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Many of us have an image of Japan as a society in which there is considerable group-oriented mutual interest. A number of authors like Nakane (1970), Reischauer (1977), Kahn (1970), Taira (1970), Abegglan (1973) and De Vos (1973), to name just a few, have intimated that the concept of the group, as opposed to the western value of individualism, is the cornerstone of Japanese society. Indeed, if we look at the behaviour of Japanese tourists on the streets of Sydney, or at the behaviour of school children in the subways in Tokyo, we see ample evidence of this trend towards group orientation.

This concept of the group apparently originated during the feudal era in Japan, when Confucian ideals were adopted by the shogun to reinforce the "natural" order of people - the so-called shinokosho system of social hierarchy which, from the top of the scale ranked the population in the following order: samurai, farmers, artisans and merchants. Loyalty to the emperor, the country, the political order, and the family was demanded of all social classes. In return the administration was to be benevolent and paternal. Citizens were required to show respect to their social superiors, and to realise their place in the hierarchically ordered society.

Some of these values, it is maintained, have been passed on to contemporary society. They are manifest in the relations between younger and older students, between parent and child, teacher and pupil, for example. It has also been suggested that within large corporations workers are treated like the children of the proprietors, and the workers in turn show respect to the company and to their superiors, much in the same way as the samurai were venerated by the peasants.

This system has become typified as one of lifetime employment, where the company looks after all the needs of the employee for the time of his/her employment - a form of economic benevolence, perhaps. In turn the workers are loyal to the company.

After World War Two, the US Occupation passed a mandate which gave workers in Japan the right to join national unions and to bargain collectively. This was seen as one of the first steps towards democracy, and towards building the US a strong ally in the Pacific. Although many workers joined unions, and these unions were themselves often formed into Councils and Federations of Labour Unions at national levels, the majority of union members were members of enterprise unions - that is, unions which were specific not only to the type of industry in which the members were employed, but also to the company. Agreements were to be drawn up between workers and management concerning wages and working conditions, company benefits, superannuation and the like.

In Australia, the United States and Europe there has been a recent move towards this system of enterprise unionism. One of the reasons for non-Japanese attempting to accommodate the union system which is in operation in Japan, is that it is seen as helping to reduce the number of days lost to industrial disputes. This improves business efficiency, which in turn enhances overall economic performance.

Over the years there has been quite a lot of criticism about the nature of the enterprise union system from within Japan. This criticism, primarily originating from the Communist and Socialist Party-related labour bodies, has been based on the concepts that: there is little democratic representation within the system; that the company's interests are defended by the unions, who act as the mouthpiece for management; that cases where workers actually do have a say in how the production process can be improved are rare and misleadingly represented as being the norm in industrial relations; and that although productivity in industry in general has been improved greatly, it has been accomplished at great cost to the industrial workforce. Whereas some of these criticisms perhaps are a little vitriolic, the basis for many of these complaints was apparent in the coal industry.

In this paper I will look at some of the constraints which were imposed by an enterpise union on some members' families at a Japanese coalmine, following a major disaster. The union's stance in this case should be seen as pro-management. One of the major issues which surfaces in this case, is that although this enterprise union was basically an acceptable structure when things were running smoothly, and the interests of workers and management were aligned, when events moved beyond the control of the company, and of the union, the feelings of people who were abused by the system emerged in a cathartic display of animosity directed at both the company and the union. Rather than being perceived of as a representative body for the workers, the union came to be seen as "the dogs of the company."

The Yamano Coal Mine disaster exposed some of the underside of the industrial relations system, and it will be one aim of this paper to display some of the problems that one company and its employees were faced with following a major methane gas explosion.

The Yamano mine disaster occurred at the Yamano mine, which was officially owned by the independent Yamano Mine Company, a subcontractor for the Mitsui Mining Corporation. In 1965 a methane gas explosion ripped through the Number Two shaft, killing 237 miners and seriously injuring another 150 men. This disaster was Japan's second worst postwar accident, and was remarkable for the number of errors which occurred before and after the explosion. Although an internal company inquiry found that the management of the day were correct in their actions, an independent inquiry conducted by the Fukuoka Mine Safety Commission found that there were 'suspicions of improper behaviour' on the part of management.

