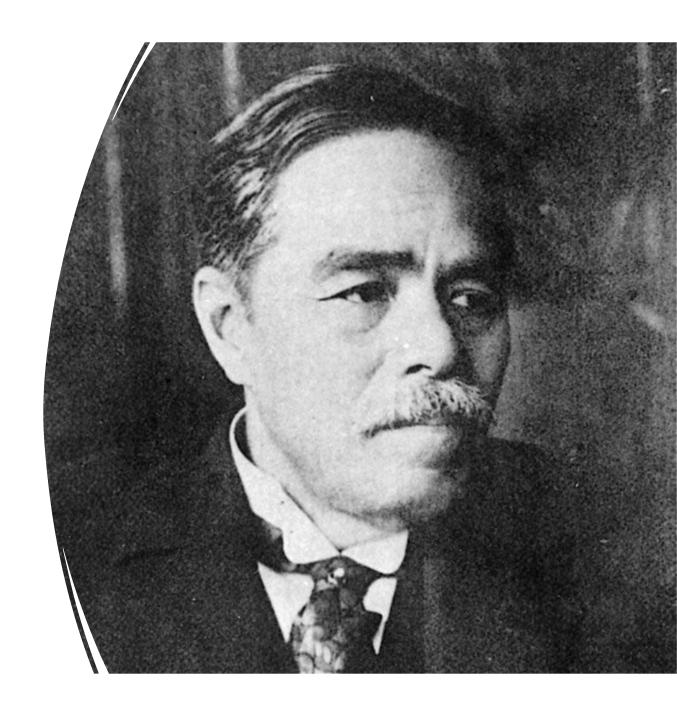
Christian missionaries had been among the first to introduce socialist ideas. The socialists at the end of the century practised itinerant evangelization, and they found their warmest receptions in the provincial churches. Churches subscribed heavily to socialist magazines...The socialists...wrote in a manner similar to that of Christian writers. Apocalyptic tones like those of the Christian prophets often infused their articles. Until 1903, the two movements must have appeared to all but the most discerning as complementary if not two aspects of the same thing. After that time, the Christians lessened their emphasis on social reform, and the hardcore socialists found their work frustrated by increasing official suspicion.

Howes, Japan's Modern Prophet (2005): 138.



Uchimura's Early Works on Ashio

- Early articles in the Yorozu Chōhō 萬朝報:
 - Four Notorious Facts about Mountains (March 16, 1897).
 - A Pornograph (March 28)
 - Some Important Facts About the Ashiwo Copper Mine (April 4)
 - Tanjū sūteki 胆汁数滴 (Installments throughout April)
 - Count Katsu and His Sayings (May 4 and May 5)
- Protest movement as a fight between ruling classes/Mammonism and the peasants/Justice.
- Pollution caused by political and social corruption amongst the ruling classes and exacerbated by incompetent governance.





A Pornograph

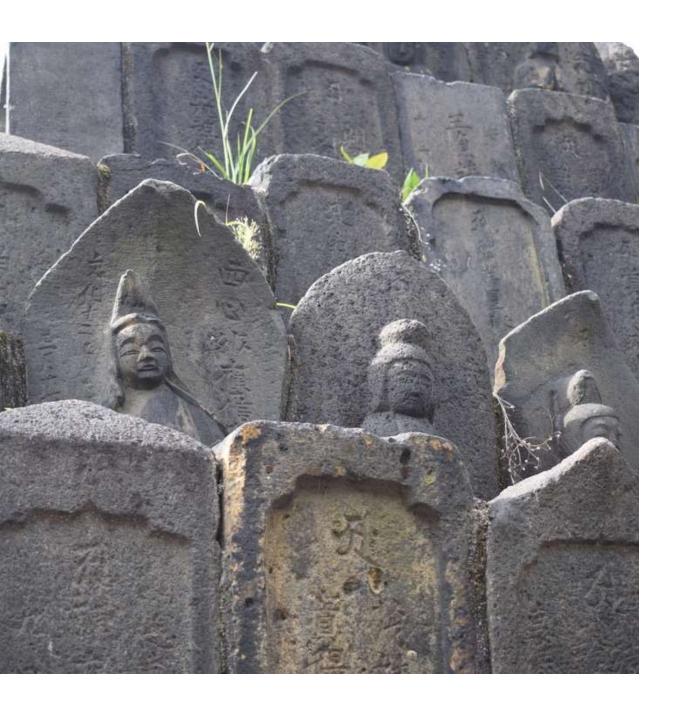
...we are afraid of the consequences of the real corruptions that have been creeping into official circles for these several years past. Sin will *never* go unpunished; and the punishment must be near at hand. The copper-mine disturbance may be the beginning of it.

