

## Social Structures of Pollution Victims

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### I. Toward an Understanding of Pollution Victims

Pollution, occupational hazards, and consumer health problems caused by flawed or poisonous products have been more effective in inducing citizen-based mass movements than any other type of social disaster since the beginning of Japan's period of modernization. All these problems are interconnected through a single extensive root system.

Pollution problems are derived from a set of conditions that are related to health damage caused in the work environment; the effects of this are felt far beyond the industrial workplace in the form of health problems related to consumer goods. The problems extend outward from the factory, to the small circle of the community, and then to the larger circle of the nation—a process in which labour disasters, pollution problems, and then consumer problems are all interconnected in a single nexus of cause and effect.

Theoretically, and in reality, workers occupational hazards precede environmental pollution problems, but public understanding in regard to the initiating phenomena and the ever-widening circle of related events is very different. There have been many situations in which a problem is perceived first as an environmental issue within the context of wider public response, and then afterwards industrial disasters and occupational diseases come to be understood as stemming from the same causes. Historically, occupational hazards have not been seen as serious problems by the workers themselves, and by the time some workers come to realize the gravity of a particular set of circumstances, the problem has already spilled over into society as a whole and has assumed a new level of seriousness.

As potential victims become victims in reality, the situation gives rise to an ever-widening circle where people are given neither relief from the problem nor monetary compensation for their suffering. These people simply give up.

In most instances, the victims of pollution problems and occupational disasters are people on the lower rungs of the social ladder. Similarly, those who

have been poisoned by consumer goods are widely dispersed, so that it has been difficult to organize meaningful protest and resistance. Even if an organization has got off the ground, those wishing to suppress it have easily been able to exploit its weaknesses.

With the exception of a few resistance movements that had their roots in the turbulent times before the Second World War, pollution victims have only been able to organize in the last 20 years or so. However, there are still many disaster victims who have not yet been able to understand the cause of their problems nor take any corrective action, and in such instances the related destruction simply continues, claiming more and more victims.

Under these circumstances, government administrative organs, which are supposed to discover which people have been victimized and then to try to find a remedy, simply take advantage of the ambivalence of the situation. For example, the publications of the Environmental Protection Agency contain various statistics on publicly recognized pollution victims, but these statistics include no reference to the adverse effects of the problems on the families of those victimized. Governmental agencies are interested not in the quality of human life but rather in lowering the numbers of officially recognized pollution victims.

There is little hope of change in the social attitudes of government organizations while the government continues to base its authority on the very business organizations that are at the root of the environmental problems. There also will be little chance of obtaining financial aid for the weak in society who have sustained such incredible suffering. But even within this context, it is essential that the conditions surrounding pollution victims be fully understood, so that the damage that is done can be minimized and help for the suffering provided.

Therefore, it is necessary to clarify the structures at the root of the problems that are being ignored by Japanese corporate structures, the Japanese government, and the community of scholars—all these groups being co-origina-tors of the environmental problems.

## II. The Structures of Environmental Destruction

Environmental destruction and its attendant social structures are an interwoven fabric made up of the loci, or levels of damage, and various social factors.

### 1. The Four Loci of Destruction

The four loci of pollution-related destruction, occupational hazards, and consumer health problems are (1) human life and health, (2) living situations, (3) personality, and (4) community environment and local society. Destruction related to 1, 2, and 3 is of a limited nature, while the concepts connected with 4 relate to a wider area of concern, in which whole family and community

groups are affected. All of these levels or loci of destruction are, however, interrelated: the first three are initiated through close family interrelationships and come close upon the heels of collective disability derived from the wider destruction of a local human environment. The victims of destruction are people within local communities who fall prey to pervasive environmental damage, major industrial accidents, and faulty and dangerous consumer goods.

The first locus of destruction—an attack on life and health—includes such examples as the Minamata disease (organic mercury poisoning), Itai-itai disease (cadmium poisoning), arsenous acid poisoning, and air-pollution-related asthma. In relation to the work environment, industrial accidents and occupational diseases cause health problems in individuals, while in the consumer field, disasters caused mainly by medicine or food additives, such as the thalidomide poisonings, SMON (subacute myelo-optico-neuropathy) disease, Morinaga arsenic milk, and the Kanemi PCB-tainted rice oil, all result in the loss of individual life and health.

These problems are all serious and they result in a series of other interlocking problems centring on the second locus of destruction. When breadwinners die or their health is seriously compromised, this greatly affects all other family members. Not only is there a loss of economic viability but every aspect of life, such as living space, available time, living standards, human relations, and planning for the future, are also affected. The important aspects of life are all delicately balanced, and when there is destruction of life and health all the other elements are thrown out of kilter.

This destruction of health and life also leads on to the third locus of destruction, which is an adverse effect on the personality. In negotiations with the original polluters, with government agencies, in the reception of medical treatment, and in communication with members of the community and the mass media, pollution victims experience personality changes when not supported by others, and these changes manifest themselves in an accumulation of anger, hatred, and sorrow.

