

# Economy and Ecology in the History of Native Americans

## Ecology and the American Indian

*Indian religious beliefs are intrinsically ecological since they regard nature as sacred. The various tribes who inhabited North America before the European invasion had been here for tens of thousands of years, where they developed economically sustainable hunting-and-gathering economies that were respectful of the environment. They did not consider themselves ruling over nature, but as part of nature. Humanity was sacred, but so were the animals and vegetation that sustained it. Even the soil, the minerals and the rest of the material world were part of a great chain of being. An assault on a single element of this living fabric was an assault on the whole. They had a radical interpretation of the old labor movement slogan, "An injury to one was an injury to all."*

The Indian draws upon ritual to maintain a sustainable relationship with nature. These rituals functioned as a surrogate for ecological science. Instead of measuring soil acidity in a test-tube or attaching radio-transmitters to bears, they simply relied on empirical observation of their environment that they had mastered. For example, the Hopi Indians had identified 150 different plant types in their ecosphere and knew the role of each. There is even evidence that had learned from mistakes in their past. If overfishing or hunting had punished a tribe with famine, then it developed a myth to explain the dangers of such practices. Our modern, "scientific" society has no myths that function in this manner. We will simply exhaust all fishing stock in the oceans, because there is profit in it for some.

The Indian thought that waste of natural resources was insane<sup>1</sup>, especially for profit. The Paiute<sup>2</sup> of Nevada tell a story of a trapper who has caught a coyote. When the trapper was about to shoot the animal, it told him, "My friend, we as people have found it necessary to warn you against trapping us, taking from our bodies our skins, and selling them for your happiness."

In essence, the attitude Indians took toward the environment was one of restraint. The role of religion was to reinforce this behavior. When the Menominee<sup>3</sup> of Wisconsin

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<sup>1</sup> Here, "insensé".

<sup>2</sup> Paiute: one of the Native peoples of North America.

<sup>3</sup> Menominee: another American Indian people.



gathered wild rice<sup>4</sup>, they made sure that some of the rice fell back into the water the next year so that there would be future crops<sup>5</sup> (...).

Another key element of Indian ecological behavior was game<sup>6</sup> "fallowing."<sup>7</sup> Although this term originates in agriculture and refers to the practice of leaving portions of field to rest, the tribes followed a similar practice in hunting. The Cree and other Algonkian tribes worked only a portion of their hunting grounds in a given year and let the fallow areas recover. The Ojibwa of Parry Island in southeastern Ontario invoked their spirits to give legitimacy to this practice. The "shadows" of slain<sup>8</sup> animals would cause living animals to grow wary<sup>9</sup> in a certain area. Hence, they took care not to produce too many of these shadows and kept a natural balance between hunter and prey<sup>10</sup>.

The value system absolutely excluded wanton<sup>11</sup> destruction of animals. Hopis told John Bierhorst, the author of "The Way of the Earth: Native America and the Environment," that when they were children, they practiced shooting at small animals and birds. But their elders<sup>12</sup> warned them not to kill any creature that they did not intend to eat. A Lushootseed man told him that he never forgot his father's disappointment when he caught him gaffing<sup>13</sup> fish just 'for the fun of it.' He chastised him, "My son, you must respect them. You must not kill them for the fun of it." (...)

The European invader viewed these practices as wasteful. From the very beginning, the North American Indian innate conservationist existence was in conflict with the goals of farmers, hunters, miners and ranchers who sought to make money from the land and from animals. When they exhausted the land, they simply would move elsewhere. The only way they could carry out such predatory commercial activities was by removing the Indian. They found a rationale for the "ethnic cleansing" of the Indian from the land in a variety of European religious and philosophical literature.

In 1978, Texas gubernatorial candidate asked a question that epitomized<sup>14</sup> the invader's outlook. "Is this area of Texas more productive, more fulfilling of God's purpose--are we playing our role of destiny with this broad expanse of Texas--than when there were five thousand Indians here eating insects?" Clement's racist query is deeply rooted in the American colonial past (...).

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<sup>4</sup> wild rice: this plant is called "zizanie" or "ivraie" in French.

<sup>5</sup> A crop is an agricultural product.

<sup>6</sup> Here, "game" means "gibier".