The families of the dead and injured men took the unprecedented step of filing a civil suit against both the Yamano company and Mitsui, suing them for compensation. This case was started even though the company and the union put considerable pressure on the widows and families of the dead and the injured miners to give up the case and take a small settlement.

It was a landmark case for a number of reasons, not the least of which was that the courts found that Mitsui was criminally negligent - the first time a mining company had been put in this position. This decision established a precedent which has affected the outcome of other civil suits within the Japanese legal system over recent years. However, before I look at the outcome of the case it is worth investigating briefly the circumstances surrounding the disaster, and the subsequent actions that took place.

## Historical background

Since the 1930s Mitsui had owned the colliery in the town of Yamano which is situated in Kago-gun, in Chikuho. A large mine which in its heyday employed more than 1000 men, it was an archetypal big Japanese colliery in that all other industry in the town revolved around the mine. When the

energy revolution, which officially sanctioned the move from oil to coal as the major energy source, began in the early 1960s the company announced its intention to sell the mine to the government under the terms of a bill which allowed unprofitable, or bankrupted mines to be sold to the government, as part of a government buy-out of the mines. This was announced to the local population, who reacted with some consternation.

In Yamano, when the company declared its ostensible intention of closing the mine, the mine workers called a meeting of the local townspeople with the aim of discussing their future job prospects. The township decided to plead with the company to show compassion, and to continue their operations in the town. The company's stance was firm from the outset though, and there seemed to be no chance of any agreement being reached. Five months after the company's initial announcement that the mine would close, Mitsui responded to the town committee, saying that the possibility of a second company taking over the running of the mine was not out of the question. However, the workers would have to be prepared for a salary drop, and for an increase in working hours, with the additional rider that the overall production of the mine would have to increase. The union fully supported the move to second company status, and exhorted the miners to accept the terms of the agreement.

In short, the company wanted a rationale that could be employed to justify cutting wages and costs, whilst maintaining and even increasing production. The 'takeover' by the second company - a company wholly owned by Mitsuiwas the answer. Mitsui was prepared to outwait the workers, a ploy which often has been used with success by Japanese companies when negotiating with overseas companies. In effect the company was able to change an unprofitable enterprise into an extremely profitable enterprise by renaming the company. Notwithstanding the new name, the company's management remained unchanged. The profits from the second company's operations would still end up in the Mitsui coffers, yet Mitsui itself would not be required to continue paying miners the previous wage levels. While the second company was operating in the black, and while there were few problems within the labour force, this system was quite effective, but as the subsequent legal case showed, when problems developed within the second company, the ultimate responsibility was found to rest with Mitsui.

One Chikuho academic had the following to say about the process described above:

At the meeting of the townspeople, the people begged Mitsui to continue the operations. Mitsui probably really had intended to continue the operations all along but from the very beginning had released a load of bullshit that they were closing the place down. In reality they were just waiting for the town and the union to say, 'The Number Two company would be fine, please do it for our sakes.' So Mitsui said that for the sakes of the workers they would just have to sell out to the

Number Two company because it couldn't be helped. And by doing this Mitsui was able to lower wages and increase the working hours with no obstruction. The union was not prepared to fight the company. They were afraid that if they argued with the company, the company would take steps to close the mine down. Therefore they tended to agree with them (Author's fieldnotes)

Although the townspeople had desperately wanted the company to continue operations, the reality of the second company was difficult for many of the miners to deal with. Wages dropped to 75% of the original Mitsui wages, working hours increased on average to 14 hour shifts, and production demands increased by 250%. Safety standards were allowed to lapse, and not surprisingly, considering the nature of the work, the long hours and the lack of investment in safety equipment, the accident rate climbed dramatically in the first year after the 'takeover.' A number of men who had worked many years for Mitsui under the original company, guit the new company and looked for work elsewhere. Only 18% of the original workers remained. A chronic labour shortage resulted. This in turn led to the situation where the mine was forced to advertise for miners, offering to train them and house them in the emptying company housing. Because of the depressed state of the mining economy in the early 1960s, and the tightening of the rural economy, many young farmers who had never worked in mines came to join the company's new sub-contractors, attracted by the prospect of a reasonable wage (compared to farming), free housing, and secure employment with a big company.

Thus only a small percentage of the miners had long term mining experience. This was to become a pivotal point in the case that followed the disaster.