Uchimura, "A Pornograph" (1897).



Kinoshita and Ashio kōdoku mondai

- Kinoshita's articles in the Mainichi Shinbun 每日新聞:
 - Ashio kōdoku mondai 足尾鑛毒問題 (1900).
 - 17 articles serialized in the Mainichi and published as an individual monograph in June
 - Sano dayori 佐野だより (February 17).
 - Kōdoku himatsu 鉱毒飛沫 (February 19).
 - Secchū no Nikkō yori 雪中の日光より (February 22).
- Journalistic approach.
- Pollution the result of government neglecting its duties and social degredation.



Visiting the Polluted Lands

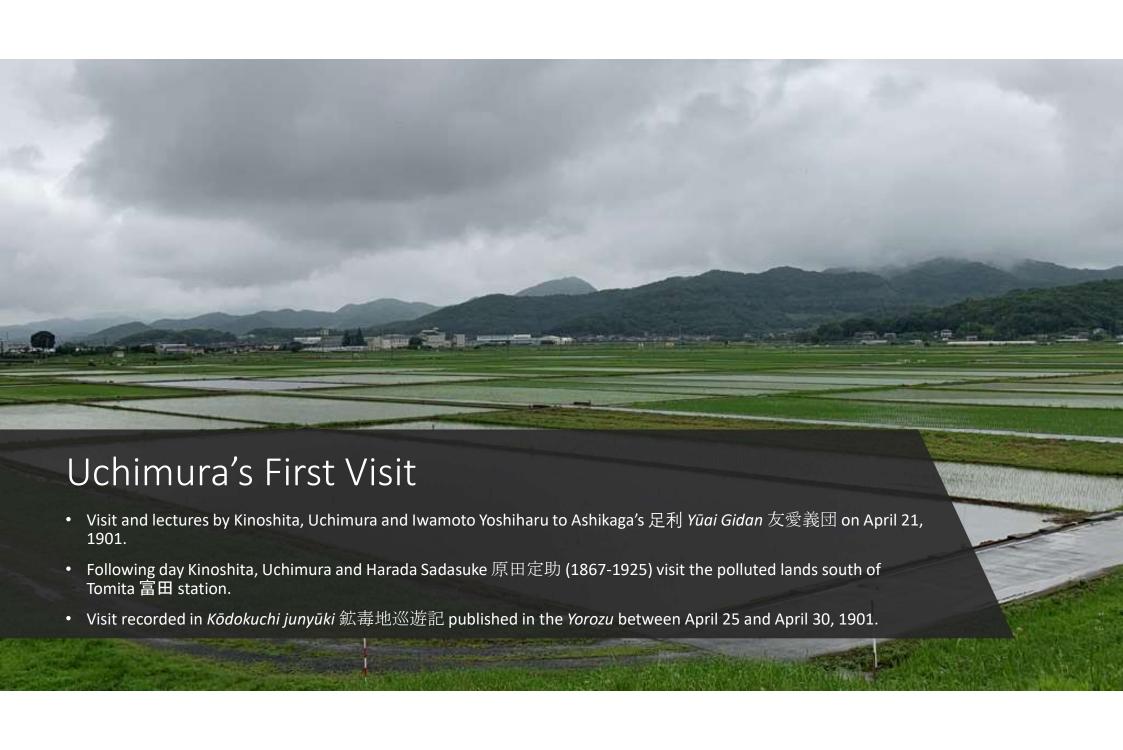
If you want to research the mine pollution problem, you must place the mines at the top of your agenda. Even if the disastrous scenes of the damaged wastelands along the Watarase is something that strikes the eye...first commence to the root of the harm at the mining facilities, search for the particulars one by one, and believe that which is well reasoned.