With the compounding of all these environmental problems, local communities become the victims. In the Ashio copper-mine incident, after a long history of protest, the results were the destruction of vast areas of farmland, the debilitation of countless victims and their families, and finally the creation of villages without inhabitants. In the areas around Minamata City where some of the victims have been restructuring their lives with the help of support groups, human relationships have been so badly ruptured that there is no hope of repair.

Environmental destruction that appears, on the surface at least, not to be related to individual families has in fact very serious social consequences for individual and family interrelationships, especially within the context of the socially and linguistically closed islands of Japan. Environmental destruction is directly related to the destruction of individual lives and to the quality of the life for all people, while the attendant destruction of community life also

leads inevitable to further environmental destruction. In this same context, pollution-related destruction of the family unit extends outward to encompass also the totality of the human community.

Problems in the workplace that degrade the quality of life for workers also impinge on the families of these workers, wreaking havoc with the social relationships involved, especially in situations where families are geographically located within the vicinity of the workplace. Consumer disasters affect much wider communities. If the deleterious effects of pollution problems or industrial accidents are reflected in problems caused by consumer products, the destruction to individuals and society may be felt on the national level.

If local community dissolution and national environmental destruction are to be avoided, then the first line of defence should be the family. If the destruction of an ecosystem or a set of environments has already started, then policies that will encourage recovery should be adopted.

Besides these levels of destruction, the following elements are related to disaster situations, the extent and character of the damage being determined by various of the many conditions involved.

## 2. Social Factors Regulating the Degree of Environmental Duress

The degree of individual and social stress created in situations of environmental destruction depends on many factors such as the condition of the victim's health, the role of the victim at home, the social position and class of the victim's family, and the family's and victim's social groups. External factors that influence the situation are derived from the type of business the polluter is in, the orientations taken by the various levels of government administration, the access to medical care, the degree to which scholars from the academic community are involved in the problem, the role of the people at large, and interaction with the mass media.

### 1. The Degree of Damage to Human Health

The extent of the damage done to the victims of polluted environments will have greatly differing results for individual people, as secondary problems related to their living situation and personality bring their varying forces to bear.

If the damage is not serious and the individual victims are able to return to work, the ensuing problems will not be overwhelming and there will still remain the possibility of recovery, both for the victim and the family involved. But when the victim requires many years of treatment before even partial recovery is possible, or where remaining in bed is the only course open to the victim, then the suffering involved is almost impossible to measure because of its depth and gravity. The worst scenario is where there has been a loss of life, and the death of the victim leaves the family in a very difficult, if not impossible, situation.

## 2. The Role of the Victim and Interaction with the Family

If death due to an industrial accident has been visited on the breadwinner of a family, the complications that ensue are all too obvious. In such situations, the wife is forced to obtain income-producing work and children are sometimes obliged to give up school in order to care for younger children or to obtain work themselves. However hard they try to overcome the disaster, they are unable to regain the same standard of living, and all aspects of their lives become retrogressive in character.

If it is the wife and mother of the family that has become a victim of environmental pollution, the health problems involved are often so very extensive that the human relationships in the family become greatly altered.

If a young child is the victim, the burden on the mother is greatly increased, and family viability can be threatened. This is particularly the case for thalidomide babies and newborn infants suffering from mercury poisoning (Minamata disease). Even though the cause of the disaster may have been fully clarified, the suffering inflicted on the mother is increased by the fact that the poisoning was unwittingly administered through the food chain by the mother herself. This suffering and pain is often transformed into enormous energy that is devoted to the struggle against the polluters; at the same time, this externally directed energy can lead to the destruction of family relationships.

In these ways the social roles of the victims and the positions held by them in the families involved also determine to a great extent the degree of damage done to the family infrastructure. It cannot be said that when the breadwinner of the family becomes the victim of pollution, the strains on the family are greater than when a baby or child is the victim. It is generally understood that the differing familial roles held by the victims of pollution or industrial disaster result in differing levels and types of stress within the family.

## 3. Social Position and Class of the Victim's Family

When environmentally induced health problems are discovered in economically advantaged families, a great deal of medical attention can be purchased, thereby bringing about a greater possibility of recovery through rehabilitation. But when the family is economically disadvantaged, often the rehabilitation offered is inappropriate or treatment is given too late. Social status has a strong influence on whether the problems are discovered early or late and on whether treatment is delivered appropriately and at the right time. In other words, the degree of recovery is determined, at least partly, not only by the family's economic status but also by the extent to which it has social and economic contacts who have knowledge of medical treatment and information about possible avenues for rehabilitation. The information that is available to society as a whole should also be made available on the community level, and victims who are less well off should have access to the same benefits as the economically advantaged, so that problems of income loss do not have a disastrous effect upon the family and medical treat-

ment is also assured. These benefits are simply not available to working people and to the mass of poor farmers and fishermen.