## Working conditions in Yamano mine

The facilities within the mine were allowed to remain in poor condition. None of the safety, digging, or coal moving equipment was updated since the new ownership. Much of the digging at the face was done by hand, and then manually passed on to the conveyor belt, which had been unchanged since the 1950s. The miners were expected to work long hours in excessive heat for poor wages. On top of this, little or no training in the use of the safety equipment that was available was given to the men, especially the new recruits. This proved to be a major contributing factor to the high death toll after the explosion. The Yamano mine had 'safety tunnels,' like all the mines, but unfortunately the new miners were not aware of the location of these emergency exits, as it transpired.

One man who was involved in the legal action which ensued described some of the safety conditions -

The cost of the mine which was the determining factor - to make the dig as cheap as possible was the only factor that counted. The company just thought that it was the only way to do business. When an accident occurred the company directors just nodded their heads and made placating noises (Author's fieldnotes).

In the case of Yamano Mine, for example, there were on average 240 workers on every shift and the company knew that methane gas build-up was a problem with this dig. However there were only 190 gas masks placed in the mine in case of emergency! So even if a person knew that there had been a gas explosion in the mine there was nothing that some of the people could do about it.

Some miners referred to the union as the 'dogs of the company,' saying that their position (the union's) undermined any attempts by the miners to have independent representation. The union's response to workers' requests to the company to improve wages, or safety and working conditions, was that if they didn't like the situation they could get out, because there was always someone else ready to come to work in their place. The union had a strongly pro-company stance which severely compromised miners, and in the longer term, miners' families' human rights.

Equally, mine management was under extreme pressure from Mitsui head office to increase production and to make the mine profitable. This was achieved through employing semi-skilled, cheap sub-contractors, and through ignoring the expensive demands of the FMSC to monitor, and improve safety standards. In order to meet the new production requirements working conditions were made more demanding, and wages were cut. According to Yano:

To get away with this the company employed 'temporary workers' who were basically inexperienced in the mines, as subcontractors. They had nothing to compare the work with and therefore were fairly easily manipulated. The numbers of these men increased dramatically, and as a result of these policies the company was able to move out of the red (Author's fieldnotes).

The above ground staff numbers were also cut, so that among other staff reductions, the engineering section, which was responsible for monitoring gas build-ups, mine construction projects, and the general excavation of coal, was operating with barely a skeleton staff. Certainly staff and wage cuts had a powerful influence on the company's economic performance. The mine's improved production figures in 1965, as compared to 1963, produced a huge leap in profitability. They moved from operating at a large deficit to operating at a considerable profit. However, as the 1965 accident illustrated, this was achieved at an enormous cost, measured in human lives.

## The Accident

On June 1st, 1965, the explosion rocked Yamano. Methane gas levels had increased to five times the safe limit over a period of hours within the Number Two shaft at a depth of approximately 780 metres. Although the actual cause of ignition is difficult to determine because the damage to the equipment was so extensive, it is thought that a spark from one of the old conveyer belts started the explosion. The concussion from the blast was felt 20 kilometres away by residents of a small farming village, and the pall of black smoke was visible from as far away as Iizuka, 30 kilometres to the south-east, according to reports in the Asahi Shinbun.

One man who was working in the mine on the day of the explosion described how he perceived what happened. He was 17 years old at the time, and had little mining experience, like the majority of the men in the shaft he was in.

I didn't hear the explosion, you know. The first thing that I knew of the accident was when the lights and the electricity went out. I was down the Number I shaft, so I was quite a way from where the accident occurred. The tunnels didn't connect, you see, so there was no way that I could have known what was going on. Anyway, because the lights had gone out I thought that it would be a good idea to get to the elevator shaft and to make my way to the surface to see what had happened. When I got there, the union representative told me that there was no need for panic, that we should all go back to our work and use our cap lamps until the lighting was restored.

We all worked until the shift finished you know - for perhaps five hours after the explosion. Anyway, when we got out of the mine, we went into the baths and I noticed that the men from the other shaft weren't there, so I assumed that they had been forced to work overtime again - this happened all the time. As we were all leaving the gates I noticed the smoke in the air - it was heavier than usual -and asked one of the security men what was going on. He told me that the company had said that it was nothing to worry about, and that we should all go home.