Kinoshita, *Ashio kōdoku mondai* (1900).

Theology and Politics as a Second Step

- Physical move of Christian and non-Christian activists from economic and political centre to polluted periphery.
- Theology as a second step (reflecting and attempting to bring about transformation based on first step i.e. experience of poverty and oppression).







Kōdokuchi junyūki

The Ashio Copper Mine Incident is a great stain on the Japanese Empire...this must not be made into a regional problem, it is a problem for the nation, it is a problem for humankind. The Ashio Copper Mine Incident may even destroy the nation!...Why not float the *Hatsuse* on Lake Chūzenji, send the *Asahi* up the Watarase, and bombard Ashio Copper Mine from both sides? That is what I would do if I were Prime Minister.

Uchimura, Kōdokuchi junyūki (1901).



The Place of the Commoners

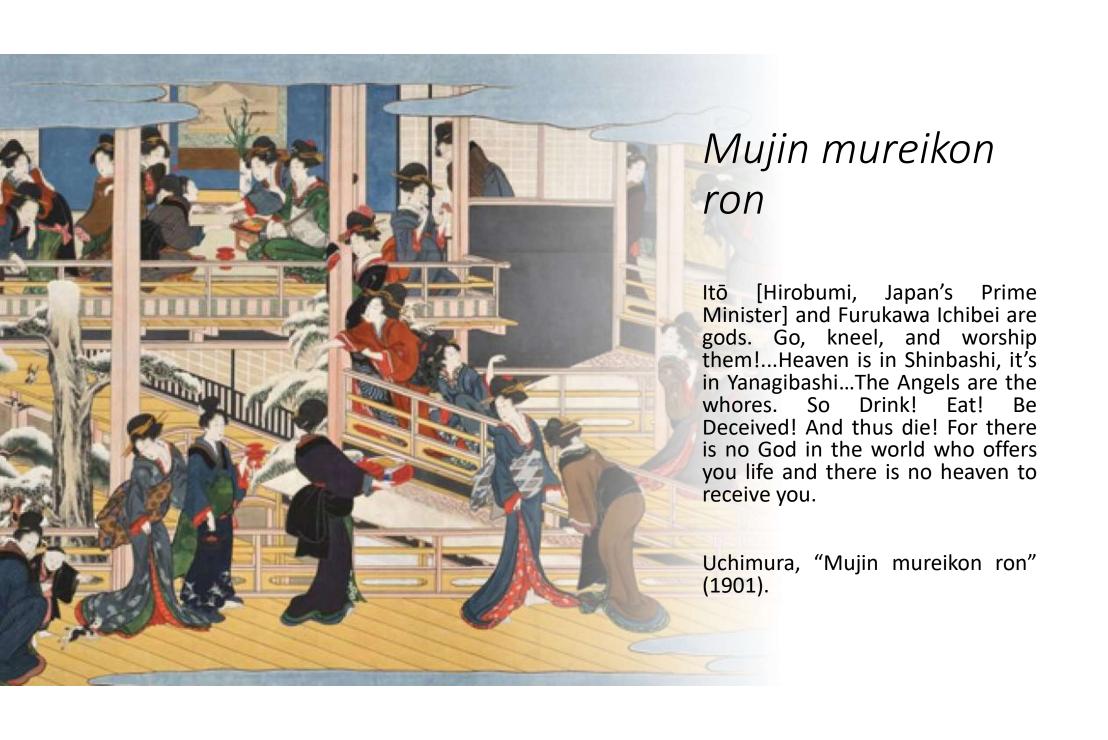
We believe no more healthy thought was given unto men than that Divinity dwells among the Poor. A man or a nation enters a new career, when, instead of looking up to some imaginary figure as the seat of all authority, it begins to look down on the mass as the chief object of its service.

Uchimura, "Adoration of the Poor," (1897).











Resolving the Pollution Problem

- Uchimura argues that:
 - Japan must adopt Christianity as it is essential to European thought and methods.
 - Individualism without Christianity "degenerates to selfishness."
 - Japanese scientists and thinkers cannot make advancements when they only seek profit and fame.