If the damage to health is stopped before it attains catastrophic proportions, then the secondary effects of poisoning and environmental disasters will be of a different nature. An early estimation of the damage done is the best method of containing the extent of the destruction. However, differences in socio-economic class and status have a great effect on the responses available to the victims of environmental pollution.

Even in the case of severe damage to health, victims' suffering will depend on the impact of the disease on their life as a whole. This differing degree of response depends on differentials in social status and economic class. The serious symptoms displayed by the victims of environmental pollution are a great shock to the families involved, but whether or not the burden to the particular family is lightened or not will depend greatly on economic level and access to sources of information.

#### 4. The Social Group Surrounding Victim and Family

In these modern times, besides the various primary groups that people belong to, such as the family and neighbourhood groups, there are also other groups and activities that allow one to go beyond the boundaries of class and social status and attain a degree of upward mobility. Within the community there are neighbourhood organizations, women's groups, political organizations, and volunteer religious groups; and within the workplace there are the various social outlets and groupings associated with labour unions.

Some of these groups support members who have become victims of environmental disaster, providing back-up support to compensation demands made by the victims themselves. If these support groups are effective, there is a possibility of reducing the extent of the damage done, regardless of the victims' social group.

The Minamata disease was regarded as taboo within the affected community for a full 12 years after the first victims were discovered; but at that point support organizations were established, for example those related to certain political parties, those supported by volunteer organizations, or those organized under traditional leadership orientations. These were victims' organizations which confronted the polluting industry instead of being exploited by it, and in so doing were able to increase national understanding of the Minamata disease. The organizations sought to define and isolate the polluter by calling the activities of the polluter socially sanctioned murder. The health of the various victims compromised by the disaster will never return to normal, but, through their activities and organizations, they have been able to avoid the total destruction of their own personalities. They have also managed to get a certain amount of compensation, which has gone a long way toward sustaining a decent life-style. However, many of the disease victims refused to belong to any of these groups and rejected the Minamata disease victim label. These people remain in very dire straits economically, and regard the group-oriented victims with mixed feelings of envy and hatred.

In the case of the Miike coal-mine explosion, the victims belonged to four different groups—the Shokukumi (office workers' union), the Miike mine labour union, the Shinro (new union), and the Kumifu (day-labourers' group)—but only the Miike mine labour union, which is a Sohyo (national labour) organization, supported the victims. The Miike labour union established rehabilitation centres for those that found it difficult to return to work in the mine. The pay provided by these centres was low, but the working conditions were guaranteed safe and there was the constant support of the other union members. This was a good example of group action being able to reduce the number of secondary problems affecting the victims. This same Miike union also supported victims' families and the families of those who had died in the disaster, making efforts to reduce the amount of damage inflicted on those groups.

### 5. External Factors

While the victims and their support groups were involved in efforts at self-recovery, external factors generated by the polluting industry, governmental administrators, medical professionals, scholars, pro-industry citizens' groups, and the mass media more often than not had a negative impact.

The polluting industry would often ignore the victims and their families, at the same time contributing to the further injury to the already compromised social milieu. The situation was often aggravated by the activities of governmental bodies, medical practitioners, and the community of scholars. The mass media was completely uncaring in its attitude to the victims, and the wider community looked down on them, wounding the sensibilities involved and acting to violate further the integrity of the violated families.

The destruction occasioned by these varying interactive forces would differ with the level of the individual victim's health, the social position held by the victim, the role maintained by the victim in the family structure, the groups to which the victim belonged, and the relationships maintained with the varying sets of impinging external factors. The level of damage done and the conditions created by the damage would have a strong relation to the social structures involved. We are therefore concerned with the whole range of factors that make up the social structures surrounding the victims. Below, three such structures will be dealt with and examples of each offered.

## III. Destruction of Life and Health: Problems of Damage Recognition and Certification

Loss of life and damage to health are the worst problems faced by pollution victims, though other problems related to these are also very serious.

In reality there are people who are not able to see the relationships between these issues. In first place come those in industrial circles who would rather not deal with the seriousness of the problems, while the government, in the form of its administrative agencies, shares this same extreme myopia.

Further, medical professionals, who receive vast amounts of funds for their research projects from industrial sources, make every effort to change the statistics so as to make it appear that there are fewer victims of pollution than there in fact are; all of this they accomplish through using their positions of power within the academic and wider professional communities. There have been cases where even the neighbours of victims were led to believe, out of ignorance of medical matters, that the victim involved really had no particular medical problems.

Often industrial circles, governmental administrative agencies, and medical professionals have made use of a technique designed to question the veracity of the victim's claim to patient status. In the instance of the Minamata disease, government agencies, medical professionals and representatives of the polluting industry would without hesitation spread rumours that most of the damage victims seeking certification were only doing so in order to receive monetary compensation. These methods have not changed, although their effects have been resisted by the victims and their support groups. In reference to the Miike coal-mine explosion victims, the supporters of the mining industry and industry-paid medical professionals would call the victim's medical problems the "union disease." The labour union requested that this designation no longer be used, but this label continued to shape the understandings of the local community. The victims were further compromised by these tactics, and the government, along with the medical community and the advocates of industry, combined into a triaxial power dedicated to further striking down the various victims of industrial wastage.