I went home, and my mother told me that there had been a huge 'bang' from the mine, and she asked me did I know what it was. I didn't. I suppose that it was about three hours after this that I was rung up at home by the labour overseers at the mine, and asked to come to work to help clear up the mess that a 'minor accident' had caused. When I arrived back at work, there were fire engines, ambulances, and police crawling all over the place - it was crazy. The labour control boss asked me to go down the shaft with the rescue crew to help the men who were stuck down the mine.

After that day I never felt the same about mining again. Down in the shaft there was torn and broken machinery which was buckled and twisted. Dust was everywhere - you could hardly see in front of your own eyes. And because the pumps had been turned off the water was up to our waists. And the smell - it was like a terrible fart. I could smell it through the gas mask. When we got out of the elevator I stumbled in the water and fell. When I got up I was holding a human hand. It was terrible. There were dismembered bodies everywhere. Further down the tunnel, away from the site of the explosion, the mine looked like it had always looked. There was no obvious damage to the machinery or the roof, although there was water everywhere. It was in the tunnels at the bottom of the mine that we discovered the first of the miners who had died of methane poisoning. Their bodies

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were lying all over the place, but none had gasmasks on, and their faces were twisted in pain. I was so frightened I had to get out (Author's fieldnotes).

Iwano's story highlights the lack of communication with the workers in the Number One shaft, something which was emphasised in the legal proceedings. However the extent of the company's negligence went far beyond this. When the build-up of methane gas had first been detected in the Number Two shaft the chief of operations within the mine had tried to contact the surface engineering section to tell them to turn off all the electricity. This was standard practice in cases where there was a sudden build-up in gas levels, because a spark from any of the machinery could have started an explosion. Unfortunately for the miners there was no-one at the engineers' office at the time, management having decided that it was not necessary to have superfluous safety staff on call throughout the shifts. The miners then contacted management head office, and notified them that the gas levels had exceeded the safe levels by a factor of four, and that they needed to have the electricity turned off.

Management suggested to the miners that their instruments were wrong, that they should check the gas levels, and then get back to them about it. In the meantime, the management would get someone over to the engineering section to check the gas from there. Fifteen minutes later the explosion occurred.

### One miner said:

The company didn't let the miners in the other shaft know what was going on (that an explosion had taken place) because they didn't want to lose production from a premature shutdown (Author's fieldnotes).

Even after the explosion, management continued to act irresponsibly. A junior member of the office staff immediately called the emergency services, notifying them of the explosion, and asking for assistance. Management were informed, and they immediately overturned this decision to get help from outside. They rang the emergency services and told them that the situation was under control and that outside help would not be necessary. Miners in the Number One shaft, rather than being contacted to help with the rescue operation, were left undisturbed to finish their shift. The inquiry found that these actions, presumably performed to save 'face' and to keep production running, were negligent.

Of all the miners killed in the explosion, only about 20 workers died as a direct result of the explosion. The other 200 or so died as a result of gas poisoning as the gas circulated after the explosion. The men that survived were the ones with considerable experience. They knew right away that the

gas was around and tried to make their way to the surface as quickly as possible.

Seventy percent of the miners who were on that shift were employed with the subcontractors, working for low wages because they didn't have any direct mining experience. This was because it was the Number Two company. These were the inexperienced temporary workers who had entered the mines for the first time and didn't know much about the mines at all. The issue was that the company was required to teach these people about mine safety but in actual fact they didn't. So the majority of these people had no idea where the gas masks were kept nor how to escape from the mine. The people who got out were generally the veterans who knew where the exits were.

The accident site was a long way underground, so even if luck was with them the quickest time possible to get to the surface from that site was about 40 minutes. And the gas masks only had enough air in them for 30 minutes. While the masks conformed to the letter of the safety regulations the specifications that the FMSC had enforced were really not very useful at all. Not only were the numbers of gas masks insufficient and the air in them inadequate for the trip to the surface in case of emergency, but also few of the miners knew where the masks were kept or how to use them. This was because company policy had dictated that safety training was not an essential part of their role, particularly in the case of subcontractors.

The delays in turning the electricity off, in making the miners and the engineers recheck the gas levels, and in calling the emergency services doubtless contributed to the extremely high death toll, but on top of these immediate problems the safety issue and the relative inexperience and lack of training of the young subcontractors was a significant factor.