<sup>7</sup> "Fallowing" means "mise en jachère".

<sup>8</sup> "Slain" means "killed".

<sup>9</sup> "Wary" means "prudent".

<sup>10</sup> "Prey" means "proie".

<sup>11</sup> Wanton hunting consists in killing animals without any reason.

<sup>12</sup> "The elders" mean "les aînés".

<sup>13</sup> "To gaff" means "harponner".

<sup>14</sup> Here, "to epitomize" means "incarner".



By the time of the American Revolution, the land utilization argument had become part of the conventional wisdom, according to William T. Hagan. ("Justifying Dispossession of the Indian: the Land Utilization Argument," in "American Indian Environments," edited by Christopher Vecsey and Robert W. Venables, Syracuse Univ., 1980.) In 1774, Lord Dunmore, the governor of Virginia, denounced the "avidity and restlessness" of the Indian. "They do not conceive that Government has any right to forbid their taking possession of a Vast tract of Country, either uninhabited, or which Serves only as a Shelter for few Scattered<sup>15</sup> Tribes of Indians."

In the first quarter of the nineteenth century, the war against the Indian intensified. As the new, secular republic sought to dispossess the Indian, (...) straightforward arguments of an "economic" nature prevailed. It was a "waste" of precious natural resources to allow a bunch of ignorant Indians to go about hunting, fishing or picking nuts and berries. Governor William Henry Harrison of Indiana expressed this view in a merciless fashion, "Is one of the fairest portions of the globe to remain in a state of nature, the haunt<sup>16</sup> of a few wretched<sup>17</sup> savages, when it seems destined by the Creator to give support to a large population and to be the seat of civilization, of science, and of true religion."<sup>18</sup>

Andrew Jackson launched the genocidal war against the Indian that came to a culmination in 1890. He was the first American President to fully understand the degree to which American capitalism was in conflict with Indian rights. In 1830, he said, "Philanthropy could not wish to see this continent restored to the condition in which it was found by our forefathers<sup>19</sup>. What good man would prefer a country covered with forests and ranged by a few thousand savages to our extensive Republic, studded with<sup>20</sup> cities, towns and prosperous farms...occupied by more than 12,000,000 happy people."

So, what kind of country did Andrew Jackson and his successors build, once they had finished murdering the inconvenient Indian or shunted him off to reservations? Once they got rid of the Indian, they were free to launch two important revolutions on the land: the mechanization of agriculture and the adoption of high input farming.

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<sup>15</sup> "Scattered" means "*dispersées*".

<sup>16</sup> Here, "haunt" means "*repaire*".

<sup>17</sup> "Wretched" means "*misérable*".

<sup>18</sup> This understanding of the relationship between man and nature is not unanimous in the Christian history. In the Middle Ages, the Church considered creation as a gift God gave to mankind to take care of. In the Renaissance period, capitalism, and rule according to a higher law ("*État de droit*", in French) appeared. So, some Christians began to interpret the Bible another way, seeing in nature a source of resources God asked humans to exploit without any limit. Nowadays, the Roman Catholic Church and other Christian movements consider pollution as a sin.

<sup>19</sup> Ancestors.

<sup>20</sup> "Studded with" means "*parsemé de*".



The shortage of labor in the USA spurred<sup>21</sup> the introduction of machinery. Mechanical reapers<sup>22</sup> were more necessary here than in Europe in the 1860s, where labor was still plentiful. The introduction of the internal combustion engine was the breakthrough<sup>23</sup> that industrial farming required. There 250,000 tractors on US farms in 1920 and 2.3 million in 1945. Other mechanical devices soon followed, from electric milkers to combine harvesters. As mechanization increased, the size of the farm increased, and the number of laborers decreased. There were 7 million farms in the 1930s, while the number dropped to below 3 million in the 1980s.

Until the 19th century, farms relied on manure<sup>24</sup> and composts produced by organic processes. The discovery of fertilizers changed all this. At first, the farmers used relatively harmless substances like guano, bat dung<sup>25</sup>. Later industrial companies began to mine phosphates around the world, from North Africa to some Pacific Islands. But the real breakthrough occurred when chemists were able to develop artificial fertilizers in the 1840s, the superphosphates. When scientists developed nitrogenous fertilizers in the 1920s, the tendency to regard agriculture as a business increased (...). The relationship between soil, water, animal and human being began to fade<sup>26</sup> into the background. The soil was no longer a living organism, as the American Indian had considered it, but a platform to hold crops while a variety of chemicals were poured<sup>27</sup> on them.