The problem was even further exacerbated by the tendency of certain of the victims to support the denials of government and industry by asserting that they themselves were not victims of a particular pollution- or disaster-related infirmity. In the Ashio copper-mine incident, it was not the health status of the farmers that was at issue but rather the environmental destruction of the farming infrastructure. This was clear from the character of the negotiations between the farmers and industrial capitalists. It is often very difficult to establish clearly delineated causal relationships between an environmental poisoning and resulting health problems.

Until recently, the health problems experienced by working people in the work situation were understood to be the sole responsibility of the workers themselves. In the case of the Chisso Corporation, which was responsible for the Minamata disease, there were many cases of ruined health and loss of life among the labouring employees caused solely by the activities of the company; this was the case even prior to the discovery of the mercury poisoning disease among the general population. Although the Chisso Company labour union was a Sohyo (national labour organization) affiliate, it was unable to confront the Chisso Corporation in relation to the life-threatening and health-destroying conditions under which Chisso employees were forced to work. The main themes of worker life within the company were lunch-boxes and industrial-accident injuries.

Labour unions in Japan are organized into different groups according to

the particular industrial sector involved. Thus it is difficult for them to confront their company counterparts in management because they are constantly told that their livelihood depends upon company profitability. In addition, the attitude of union leaders toward corporate management is typical of Japanese human relationships in general, and is characterized by cohesiveness between the two groups.

In the post-Second World War period the labour union movement, as the vanguard of the many mass movements seen in that difficult period, were very much this type of organization, and in 1955 when the Morinaga arsenic milk poisoning case surfaced, or when the Minamata disease appeared in 1956, the general public did not think of these problems as violations of basic human rights. The victims and their families did not know what they could or should do when faced with the contamination of baby milk by arsenic or the poisoning of whole households by the mercury-tainted fish caught in Minamata Bay, after centuries of fishing in the same area with no sign of an environmental problem.

The companies causing this kind of destruction took advantage of the victims and their families, knowing that those who had been subjected to loss of life or health were isolated from other people and that they could therefore get away with paying very small amounts of money in compensation. These families, who found it very difficult to accept these small amounts, did not have the knowledge necessary to judge the adequacy of the solatia offered, and accepted them because they had no other choice in the matter. It took ten years for people to realize that these small amounts were entirely inadequate and that the companies' attitude of ignoring human rights should be challenged by demanding much higher levels of compensation. These realizations came not through the direct activities of the victims themselves, but through those of the victims' support organizations.

It was in the middle of the 1960s that the victims of the Miike coal-mine explosion received a minimum amount in compensation from the mining company. The mine workers were also aware of the fact that there were great differences in the amounts of compensation provided to them and those awarded to the victims of the railway train accident that took place on the same day. When people became more aware of the value of life, there was also an increase in the awareness that a premium value should be placed on health. Thus their increased awareness resulted in demands that both life and health should be restored. There is no way to return life once it has been lost, and it is also very difficult to restore lost health. As time passed, people realized that life and health are beyond human control and came to understand that corporations which profit from damage to life and health have a profound and abiding responsibility for the negative results of their activities. Genuine demands made by the victims of environmental destruction can only be based on this kind of awareness.

There are many types of damage to human health. In the case of the Miike coal-mine explosion, carbon monoxide victims were reduced to human vegetables, a condition that is tantamount to being dead. The health of many other victims was also compromised to various degrees.

All the symptoms cause extreme pain to the victim. If they are not visible to other people, then the victim also suffers because no one in his family is able to understand what he is going through. Except in very mild cases, once health is destroyed the problem affects the entire family, degrading the quality of all human relationships.

#### IV. Destruction of Life-support Structures

When pollution problems continue to destroy the human environment, the effects on health become inexorably apparent. As in the Kochi Pulp incident, where hydrogen sulphide was discharged from the pulp-processing factory, those living along the river began to experience health problems that became life-threatening. The Kochi Pulp incident is understood to be a question of simple environmental destruction, but apart from the ecological issues involved, people's very lives were put at risk.

Before the Ashio copper-mine problem became a celebrated case, the problem was understood only in terms of its ecological consequences, that is, the deleterious effects on farming and fishing. After the problem worsened, there came a period when the health of the people was affected; this was reflected in an increased death-rate and in higher infant mortality. At a certain level of environmental destruction, the situation becomes life-threatening, with calamitous results for the human life-support system.

##### 1. Death and Debility Caused by Environmental Destruction

The Miike coal-mine explosion in 1963 was the worst industrial accident of its kind in the history of coal-mining. There were 458 deaths and 839 people were instantly affected by carbon monoxide poisoning. All 1,297 persons were the breadwinners of dependent families. Four hundred and fifty-eight families were permanently deprived of their breadwinner and 839 saw their central supporting member struck down by varying degrees of sickness and infirmity. This left the wives to cope with a burden of mental deprivation and social problems, along with the need to support the family. Instead of staying at home and feeling sorry for themselves, they went out to find work. The effects of this shift in family relationships and tensions were to be seen first in the youngest children, then in the grandparents, and finally in the other family members. Not only was there the loss of the central family figure, but the small children and the old people were also greatly depressed by the situation.

