

### Washing Away (and Using Operant Conditioning to Stop It)

As we continue to pollute the environment, our island home becomes a more perilous place to live. The main infrastructure of O'ahu is very near to sea level, and as global warming increases, raising the sea level, more and more of O'ahu is submerged. In fifty years, sea-level could rise two to three feet, putting parts of Waikiki underwater. This problem will wash away the current way of life on O'ahu, so it must be solved.

The best way to solve a problem is to start at the root, which, in this case, is the cause of climate change. The cause of climate change is an increase in the release of greenhouse gasses into the environment. Greenhouse gasses are released in many ways, including by burning fossil fuels to release energy. To reduce greenhouse gas emissions, I propose using operant conditioning techniques to teach people behaviors that will help preserve O'ahu, where I live, and the whole Hawaiian Island chain.

One way to reduce emissions is by recycling because recycle something requires less energy and therefore releases fewer emissions than making a new product. To encourage recycling, the government could reduce the number of trash pickup days per month and increase the number of recycle pickup days per month. Then the government could say that trash bins that cannot be closed, will not be picked up. This means that there is a limited amount of trash that a household can throw away each month. I propose this solution because it would be a form of operant conditioning that would help change people's behaviors. The concept is to use negative reinforcement so that people will recycle more to avoid not having their trash picked up because the lid won't shut.

Another way to reduce emissions is by encouraging the generation of solar energy by households. Households could be encouraged to purchase solar panels with

increased tax deductions. This is operant conditioning in the form of positive reinforcement, where people are rewarded for doing something positive, such as installing a solar system.

Either positive or negative reinforcement, as explained above, could be applied to any method of reducing emissions. Another example would be reducing emissions by conditioning people to buy more fuel-efficient cars. An approach involving positive reinforcement would be to give tax breaks to people who purchase a car that gets over forty miles per gallon. An approach involving negative reinforcement would be to raise gas prices significantly so people avoid buying cars with poor gas mileage, to avoid spending a fortune on gasoline.

I believe that operant conditioning can help solve this very pressing problem in Hawai'i, and that it would help further Mr. Ching's legacy of helping people who are of lower socioeconomic standing. Solving the problem of the rising sea level, by reducing greenhouse gas emissions, would help to protect the environment especially since Hawaii relies heavily on the natural resources and we don't want to risk economic instability by jeopardizing Hawai'i's main source of revenue, tourism, thus making it harder for people to change their socioeconomic standing.

Since it difficult for people to change their behavior on their own, the government must do something, such as apply operant conditioning. The rising sea level puts everyone in Hawai'i at risk and would cause economic upheaval and would prevent people from being able to get where they need to go, such as to a hospital, because many roads are near the ocean and would flood. Operant conditioning may be the key to avoid being washed away.

Bibliography: "Sea Level Rise Hawaii." *Sea Level Rise Website*. Coastal Geology Group, 2008. Web. 28 Oct. 2015. <<http://www.soest.hawaii.edu/coasts/sealevel/>>.