Since 1945 there has been more and more of an emphasis on single crop production. Larger and larger farms are devoted to corn, wheat, alfalfa, sorghum or other commercial grains, especially those that can be used as livestock<sup>28</sup> feed. Monocrops are more susceptible to disease. Hence, chemical herbicides and pesticides become more important. The amount of such substances sprayed on crops in the USA since 1953 has risen fifteen-fold. The new book "Living Downstream" by Sandra Steingraber includes maps that show increased cancer rates near counties with increased use of such substances. Ms. Steingraber has a doctorate in biology and grew up in one such county in Michigan. She is also a breast cancer survivor.

Livestock production changed dramatically in the nineteenth century as well, once the "wasteful" Indians were removed from grazing<sup>29</sup> land. At first, sheep and cattle<sup>30</sup> were allowed free range on the grasslands where the buffalo had lived. As herds of such animals left the soil exhausted, the rancher simply moved elsewhere since he thought that land was limitless. The damage left by the sheep led John Muir, the 19th century

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<sup>21</sup> "To spur" means "*aiguillonner*".

<sup>22</sup> *Moissonneuse*.

<sup>23</sup> "Breakthrough" means "*découverte*".

<sup>24</sup> Manure: *fumier*.

<sup>25</sup> Dung: *excrément*.

<sup>26</sup> To fade: *se flétrir, dépérir*.

<sup>27</sup> To pour: *verser*.

<sup>28</sup> Livestock: *relatif ou destiné à l'élevage*.

<sup>29</sup> Grazing: *pâturage*.

<sup>30</sup> Cattle: *bovins*.



conservationist and founder of the Sierra Club, led him to describe the animals as "hoofed locusts."<sup>31</sup>

In the 20th century, dwindling<sup>32</sup> grazing lands forced the livestock industry to move indoors, where it raises animals in small compartments and artificial feed. Such conditions are the cause of a variety of endemic ills such as Mad Cow Disease, e-coli bacteria, and the recent appearance of poultry flu<sup>33</sup> in Hong Kong. Clive Ponting's "A Green History of the World" (Penguin, 1991) contains a stark<sup>34</sup> picture of the conditions of livestock animals. "Chickens are kept in over-crowded battery cages, cattle in small stalls<sup>35</sup> and pigs are chained to walls in sties<sup>36</sup> small enough to ensure that they cannot move. Animals, which are herbivores, are fed on a diet which may include a high percentage of dead animals, recycled manure, growth hormones and also antibiotics to control the diseases that would otherwise be rife<sup>37</sup> in such conditions." Those of us who do not get cancer from pesticides risk infection from the livestock fed by the grain such processes require. If this is what Andrew Jackson had in mind when he spoke of 12 million "happy people," he had no idea of what the fate of such people would be.

Industrial farming eventually influenced the form in which foodstuffs came to the table. The goal was to make food available, while sacrificing the quality. Wonder Bread<sup>38</sup> was a paradigm for this dubious new plenitude. Soon canning and refrigeration made it possible to supply fruit and vegetables out of their natural season. While the Indian harvested nuts and berries and hunted deer, modern society can put slices<sup>39</sup> of Wonder Bread, canned green beans and beef on the table twelve months a year. Raw meat, however, must be kept away from dinner plates, however, or else one of us "happy people" risk severe illness, including bloody diarrhea, that might lead to death. A solution to bacterial meat has been proposed. Irradiation will kill all such bacteria, but care must be taken that the nuclear plants that produce such radiation do not spill their poisons into the water and soil and give us leukemia.

The ecological crisis of today is intimately linked to the genocide of the American Indian. By removing the custodian of the land who had lived here for tens of thousands of years and making it possible for capitalist ranching and farming to "subdue"<sup>40</sup> the land, American society has become its own worst enemy. Resolution of the ecological crisis will force us to revisit the beliefs of the people who preceded us on this continent, whose attitude toward nature was inherently more respectful. The respect

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<sup>31</sup> « sauterelles à sabots »

<sup>32</sup> decreasing

<sup>33</sup> « grippe aviaire »

<sup>34</sup> Stark = severe

<sup>35</sup> *emplacements*

<sup>36</sup> "Sty" means "porcherie".