Further, the company's methods of dealing with the compromised families were also problematic. The Mitsui Mining Company treated them as though they had retired and died a natural death, providing 500,000 yen (about \$2,272) for each family and assuming no other responsibilities. In some cases, families were requested to leave company housing. The attitude taken by the company aggravated the situation of the dead victims' families, who

were in desperate straits. The Miike mine union had no time for the families of their dead fellow workers, and other families who had not been members of the union were completely ignored and lost all sympathetic support. The destruction of all aspects of life such as economic viability, human interrelationships, living conditions, and future planning, came to a crescendo.

In the situations surrounding the infant deaths from the Morinaga arsenic milk incident, the mentally destabilizing impact on the families involved was very great indeed. The mothers felt guilty about having fed their babies the poisoned formula, and suffered both because of this and as victims in their own right.

## 2. Damage to Health and Related Effects on Daily Life

The following is a report of the situation of victims and their families in 1978, 15 years after the Miike explosion.

There were at that time 63 hospitalized victims, 12 outpatients, 30 who had died, 17 missing, 394 retired, 138 returned to the mine, and 138 working outside the mine. The 63 first-class patients in hospital were unable to get out of bed. The brain damage was so great that they had difficulty in maintaining consciousness, and did not recognize the members of their own families. Not only were their outward appearances changed but also their personalities. The wives and children had to face problems quite different from simple economic incapacity due to the death of the breadwinner. The annuity for the husband or father became a source of financial help for wives and children. Although the financial needs of the family were met to a very basic degree, the burden was increased by having to deal with a living vegetable instead of a healthy and alert human being.

The second class of victims who were also hospitalized could manage for themselves, but memory, intellect, and expressions of feelings were seriously compromised and many suffered from states of psychological depression. These victims could carry on conversations with other people and thus they were able to go home once a month. They would often offer violence to their wives and children because of a basic inability to control themselves. For instance, there would be constant fights with the children over which channel to watch on television. These victims would become violent towards the children, tying them up, and then moving on to assault the wife. Thus this once-a-month home stay was a fearful time for the whole family. In such a situation there is no happiness in the home.

Those labourers who were able to return to work in the mine were classified in a category that is fourteenth down the list from the first-class victims. These people were light carbon monoxide poisoning cases who experienced only mild physiological damage. But some of the workers who were classified in victim classes 7, 8, and 9 also returned to work in the mine. These victims looked as though they had no physiological symptoms, but usually they experienced difficulty in sleeping and loss of memory, and found their bodily resistance to disease to be lowered; all these conditions made work in the mine too difficult for them. However, in many cases they were forced to return in

spite of the increased danger, because of the need for income for the family. The company and the Miike labour union did not stop those that wanted to work from working. But in these situations, not only were their relationships with other workers in the mine strained, but their tiredness after returning from work was extreme, and this contributed to a variety of family pressures. Even in the lightly affected cases, the adverse effect of the poisoning on their daily lives was in no way small.

The adverse effects of pollution-related diseases are different when the victims are breadwinners, as opposed to infants, as in the Morinaga arsenic milk poisoning case, or the entire spectrum from infants to old people, as in the Minamata disease.

When the victims of an environmental poisoning are infants, they have no way of expressing pain and suffering, which means that the surrounding adults worry more. Since, in the Morinaga arsenic milk poisoning case, the cause of the sickness was unknown, the pain and suffering of the family was extreme because the doctors could find no treatment for the diarrhoea, vomiting, and weight loss. It took three months for the Ministry of Public Welfare to determine that the cause was arsenic poisoning, and their only response was to try to stop the production of the milk and provide treatment for arsenic poisoning, without making any effort to deal with the problems faced by the victims or in any way consult with them. This way of doing things ignored completely the condition of the victims themselves. In reality, the infants suffered from the damage inflicted, but medical treatment was offered only to those who could pay for it. It was 14 years later that Osaka University's Professor Maruyama offered his research report to the public, and during all those years the victims and families involved were completely ignored by the offending company. During that time the economic burdens piled up, and although there were differences in family background, generally speaking living standards in all of the affected families were compromised, family relationships were strained in the extreme, and plans for the future were radically altered. These effects could also be seen in the labourers who lost their livelihood.

When one family member is sick, all the members suffer. In the case of the Minamata disease, there were instances where many members of a single family became victims and suffered some degree of debility. Husbands would eat the fish caught from the bay, the wives would be involved in fishing and would eat the same tainted fish, and then the children, while still in their mother's womb, would also become poison victims.