A cynical perspective would be that the company was determined not to lose production, and that it would go to any lengths to achieve this end. The reluctance to call in the emergency authorities for fear of a public investigation which would result in the mine being closed for an indefinite period is relevant here. The delay in calling in the emergency services probably cost many miners their lives; in the five hour delay most of the men suffocated. Those who survived managed to do so through escaping into tunnels least affected by the gas, and waiting for the rescuers. By not having anyone stationed at the engineering section for emergencies, especially given the established problems that the mine had with methane gas build-up, the company also contributed to the disaster.

However the accident has to be seen in the economic context in which it occurred. The mid 1960s were the most severe years for coalmining Japan had seen. Under the terms of the coal rationalisation bills, Chikuho mines were being closed at a tremendous rate, the market was being 'undermined' by cheap high quality coal imports from Australia, the US and Canada, and domestic sales had shrunk to a fraction of the 1950s levels as oil and petroleum products competed directly, and successfully, with coal for a large section of the domestic energy market. Unemployment was becoming an even more serious problem in the coal areas than it had been, and work opportunities in the Chikuho region in particular were extremely limited. Coal companies were no longer seen as the 'shining light of industry,' and few could offer the so-called 'life-time employment' that so pervasively characterises foreign perceptions of Japanese business. Given these circumstances, and notwithstanding the safety issue, it is understandable, though barely so, that the Yamano mine management would consider carefully whether they could afford to slow production for the sake of what was, after all only a 'little bit of gas.'

After the accident, which was the second major coalmining disaster in Fukuoka Prefecture in two years - the previous year, at another Mitsui mine, the Miike coalmine at Omuta, an explosion killed 467 miners - the company offered compensation of 400,000 yen to the families of each miner killed in the explosion. The union supported this, saying that it was generous beyond anything the families should expect. It was equivalent to about six months' wages. The company also said that the widows and the families would be able to stay on in the company housing for a further 12 months until they found other suitable accommodation. The mine was closed down, and there seemed no harm in having the families of the dead living on the mine site.

The families of the dead men were outraged at the limited nature of the proposals. Comments such as 'Is a man's life worth just six months' salary?', 'Why doesn't the union get off their butts and help us? We can't afford to live on that amount for long,' were made public by a number of women, but the newspapers ignored the nature of their comments by and large, as the accident quickly faded from people's memories.

However, the lack of publicity in the mainstream media notwithstanding, a group of Communist Party-connected people who were informed of the company's actions by local informants, were outraged at the inadequacies of the company's proposals, and soon convinced the families of the dead to form an independent group to agitate for better compensation from both the union and the company. They were convinced that the women's group - the Widows' Movement, as they were to become known - should begin litigation against the company. This was seen as the next logical step, after they had heard that the company had been successfully prosecuted for criminal neglect by the Fukuoka Mining Safety Council. After more than 20 years of

court actions and appeals, the families of the dead men were awarded a substantial amount of money from Mitsui.

# Conclusion

A number of points arise in this discussion about the causes of and the preventability of accidents such as this.

- 1. The accident was caused by a series of misjudgments which had been made as to the necessary minimum safety standards for coalmines.
- 2. The standards which were applied were not carefully policed.
- 3. The reasons for the appalling safety standards in this mine in particular, were primarily economic in orientation that is, profitability had priority over all other concerns, and this ideology of profitability was forced on the 'new' owners.
- 4. Although there was a union, which had as part of its charter the obligation to look after the welfare of its members, it had taken no steps to ensure that it fulfilled this charter. It was more concerned with self-preservation than with applying safety standards for its members, in the face of the serious employment problems which had plagued the region since the introduction of the coal industry rationalisation measures. This attitude was to become a serious obstruction to the application of justice after the accident.
- 5. The system of dependence on the advice of one's senior in the hierarchy of the mini business community, and the lack of initiative shown on the part of the people monitoring the steady buildup of gas had disastrous ramifications. If the electricity had been cut off when it was first suggested that it should have been, then there would have been little likelihood of an explosion occurring.
- 6. The notion that the company would benevolently protect its workers was unable to be fulfilled in this instance, because of the reasons mentioned above.