<sup>37</sup> "To be rife" means "sévir".

<sup>38</sup> Wonder Bread is a brand. In 1921, they were the first company to sell pre-sliced bread in the US.

<sup>39</sup> "Slice" means "tranche".

<sup>40</sup> *assujétir*



given nature was ultimately respect that humanity gave itself, since we are part of nature ourselves (...).

Source: [http://www.columbia.edu/~lnp3/mydocs/indian/ecology\\_indians.htm](http://www.columbia.edu/~lnp3/mydocs/indian/ecology_indians.htm) [retrieved on 28.08.2020]

### **Reading:**

1. What was the Indian man's behaviour towards the environment like? Why?
2. What happened when palefaces conquered the West?
3. What have been the environmental and health consequences of the settlement of white people in the Native's lands?

### **Speaking:**

1. What do you think about the Native way of life?



2. What could western economies learn from the American Indians?



# Cowboys and Indians revisited

... A GUIDED TOUR

**1** Say all you know about Native Americans, in the past or in the present.

**2** a) Read page 57.

- Pick out the two usual clichés about Indians.
- Explain how and why Indians have become a symbol for Environmentalists.
- Look at the Cherokee Indian on the right and describe him. Read the text. What was this picture used for?


b) Read page 58.

- Why are tribes often tempted to accept polluting industries?
- Make a list of the various consequences of these industries on Indian peoples.
- Imagine the consequences of gambling on Indian communities.

c) Read page 59.

- Explain what environmental discrimination is. Name the victims.
- Find two ways of fighting for environmental justice.
- Indians take action to protect their natural resources. Give an example.

d) Think of other environmental problems, in your country or elsewhere in the world. Discuss them in class.

**3** Quiz  Now find out how much you know about Indians and the environment.

## PROJECT WORK



Each student, or group of students, should choose one Cowboy movie. Watch your movie and prepare a short report on it: say who it was directed by, name the actors and tell the story. Then discuss with your friends how Indians are represented in the different films.