When the cause of the sickness was still unknown, it was thought that the illness was contagious because all the victims would experience the same symptoms. Once multiple victims were discovered in one family the resulting confusion was very great. Moreover, because of the strangeness and unknown character of the disease, entire families would be isolated from the rest of the local community. Medical expenses would also rise. When the cause of the sickness was discovered to be the mercury-tainted fish, the entire fishing industry became depressed. The economic viability of an entire community was absolutely destroyed.

## V. Personality Changes

Personality changes constitute the third level of environmental pollution-related damage, and as such are inextricably bound up with the second level of damage, the destruction of health. Some of the victims of environmental problems who suffered physiological disorders also suffered from changes in personality. But it is not clear whether these changes were a response to the sickness or were inherent in the pathology of the sickness. Such cases are found among victims who suffered nerve damage, for example Minamata disease (mercury-poisoning) patients, the carbon monoxide poisoning victims, and the victims of SMON (a medicine-induced iatrogenic disease). The symptom common to all of these patients is that they are easily angered, and this fundamental change in personality is endemic to the disease process.

As indicated earlier, the victims of the Miike coal-mine explosion all became violent, a fact that seriously undermined family relationships. It is essential to understand that, to some extent, the attitude of the family toward the victim also fostered violence in the victim. At the same time there were changes in the personality, caused by problems of altered physiology and social factors.

Patients who suffer from nervous system problems are unable to stand the adverse reactions of family members. Therefore, the patient's personality progressively deteriorates, and as a result the entire family suffers from a worsening of interpersonal relations. These personality changes are very evident. Some of the wives of the Miike disaster victims were forced to admit that their husbands suffered from a complete personality alteration.

These changes were also caused by the manner in which victims were treated by the offending industry, by governmental organs, by medical doctors, and by the mass media, and they became more obvious as the negotiating process between the company and the victims progressed. The offending companies would usually use negotiating methods that aggravated the patients and increased their nervous tension. The government and the medical profession were only interested in maintaining corporate profitability and in protecting their professional status. The mass media treated the victims as objects of curiosity, showing an absolute minimum of sensitivity for their plight.

## VI. The Battle against Oppressive Structures

### 1. The Adverse Conditions Suffered by Pollution Victims

The accumulation of adverse effects suffered by the victims of environmental pollution are so profound that their life-styles are radically altered, as seen in the example of Yanaka Village of Ashio copper-mine fame, in which a whole community was erased from the face of the earth. The place itself gradually came to resemble a ghost town. There are other areas that suffered from the

same pollution-induced problems as those seen at Ashio, such as the Doroku area of Miyagi Prefecture, which was affected by arsenous acid poisoning, and the Jintsu River basin, which suffered the effects of cadmium poisoning in the form of Itai-itai disease. Neither the poison-producing industrial organizations nor any of the governmental structures has taken the initiative or responsibility in caring for these victims of a ravaged environment. The governmental organs were interested only in the continuing economic viability of the offending industrial corporations, and the government therefore shares culpability with the corporations. Concern for individuals, for the victims and their families, is something the government seems incapable of.

If the victims waited for the helping hand of governmental organizations to be extended, the problem of oppression would never be solved. History shows us that countless people have suffered at the hands of an uncaring government, only in the end to be eliminated.

When Japan was still under the feudalistic rule of the Tokugawa family, people were forced to work in mines under conditions much worse than those experienced in this century. If individuals lived to the ripe old age of 32 it was something to celebrate. The workers in those times never protested, and they died after a short and wretched existence.

With changing times and the advent of capitalism people worked in iron and steel mills, in textile mills, in mining, and in chemical plants, where the healthy sacrificed their lives, their strength sapped by environmental outrages. The majority of these workers considered that they had no choice in the matter and accepted their fate as part of the workings of destiny. Under these conditions it required a great deal of bravery to appeal to other people, setting oneself against all the industrial, political, and social structures of Japan. In the textile industry tuberculosis was so prominent among workers that whole families would have the disease. Dr Osamu Ishihara wrote about this when making his academic presentation on the situation of workers in the textile industry. If the victims of these circumstances had protested, the damage would only have increased and the discrimination against them would have escalated. A modern example of this phenomenon in Japan is the discrimination suffered by the victims of the atomic bombings.

In relation to environmental destruction, the protests mounted by the farmers who were victims of the Ashio copper-mine poisonings were silenced through government pressure, as a result of a policy which promoted industry and was bent upon strengthening military power.

It was not until the late 1960s, about 20 years after the end of the Second World War, that at long last the victims of environmental destruction were able to speak with one voice in order that social conditions could be changed. During this period a number of infamous pollution diseases, such as the first and second Minamata diseases, the Morinaga arsenic milk diseases, the PCB poisonings, the thalidomide poisonings, and the SMON disease, were all brought to the public's attention. Also, at this time air pollution conditions were worsening and asthma victims were on the increase. In other words, the time had come to pay for the rapid economic growth of Japan's industrial

society, and those who were required to pay these social costs were those without power in society—the consumers and the workers. It was also a time when the so-called post-war democratization processes were beginning to take hold among the people. Along with this there were the movements against the Japan–United States Security Treaty, and a growing alliance of forces against environmental pollution, industrial disasters, and poisonings involving consumer products.