Points four and five were particularly difficult for the families of the dead to deal with. It was their resentment at the company's bad treatment of them after the accident that eventually prompted them to take legal action. The union had taken upon itself the role of, euphemistically speaking, the arbitrator in this affray. They were to take a cut of the payouts to the families of the dead - 45%. This was enough motivation, given the difficult

times its members faced in the years ahead, to try to force the widows to accept the deal that the company offered. The sticking point for the negotiations between these parties was that the union was not prepared nor was the company - to build a memorial to the dead miners. The widows were verbally abused, sometimes physically jostled by others in the mining village, who said that if they accepted the money offered, then there would be more money for everyone else when the company paid the other now redundant miners off.

Rather than the group being involved even at this level, self-interest was the motivating factor in the actions of all parties - including the bereaved families, who were concerned with eating, like everybody else. The union, while displaying solidarity with the company, represented self-interest in that they were concerned with their own position, at the expense of their brothers, who had died because of no fault of their own. Now, faced with economic hardship, their co-workers' families were seen to be expendable in their own battle to survive. The union was not able to see far enough ahead to consider the benefits of action, either political or legal, which could resolve their situation, so encapsulated were they in their ideological net.

With hindsight it is apparent that the causes of this accident were preventable. Suitable training of the work force, rigorous application and regular review of safety standards, and establishing improved gas monitoring teams were essential requirements in an industry which was so prone to catastrophe. Equally, developing standard procedures for dealing with disasters would have prevented the delays which cost so many men their lives. However, one of the main problems associated with the accident was the ethic concerning profit at the expense of human life. This ethic, discussed in recent literature on Japan, especially by Mouer, Sugimoto, and McCormack in Australia (see Mouer and Sugimoto 1980), and Kamata in Japan, is difficult for many non-Japanese to grasp, used to receiving images of the efficiency of Japanese industry. We seldom hear of the other side of the economic miracle - and of the miracle's dependence on expendable Japanese labour.

In short, although the courts found that management was guilty of mishandling the disaster, of negligent behaviour after the disaster, and of not following the set procedures for dealing with the monitoring of gas buildups, other factors, which were not raised at the court hearing were equally important. The structure of the company, the pressure from above for the company to turn a profit in its first year of operations, the semi-management role of the union, and perhaps most importantly the lack of training the company gave the miners were critical factors in the accident. The union's reluctance to press for safer working conditions before the accident, and its partisan and sometimes even aggressive stance toward union members' families after the accident highlight some of the problems of enterprise unionism. Hopefully this case illustrates some of the shortcomings of the Japanese labour-management co-ordination and co-operation system.

## References

Abegglan, J. 1958. The Japanese Factory: Aspects of its Social Organisation. Free Press: Glencoe Illinois.

Chikuho Tsushin Series

1977. Chikuho Karaban Hojo. Chikuho Tsushin Publications: Tagawa.

1978. Chikuho Noto. Chikuho Tsushin Publications: Tagawa.

- Chikuho Fukko Kyoto Kaigi. 1966. Yomigaere Chikuho no Sogoteki Fukko no Do. Yugen Publications: Fukuoka.
- De Vos, G. 1975. Socialisation for Achievement: Essays on the Cultural Psychology of the Japanese. University of California Press: Berkeley.

Fukuoka Mining Safety Commission Report

1966. Fukuoka Kosan Hoan Kensakyoku Hoku. Fukoka [photocopy].

1974. Fukuoka Kosan Hoan Kensakyoku Hoku. Fukoka [photocopy].

- Kahn, H. 1970. The Emerging Japanese Superstate: Challenge and Response. Prentice Hall: Englewood Cliffs.
- Kamata, S. 1982. Japan in the Passing Lane: An Insider's Account of Life in a Japanese Auto Factory. Pantheon: New York.
- McCormack, V. and Sugomoto, Y. 1986. Democracy in Contemporary Japan. Hale and Iremonger: Sydney.
- Mouer, R. and Sugimoto, Y. 1986. Images of Japanese Society: A Study in the Structure of Social Reality. Routledge and Kegan Paul: London.
- Taira, K. 1970. Economic Development and the Labour Market in Japan. Columbia University Press: New York.

Nakane, C. 1972. Japanese Society. University of California Press: Berkeley.

Reischauer, E. 1970. Japan: the Story of a Nation. Knopf: New York.

Reischauer, E. 1978. The Japanese. Harvard University Press: Cambridge, Mass.

## Interviews

Idegawa, historian, June 1988.

Iwano, former miner, Yamano Mine, July 1988.