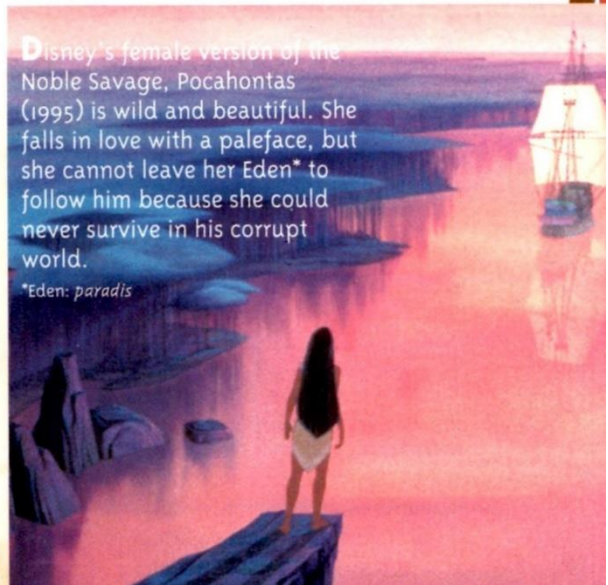


## VIDEO

**Pollution: it's a crying shame.**

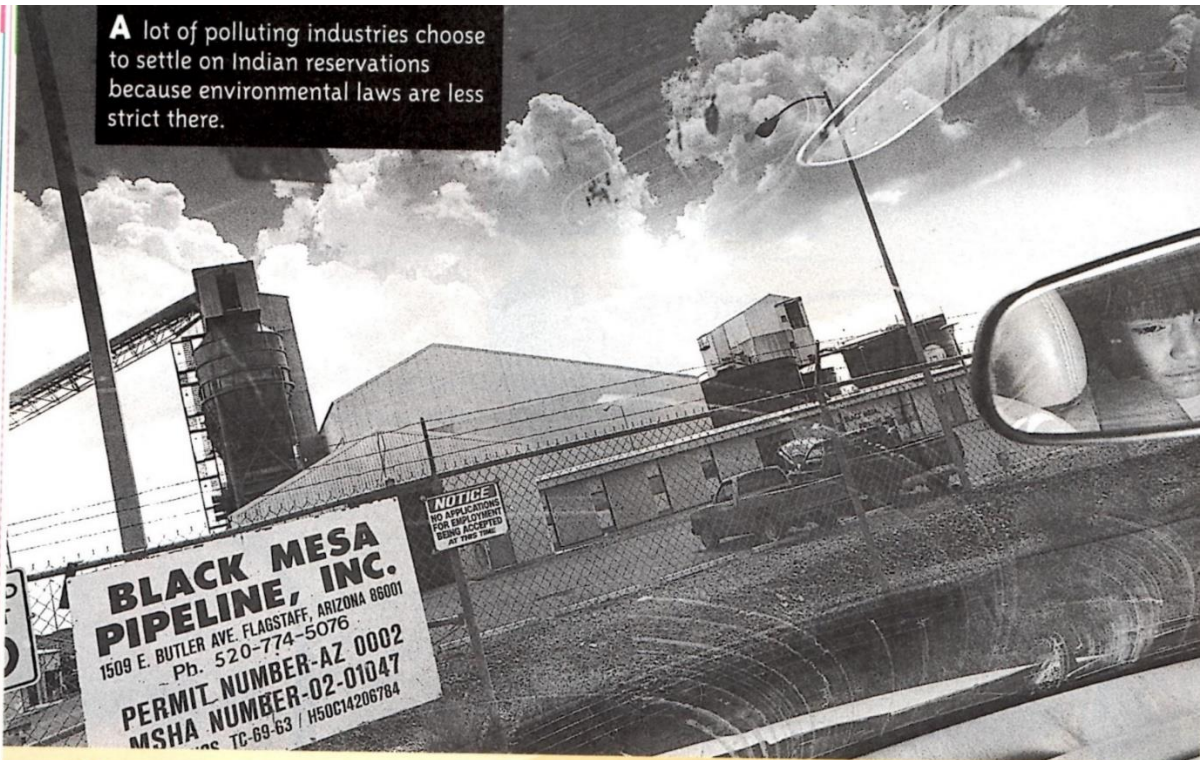
Disney's female version of the Noble Savage, Pocahontas (1995) is wild and beautiful. She falls in love with a paleface, but she cannot leave her Eden\* to follow him because she could never survive in his corrupt world.

\*Eden: paradis





**A** lot of polluting industries choose to settle on Indian reservations because environmental laws are less strict there.



The Peabody Coal Company exploits coal mines on Hopi and Navajo land in Arizona. In exchange, it provides jobs and pays the tribes \$9 million a year. But the Indians worry: their region is very arid, and yet P.C.C. wastes huge quantities of water. On top of that, it generates gases that pollute the Grand Canyon and the sacred Four Corners region.

**S**ince the discovery of oil on Navajo reservations in Utah (1956), oil companies have drilled 577 wells there, contaminating the area's springs\* and ground water.

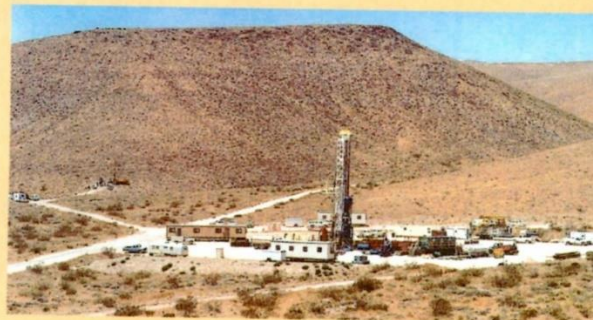
\*springs: sources



**R**adioactive pollution may be the most serious long-term threat to Native peoples. Health problems related to radiation exposure have

increased dramatically in the Navajo population near uranium mines. And yet, the U.S. Department of Energy encourages (and pays) tribes to store even more toxic waste\*. So Indians often face a dilemma: poverty or pollution.