It was also a time when people were beginning to recognize the fact that environmental and related poisonings are a violation of fundamental human rights and that unquestioning acceptance of these unethical and immoral practices was not an unalterable fact of destiny but rather a form of exploitation that needed to be challenged and rectified. Pollution cases were brought to court one after another following the initial suit filed in 1967 by the victims of the Niigata Minamata disease.

The struggle for adequate compensation for victims of mining disasters began to intensify after the Second World War, but it was not until the 1970s that a movement for the protection of mine workers came into being. In 1972 two of the Miike coal-mine explosion victims' families took their cases to court. The damage done to the victims of that disaster was so extensive and devastating that the workers began to go to court to indict the corporate managers.

## 2. Victim and Mass Movement Interaction

After the pollution victims began taking their cases to court many support groups sprung up. These ad hoc organizations included students, researchers, labourers, consumers, doctors, lawyers, journalists, novelists, and poets.

These court struggles usually involved several lawyers, medical doctors, and academic researchers who were employed by the prosecution to testify against the offending industrial corporations. People began to support the physically handicapped pollution victims. Not only was this kind of support seen on a local level, but support organizations would spring up nationwide. Some people would visit the areas most heavily affected by environmental damage and would live and work with the pollution victims in the hope of creating new communities.

New supporting organizations included groups bent on a boycott of offending companies' products, as in the Morinaga arsenic milk poisoning case. Chisso Company workers came to the aid of Minamata disease victims and the Miike coal-mine workers came to the aid of the mine explosion disaster victims. Instead of victims visiting their doctors, the doctors would go to see the victims in their living environments and learn first-hand the reality of their lives.

The victims and their doctors were supported by journalists, photographers, film producers, writers, and actors; and through the use of the communication media, these people provided an in-depth and broad-based analysis of the situation with respect to the suffering of the victims and the irresponsibil-

ity of corporate management. The voices of the pollution victims were heard at the United Nations Conference on the Human Environment in 1972 and at other international conferences and organizations. Through this increase in international pressure from outside Japan, corporate management and governmental organizations had finally to change their stance toward the victims. The pollution cases brought to court in the late 1960s were settled in the early 1970s, and this resulted in certain changes in the law and in the attitude of the government.

Mass movements of citizens supported the pollution victims and through this there were certain changes at the grass-roots level, but the labour unions in Japan—which are, more often than not, company unions—were often unable to arouse interest in the pollution victims among their rank and file. It is essential that labour unions become involved in the struggle for universal human rights if we are to change the social structures that foster the destruction of life and the human environment.

### 3. The Kochi Pulp Incident

Once a hole has been made in a wall, it is difficult to close up the hole again, even in times of economic depression. In the last ten years the citizens' movements, along with the victims of environmental and occupational diseases, have increased their awareness of human rights. One example of this can be seen in the Kochi Pulp incident, although it is of secondary importance compared to the Ashio, Miike, and Morinaga cases. The reason for its inclusion here is that action by the victims was very effective in changing the situation, and this action was brought to bear at a time when there was rising national involvement in protests against environmental destruction, together with a deepening concern for finding solutions to the radical problems presented by a runaway industrial society.

This situation began when the Kochi prefectural offices invited a pulp-processing industrial concern to set up a manufacturing facility at Urado Bay in Kochi City. From the Tokugawa period (1760) onward Kochi City has been famous for the production of paper from natural resources, and paper manufacture has been a major industry there from time immemorial. As time went on the rivers of Kochi became more and more polluted by paper-manufacturing discharges, and the people, particularly the fishermen, were increasingly threatened by the problem. In the 1930s a pulp-processing plant was constructed, releasing even more effluent into the environment. In 1948 a new pulp complex was proposed for the old pulp plant site. The city administration and prefectural government supported the project while the local fishermen and the citizens were against it. The site was located well within city limits and the plan included no facilities for treating industrial waste. The plan meant that the river running through residential areas to Urado Bay would be thoroughly polluted and there would also be sulphurous anhydride air-pollution problems to contend with as well. This groundswell of opposition continued even after construction of the factory had begun in January

1949. In July of the same year the anti-factory citizens' movement and the company came to an agreement in relation to pollution prevention. This was a time when Japan was moving ahead with full-scale reindustrialization, but the agreement fully represented the will of the people, who opposed the establishment of the pulp factory.

The agreement read in part as follows:

- (a) The company will assume responsibility for damage done to the environment by factory operations, and will pay compensation.
- (b) In order to ensure that compensations are fully paid a management committee shall be established with more than half of its membership made up of local citizens. The company will retain in the bank at all times a sum of 2,000,000 yen (about \$5,500) for industrial pollution compensation purposes and this fund will be managed by the committee.
- (c) If pollution-related compensation amounts are paid from the said funds, the amounts withdrawn from the account for such purposes will be replaced immediately by the company. If this supplemental funding is not provided by the company, then the management committee can demand these same funds from the company.
- (d) If the amount of money needed for pollution compensation purposes is not covered by the amount of money in the bank and if it cannot be provided by the company, factory operations must be halted. In this instance the factory will remain closed until a problem-solving policy is established.

