

## At What Cost?

By Evan Akers

A lovely young woman reaches for the newest hair-care product that promises to make her hair more beautiful than it has ever been. A doctor prescribes a new “miracle” drug for his cancer patient. A farmer harvests his genetically enhanced corn which makes its way to a cereal manufacturer. We often use products without considering their actual cost; not just the dollars and cents that consumers are willing to pay, but rather the actual cost of the new product. What do innovations really cost? New products are created every day and as consumers, we look forward to making use of these innovations. But, what do these innovations really cost? Are new products tested on animals before they can be released for human testing? Do products deplete the few forested areas that this world has left? Have some human beings died from using a product before it has been perfected? Have researchers and developers crossed the thin line which divides ethical and unethical procedures? All innovations come with some sort of sacrifice. Some new products do cause harm to animals and the environment. Some products do have a negative impact on the human race before they are improved and can benefit mankind. The Penobscot story “Corn Mother” and Nathaniel Hawthorne’s “Rappaccini’s Daughter” make very clear the importance of sacrifice in creation. It is apparent that sacrifice is a necessary part of creation.

Sacrifice as a necessary part of creation is not limited to modern scientific innovations. Many cultures have demonstrated that innovation does not come without at least a small price. Many Native American cultures have similar stories about creation and the sacrifices that are necessary to develop and maintain those creations. These said stories share many similarities

with the stories of the Judeo-Christian culture. In all of these accounts, the sacrifice has been necessarily human—no other animal or thing can take the place of a human life.

The Penobscot Indians have a rather graphic story of human sacrifice to explain how corn came into existence for their use. According to their tale, “Corn Mother,” First Mother was to sacrifice her own body in order to give the rest of the tribe food as they suffered from a famine.

First Mother states in the story:

Tomorrow at high noon you must do it. After you have killed me, let two of our sons take hold of my hair and drag my body over that empty patch of earth. Let them drag me back and forth, back and forth, over every part of the patch, until all my flesh has been torn from my body. Afterwards, take my bones, gather them up, and bury them in the middle of this clearing. Then leave that place. (Erdoes 13)

Then she goes on to say, “Wait seven moons and come back, and you will find my flesh there, flesh given out of love, and it will nourish and strengthen you forever and ever” (13).

These words of First Mother are powerful. She made it quite obvious that it was necessary to sacrifice her life in order to save her tribe from hunger. But not only must she die, she must be dragged about the earth until there is no more flesh on her bones. The specificity of her sacrifice shows just how necessary her death really is. It is necessary for her to die in a particularly gruesome fashion so that the rest of the tribe could continue to live. The field needed First Mother’s flesh and bones in order for it to bear any fruit. Her second statement brings comfort: “Wait seven moons and come back . . . and [my flesh] will nourish you and strengthen you forever and ever” (Erdoes 13). She tells her people that the sacrifice of her flesh will give them what they need forever. The Penobscot Tribe will never be hungry again. Tales of creation

and sacrifice were not limited to ancient civilizations. Even well into the nineteenth century, stories of creations have ended with the sacrifice of human life.

In the nineteenth century, the role of science in the improvement of human life is not only accepted, but promoted. Marie Curie and her husband work with Uranium. New sterile medical techniques begin to replace antiquated life-threatening procedures. Authors such as Mary Shelley write about the role of science in creation. All of this work involved sacrifice. Even though civilizations have moved from ancient cultures and mythological tales to an adulation of science and scientific discovery, creation is still recognized as an integral part of creation and sacrifice takes on many forms. It is not always a person giving his life for another person directly. Sometimes, it can be a person giving his life for the benefit of science which in turn, will benefit people indirectly. Especially in medicine, there is a hazy line as to where scientific experimentation is beneficial and where these trials become detrimental. This is why medical scientists do such careful experimentation on lab mice before any of their miracle medicines are tested on human subjects.

In Nathaniel Hawthorne's "Rappaccini's Daughter," Dr. Giacomo Rappaccini is an experimenter in the field of medical science. His creations include new forms of toxic fauna that he cultivates in a garden outside of his house. Rappaccini's main purpose for these plants, however, is not to kill people but to make new kinds of medications from their poison. A colleague of Rappaccini, Pietro Baglioni, admits, "That the signor doctor does less mischief than might be expected with such dangerous substances is undeniable. Now and then, it must be owned, he has effected, or seemed to effect, a marvelous cure . . ." (Hawthorne 6).

That's not to say, however, that Rappaccini did not have a dark side. The explicit mention of a human sacrifice by Baglioni, "He would sacrifice human life, his own among the rest, or

whatever else was dearest to him . . .” (Hawthorne 1049) makes it very clear that Dr. Rappaccini means business. Rappaccini’s daughter was raised with the poison of what she calls her sister, which in fact is a very toxic shrub in the garden. This daughter, Beatrice, says, “Give me thy breath, my sister, for I am faint with common air” (Hawthorne 1050).

In this case, Beatrice had no consent in the experimentation that Dr. Rappaccini was conducting. She was sacrificed. She didn’t sacrifice herself. Her father made the sacrifice for her. She was the sacrificial lamb and her father the slaughterer. Her life was given to science for the greater good of medicine. Her toxic nature was to benefit medical science. Her very being is the sacrifice. Her toxic nature didn’t allow her to leave the confines of the garden or home. Other than Giovanni, she had no contact with the outside world. Giovanni, not recognizing the extreme toxicity of Beatrice, tries to cure her with an ineffective antidote thus making her death as well as her life a sacrifice to science.

There can be no creation without sacrifice. Sacrifice can be a giving of one’s self. It can be a giving of another’s self. Sacrifices are needed in creation because the goals of creation cannot be accomplished without them. The Penobscot Indians needed a self-sacrifice to save the entire nation. The sacrifice in “Rappaccini’s Daughter” is a selfish act designed to create a “utopian” existence for her, denying the encroachment of the outside world. In both cases, the intention of the sacrifice is the benefit of the civilization, the culture that embraces the way of life.