"In 1492, Columbus sailed the ocean blue." That's what we learned in my grade school. Today, Columbus Day remains a day of celebration for some but has become a symbols of colonialism for others. Rather than entering that debate, I'd like to reflect on how issues of colonialism might relate to climate change.

The study of colonialism and post-colonial societies is now a major academic focus. I don't purport to be an expert on that. It seems to me that, at its core, the idea of colonialism revolves around two key concerns. The first is economic exploitation, meaning that one society is gaining economically at the expense of another. That could take the form of extracting resources (including land) for less than full value or seizing them. It could also include imposing costs, whether financial, human, or environmental on the other country. The second concern is political domination, meaning that the autonomy of either the other country as a whole or parts of its population is impaired. There are undoubtedly other possible concerns, such as displacing local cultures, but let's focus on these two.

Efforts to by developed countries to incentivize preservation of tropical forests have given rise to claims of "carbon colonialism." Those claims seem strongest to me when the preservation schemes are imposed, sometimes with government support, on local inhabitants. Backers of the incentive systems have made efforts to meet those concerns by giving local inhabitants more of a rule in decision making. Some critics, however, view any economic incentives for forest preservation as being a colonialist interference in internal affairs.

One complication is that many of the pressures on forests are external to begin with. For instance, destruction of rainforest in South America is partly driven by global demand for soybeans, a good deal of which comes from China. Another complication is that logging in the handful of nations with the most important forests will cause climate change that is devastating to other developing countries, not just to the "colonialists."

The debate over carbon colonialism has obscured two other important forms of exploitation of developing countries by powerful, more economically developed nations. The first is the sale and construction by more affluent, powerful countries of coal fired power plants in developed countries. China has been one culprit here, although it recently announced a change in policy. There are several arguments that might support considering this a form of colonialism. In terms of economic exploitation, a coal plant may impose large health and environmental costs on the other country. It may also turn out to be an expensive stranded asset as other sources of power become increasingly dominant globally. On the political side, such transactions may reflect and strengthen undue local political influence or may even involve corruption of local officials. The country making the sale profits from the

transaction, while local benefits may be illusory. Thus, we should be worried about "coal colonialism" by developed countries.

The most important form of climate colonialism, however, could be the continued emission of vast quantities of carbon by more affluent countries. These continued emissions benefit the more affluent countries by saving them the costs of emission reductions, while the most serious harms will fall on the countries and populations that have the fewest resources to protect themselves. In other words, continued emissions transfer wealth from poor countries to rich ones. That's economic exploitation on a grand scale. There's also evidence that climate change may lead to political instability in vulnerable countries, so climate change may also be a form of interference in local political autonomy. Colonizing the climates of developing countries is certainly something we should be concerned about.

Perhaps next year we could add a new line to the verse I learned in school. The lines could go something like this: "

In fourteen hundred and ninety two,

Columbus sailed the ocean blue.

In twenty two hundred and twenty two,

Rich countries wrecked the climate too.