This agreement was signed by the mayor of Kochi City and the governor of Kochi Prefecture.

As it turned out, the construction of the factory was temporarily halted owing to the economic depression, and the city and the prefecture were not able to meet construction expenses. Responding to an initiative from the Daio Seishi (pulp) Company of Ehime Prefecture, the neighbouring prefecture provided funds for the project and the Nishi Nippon Pulp Factory went into operation in 1951. As a result of this turn of events, the factory went from Kochi Pulp to Daio Pulp management, and in the process the viability and validity of the pollution-prevention agreement was seriously downgraded.

Citizens staging a sitdown demonstration against the construction of the plant were arrested by the police. The high quantities of sulphurous anhydride that the factory emitted into the air damaged human health, and a dark polluted discharge into the river and Urado Bay killed all life in the aquatic environment.

The company did not take any preventive steps in relation to the worsening pollution problem, nor did the governmental organs involved in the plan enforce corrective measures, in spite of the fact that this was stipulated in the original agreement between the company and the citizens of Kochi City. On the contrary, the prefectural office announced that the results of tests on water samples yielded no evidence as to the cause of the degraded aquatic environment or to the type of damage involved. The management commit-

tee's 2 million yen fund was used as a slush fund for entertainment. From 1950 onward, the Nishi Nippon Pulp factory and its parent company Daio Pulp grew rapidly in spite of the continued suffering of the local people.

For a period of ten years during which there was no waste treatment provided, the factory continued to discharge its noxious effluents into the river, and with this the Urado Bay fishing industry was greatly compromised. In 1962 the fishermen gave up their fishing rights to the company in exchange for compensation of 100 million yen (about \$277,000). After fishing had been halted in the bay, the environment was further compromised by the operations of the company. Because of the fact that the company had changed its management, the citizens' protests were completely ignored.

In the 1960s, after obtaining the bay fishing rights from the fishermen, the prefectural offices reclaimed land around the bay in order to build more factories. With the exception of two or three cases, there were almost no protests by the citizens. In August 1970, when a typhoon hit the city, the people were immediately made aware of the problematic nature of the projects on the reclaimed land, because, as a result of the modifications made to the natural environment around Urado Bay, many more homes in the city and surrounding areas were flooded by the typhoon. The flooding washed accumulated pulp sludge into people's homes, and the damage was considerable. At this point the people realized the serious nature of the problems presented by the pulp factory and the land reclamation projects.

With this turn of events, a second wave of protests against the pulp factory was instituted in 1970, in concert with the many nationwide protests against pollution that were being mounted by labour unions and student movements. An environmental group in Kochi City and a group formed to protect Urado Bay initiated a movement to remove the pulp factory, or at least to ensure that the sludge discharged from it was fully treated before being dumped into the river and bay. The movement grew on the basis of understandings that would come to see all of nature as public property and would also see the interrelationship between human beings and the environment as important and central to the continuance of human civilization. The two groups that came together lay stress on the limits of technology—an argument never before used in the ideology of Japanese anti-pollution protest movements.

However, there remained the fact that for ten years there had been no citizens' protests and that management had changed in 1960 from Kochi Pulp to Nishi Nippon Pulp. On 31 May 1971 the Kochi Pulp management decided not to negotiate with the Urado Bay Protection Citizens' group. Therefore, the four executives of the citizens' movement decided that the situation had reached crisis point and that there was only one course of action—to pour cement into the mouth of the factory effluent outlet. This action took place on 9 June, stopping factory operations for 15 hours. This form of protest was fully supported by the citizens of Kochi City, but the prefectural and city authorities panicked, and, in all the confusion and pressure that followed, were forced to ask the company either to install pollution-control equipment or to move the factory elsewhere. Kochi Pulp management was not able

to meet any of these demands, and was therefore forced to close the installation in May 1972. The pollution problems generated by this one plant continued to compromise the natural environment for a period of 20 years after the start of operations. It was stopped in its tracks by the courageous action of a few individuals and by the support for that action by the citizens of Kochi City.

Two of the four persons involved in the plugging of the effluent discharge outlet were prosecuted in court, but the court provided an ideal platform for the protesters, who contended that the Kochi Pulp Company, in its flagrant disregard for the viability of the human environment, was guilty of a criminal action. National anti-pollution groups, environmental protection groups, and the mass media all supported the two people being tried in court, and, as a result of the efforts on their behalf, the court case ended on 31 March 1976 with the two being required to pay a fine of 50,000 yen (about \$200) each. In this regard the court battle was a victory for the citizens' movement.

The court struggle became the forum within which it was possible to change the structures promoting environmental destruction through united action by citizens opposed to pollution.

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