The epilogue of the story about human and whale is a tragedy. People spent much time in finding a symbiotic relation with killer whale but broke down soon. There was even barely time for us to know why the population of the killer whales decreased. The researcher defines a parameter called "K-value" to measure the limit of population density in a special environment. It is apparent that the K-value to the whale has been down so much during the last 100 years.

How human activities influence the K-value? The first reason is global greenhouse effect. High temperature under the sea drastically decreases the birth rate of killer whale. There are some data indicating that the birth rate will reduce 5% when the temperature goes up 0.2℃.

On the other side, we plunge thousands of rubbish into the sea. Most of them are made of plastic materials or heavy metal elements. These materials threaten the animals directly and hardly to decompose. When a female whale absorbs heavy metal elements more than 0.1% of weight itself, it will have a 30% risk of abortion. Some young whales may eat the plastics as a kind of delicious food. That will destroy the digestive system and result in death.

At last, over-fishing for meat and oil obviously decreased the number of whale. When people hunt the whale whose population density is near the half of K-value, the density will recover rapidly. But as a result of over-fishing, the birth rate will be at very low level and hardly recover in a short time.

Then how to protect the whale or to rebuild the relationship between human and whale? We must set up legislation to stop pollution, find new ways to recycle the plastics and heavy metal. The government should provide some methods for people who live on the whale to find new food resource. Develop new power resource to replace the oil from animals. Every year we should stop hunting at a special time for whale breeding and control the number of hunting at the other time in order to maintain the situation that birth rate is bigger than death rate.