

The Relationship Between Racial Identity and Exposure to Pollution

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“All men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness” (Jefferson et al 1776). Was the lie that was told to the public at the founding of our country by slave owning white men. Through direct lies and mistreatment at a systemic level Black, Indigenous, and People of Color (otherwise known as BIPOC folks) face many barriers that white people do not have to contend with. One of which is disproportionate exposure to harmful air pollution. This not only makes day to day activities harder to complete, but Yu and Zhang (2023) explain that “Air pollution may discourage physical activity and increase sedentary behavior among children.” When air pollution goes up, people are less likely to “go outside and enjoy the fresh air” because for many BIPOC folks in the USA there might not literally be any “fresh air” available.

Disproportionate exposure to air pollution has been an issue that communities of color deal with on a daily basis, one very obvious example of Environmental Racism. Many forms of which exist today, environmental racism is described by the creator of the term, Dr. Benjamin Chavis (1982) defined as “The intentional siting of polluting and waste facilities in communities primarily populated by African Americans, Latines, Indigenous People, Asian Americans and Pacific Islanders, migrant farmworkers, and low-income workers.” For a long time in the history of the United States BIPOC folk have produced more than they benefit from and taken the brunt of many societal impacts, and this extends to BIPOC people experiencing pollution to a higher degree.

In a contemporary context one example is Uniontown, Alabama (a community of color that has 97% African American residents) which often finds their land with coal dumped on it, or other dangerous heavy metals that can affect societies most vulnerable people, the children. Emily Bair (2022) articulates “Exposure to heavy metals during acute developmental stages can contribute to “untreatable and frequently permanent” neurological

damage” According to the American Bar Association “On December 22, 2008, more than a billion gallons of highly toxic coal ash burst from an impoundment and spilled into the Emory River channel in Kingston, Tennessee, covering approximately 300 acres. A by-product of coal-fired power plants, coal ash contains pollutants such as arsenic, mercury, and lead.” This will inevitably lead to the community incurring costs, most importantly on a human level, but additionally on an economic level as well. The human cost will be lives, disease, and suffering that could have otherwise been largely if not completely prevented if our societal systems did not incentivize profit motives but instead prioritized health and personal well being.

Then there are the economic costs, most of which cannot even be quantified. There is no amount of money that could repay the atrocities of Environmental Terrorism that the coal, and other industries have inflicted on Uniontown, but due to the historical gentrification, redlining, and other forms of oppression according to the publicly available census data the majority of Uniontown Alabama residents are under the poverty line (61%) which is more than 4x the Alabama poverty rate (14.6%). Which is nationally among one of the 5 most impoverished states. The median income on a per capita basis is \$15,263 per year. According to the US Population Review this is only about half of Alabama's average income (a state that ranks in the bottom 5 for per capita income by state). In other words a population (Uniontown) that is home to a community of color that has extremely low income levels in a relatively low income state (Alabama) due to historical oppression. Is forced to pay costs that not even wealthy communities can afford. Which will possibly give their posterity even fewer opportunities to gain wealth, further continuing the cycle of oppression in America.

Many times when talking about pollution, one of the most commonly misheld viewpoints is that socioeconomic class is more (inversely) correlated with exposure to air pollution than racial identity. Many times the narrative around climate justice is that it is a

battle between rich and poor, and in many respects that is true. Socioeconomic status is inversely correlated with exposure to air pollution. That is to say the less money someone makes, the more likely that they are to be exposed to pollution. “Communities and neighborhoods comprised of individuals and families of lower socioeconomic status (SES) are consistently exposed to higher levels of pollutants than predominantly wealthier neighborhoods” (Currit 2022).

While it is true that socioeconomic status is inversely correlated with pollution exposure. A far more correlative measure to measure pollution exposure to would be racial identity. Due to the historical context regarding redlining. Many African American communities are disproportionately exposed to far more pollution than their white counterparts. Lane et al (2022) describe that “Redlining has emerged as an area of interest because it is well documented and was explicit in its discriminatory implementation, widespread, and carried out by the federal government.” These facts stated above begin to shed light on how the historical context of oppression as a whole has denied BIPOC folk, and particularly African American people in the USA, the spaces to live that do not have high/disproportionate rates of pollution.

This has continued on through more recent history, with more recent data showing that even if socioeconomic class was excluded as a variable, BIPOC folks still are exposed to far more deadly and hazardous pollution than are their white counterparts. Across all population densities, and when measuring for many different forms of pollution. “However, in 2010, racial/ethnic exposure disparities remained across income levels, in urban and rural areas, and in all states, for multiple pollutants” (Liu et al 2021). Refuting the commonly held notion that socioeconomic class is the primary determinant for how much pollution an individual in the USA is exposed to.

In order to create contemporary solutions to problems that have plagued this country for many millennia, we need to center new forms of logic that are more focused on equity and less focused on maintaining a profit motive. One such movement is the land back movement. Which advocates for Indigenous stewardship and guidance of land use. Barefoot (2022) articulates that “Indigenous peoples throughout what is now North America and other parts of the globe were the sovereign caretakers of the land; each tribal nation with their own sustainable practices for obtaining natural resources”. This allows the land to be managed in a manner that humans can be in a symbiotic relationship with the world around us. That is in direct opposition to the current dominant narratives.

If we continue to participate in the current day practices of monocropping with large amounts of pesticide usage the environment and our health as a society will continue to deteriorate “Unfortunately, this [pesticides killing bugs but posing no human harm] is not the case, so the controversy of use and abuse of pesticides has surfaced. The rampant use of these chemicals, under the adage, “if little is good, a lot more will be better” has played havoc with human and other life forms” (Aktar et al 2009). In order to make real noticeable change we as a society will have to start listening to indigenous peoples expertise in land management. When the Indigenous peoples of any region take over the land, that land is more likely to be sustainable. However far too often, especially in international climate conferences/meetings, Indigenous peoples knowledge is quite often not genuinely considered. “Ancestral and Indigenous communities contribute next to zero toward carbon emissions, yet they are the most vulnerable communities to climate change. Despite this, Indigenous perspectives on sustainable land and water management were mostly sidelined at the conference.” This is true regardless of the fact that indigenous peoples have been the pinnacle of land stewardship throughout the course of American history. “Compared to areas managed by governments or private entities, research shows that when IPLCs hold secure land rights, their territories are

associated with lower rates of deforestation, reduced greenhouse gas emissions, better biodiversity protection, and improved livelihoods.” (Undeland 2021). In order to create a sustainable and safe country for many future generations we must attack the climate crisis with a BIPOC centered focus, only then will our society reach a breakthrough in respect to the climate crisis.

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