Tennen (Nature)

The long-continued peace of two-hundred years brought in luxuries and dissipation among men of all classes, and indolence thus introduced had immediate effects upon the cultivated fields. In many places, the revenue from land decreased by two-thirds. Thistles and bushes invaded the once productive fields, and what little was left in cultivation had to bear all the feudal dues levied from the land. Village after village bore an aspect of utter desolation. Honest labor becoming too onerous, men betook themselves to dishonest ways. From the kind earth they ceased to look for her ever bounteous gifts, and by cheating and defrauding one another they sought to acquire what little they needed to sustain their ill-doomed existence. The whole cause of their evils was moral, and Nature refusing to reward her ignoble sons, brought about all the miseries that befell the land.

Uchimura, Japan and the Japanese (1894).

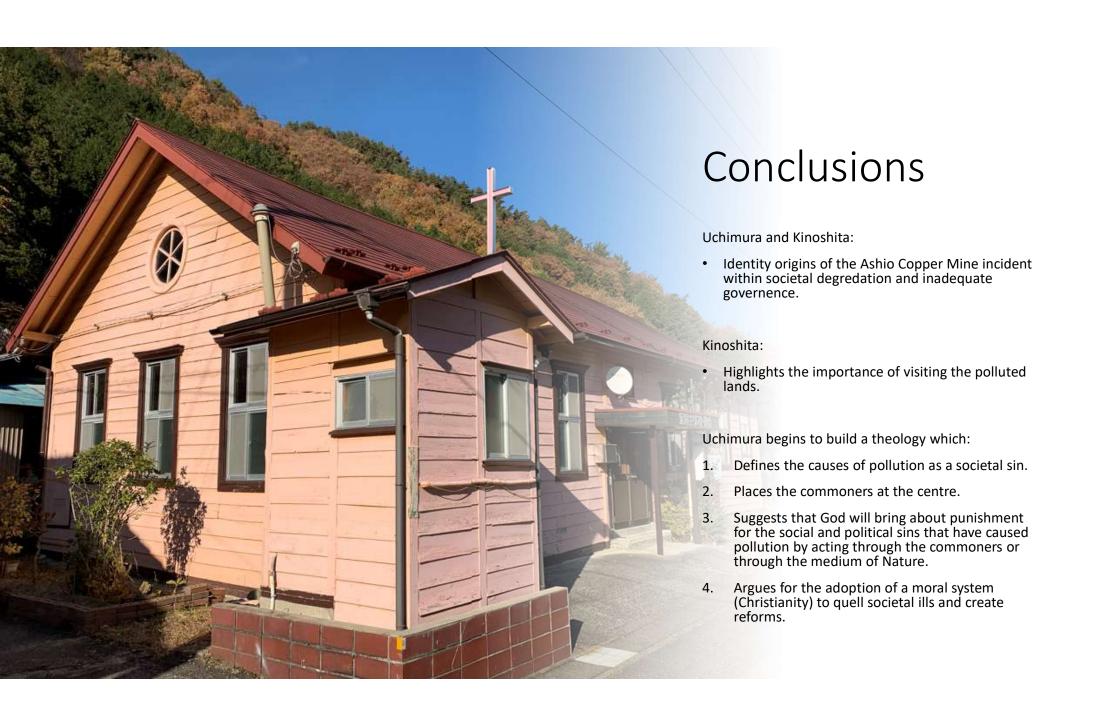


Appropriate Methods

If one waters the wilderness, plants trees in it and harvests the fruit, something comes of it. It [is] a very simple matter. It may [be] simple, but it [is] not easy. Nothing in the world is as difficult as a man-made desert... If only one waters a natural desert and tends it well, it turns into fertile soil. However, it is extremely hard to resurrect a desert which has been laid waste because of human recklessness. But the Jutland heath was precisely that kind of wasteland. 800 years ago, there were good luxuriant forests there. And until 200 years ago, oak forests could still be seen here and there. But as civilization progressed, the appetites of people grew; it was more important for them to take from the earth and the reward they reaped was that, as time went by, it became more and more withered until it was in the state it was 40 years ago. But not even human greed can kill the land forever. The land can be brought from its worst state back to its original condition by using the appropriate methods that God and Nature show us.

Uchimura Kanzō, Denmaruku no hanashi (1911).







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