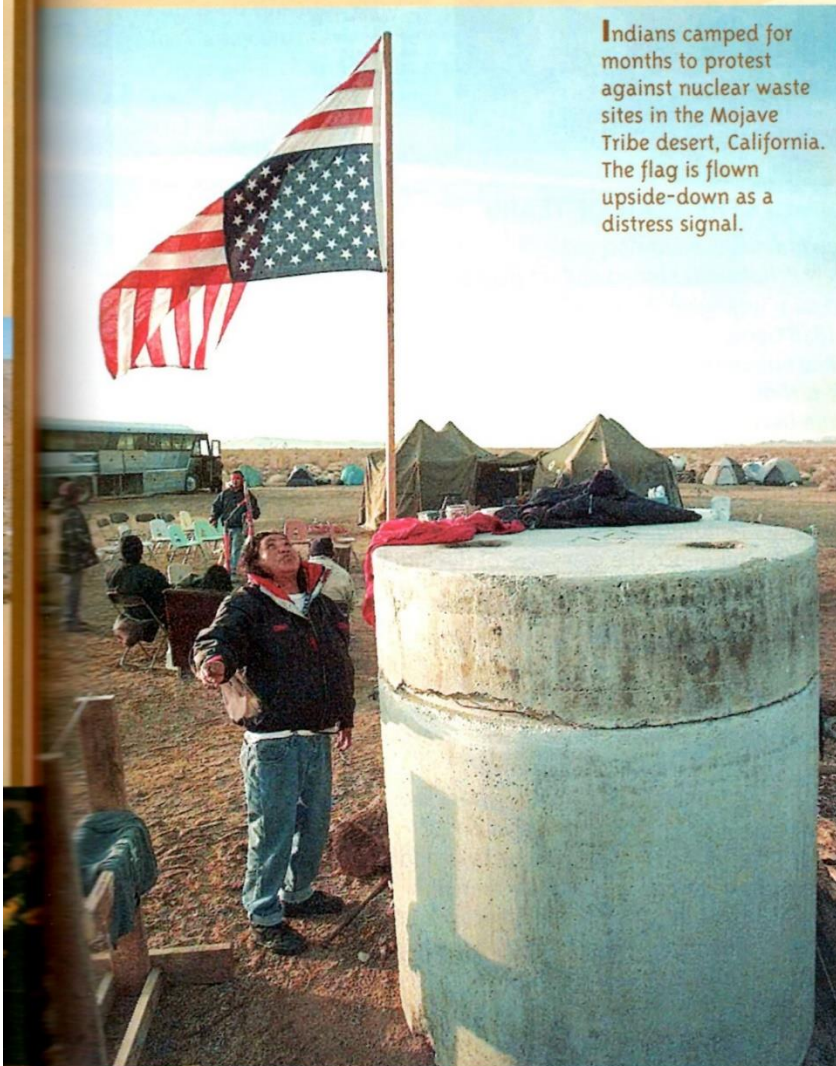
\*waste: déchets



**O**nly 11 U.S. states allow gambling. But Indians can have casinos on their land, and this attracts many tourists. A lot of Indians have started gambling too...



Polluting industries are a threat to Indians, but also to other minorities: 60% of Afro-Americans or Hispanic Americans, and many poor white people, live in communities with uncontrolled toxic waste sites. This is called "environmental discrimination". Civil rights activists and ecologists have joined Indian campaigners to fight for environmental justice.



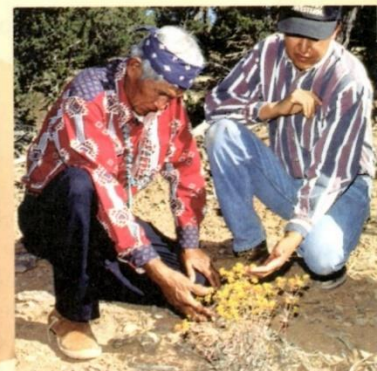
Indians camped for months to protest against nuclear waste sites in the Mojave Tribe desert, California. The flag is flown upside-down as a distress signal.

### Diné CARE

<http://dinecare.indigenoussnative.org>



Native environmentalists want to get rid of polluting industries, even if they know that their own people will probably lose their jobs as a result.



Native groups have developed initiatives to protect their natural resources. Some use modern technology to monitor their wildlife, others take part in planting projects to reintroduce native species.

