

Spring 5-4-2016

Unearthed: Advocating Against Fracking and Breaking the Bond of the Imagined World Order

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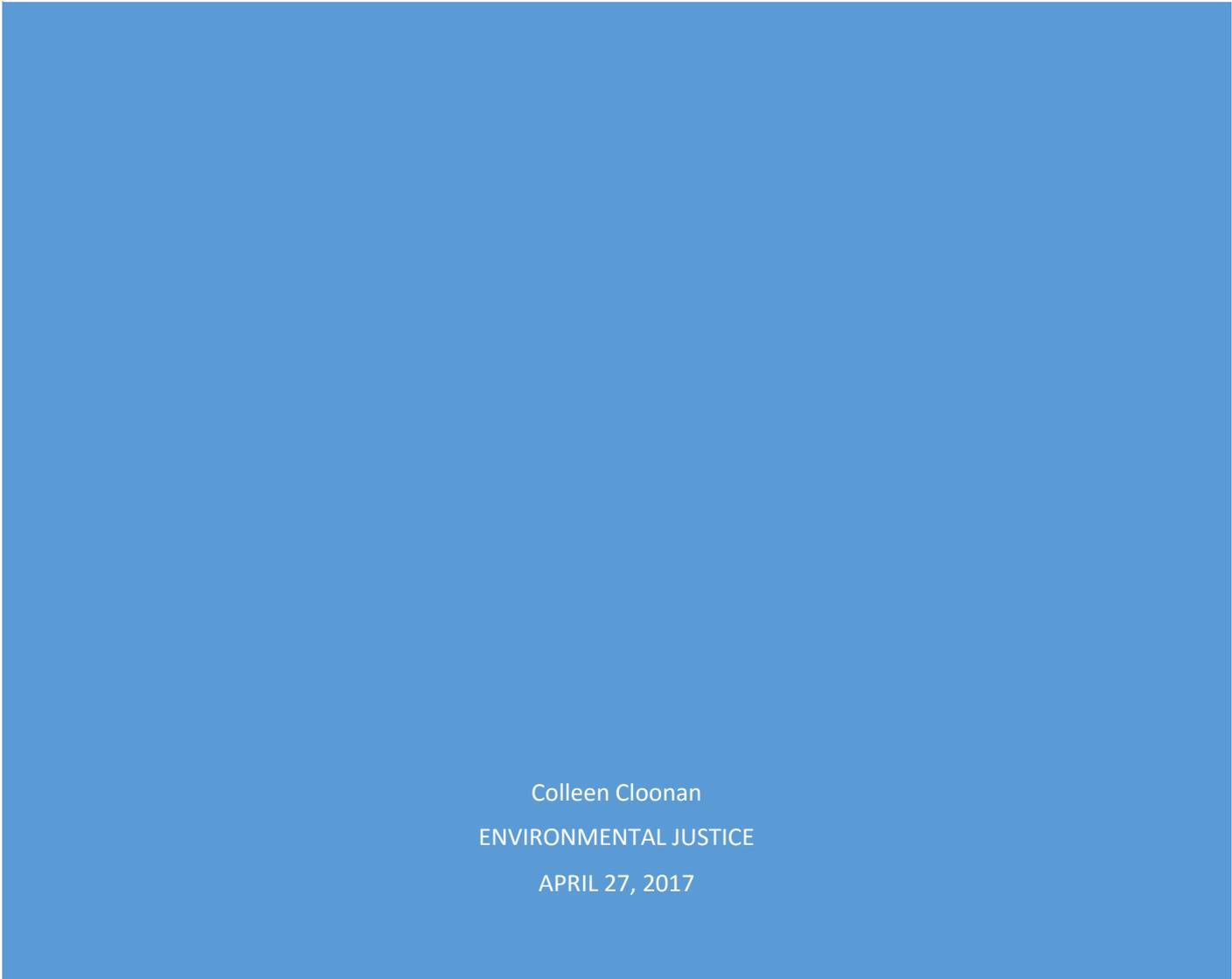
Recommended Citation

Cloonan, Colleen E., "Unearthed: Advocating Against Fracking and Breaking the Bond of the Imagined World Order" (2016). *ENV 434 Environmental Justice*. Book 2.
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UNEARTHED: ADVOCATING
AGAINST FRACKING AND
BREAKING THE BOND OF THE
IMAGINED WORLD ORDER



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ENVIRONMENTAL JUSTICE
APRIL 27, 2017

Abstract

While discussing the imagined world order, it is evident that the world is not perfect. Over the course of the centuries, the earth has been maimed by humans, whether it be during the agricultural age or throughout the process of industrialization into the modern era. Humans must realize that sooner, rather than later, we must address the environmental destruction we are causing. A specific case, with that such as hydraulic fracturing of shale, otherwise known as fracking, provides as an example of one of the environmental justice issues that is plaguing the earth. However, there are complications. In the consumer capitalist world of today, economic profits are swaying individuals away from protecting the environment and leading people to exploit it. This must change. With a reexamined mind through critical ecological thinking, one can notice the multiple violations of basic human rights caused by fracking, as well as its destruction of the environment and health of individuals. This research will encourage and inspire readers to think critically about the environment. Furthermore, this information can also be used to inspire individuals to read the literature surrounding both their legal and human rights and work towards improving the corrupt imagined world order.

Introduction

When you look at the world and its inhabitants, what do you see? Do you imagine the famous landmarks speckled across continents? Do you imagine the various cultures, moral ideologies, and languages that are embedded in different regions? How about the food, tourist attractions or adventures to be had in a specific place or moment? Or people that have brought more meaning to your life, your family, friends, enemies, strangers or significant others? What about the environment? You might picture rivers and mountains but also remember that the environment is also everything around you whether it be a city, a suburb, desert, or jungle. While imagining all that is around us the world can seem vast and unknown. Little you would know that the latter is correct. There is so much wonder and awe that lies within the world that remains untouched, leaving mysteries left unsolved. If only more humans ever truly wondered more about the world without being forced to through imagery prose.

Humans have been consumed by their own personal daily lives and schedules, it's the trick of life. When things seem to be slowing down it just starts picking up again making you forget about the true beauty that surrounds you. Yuval Noah Harari discusses in his book *Sapiens* that "most westerners today believe in individualism. They believe that every human is an individual, whose worth does not depend on what other people think of him or her."¹ While humans focusing on themselves and their schedules, they focus on the way life is, not how it ought to be—some may describe this as the pre-existing imagined world order that is woven into the very fabric of our existence. The catch is that the imagined order is only a figment of our mind and tricks of perception. The material world gives humans the impression that "man's true worth [is] determined by his place in the social hierarchy and by what other people said of him"² and that consumer culture will assist us in finding ourselves, our

¹ Yuval N. Harari, *Sapiens: A Brief History of Humankind*. (New York: HarperCollins Publishers, 2015), 113.

² *Ibid.*, 114.

potential and ultimately, happiness.³ Humans cannot even think beyond to an alternate world order that strays from the grip of capitalism that we see today—we are trapped. While humans may lay the blame only on Westerners for believing in more “individualistic” imagined world values, this is not something that just one group of people can take the blame for. The imagined world is not an individual problem, or a regional problem, but a global problem. We must come to realize that the imagined world order “is rather an inter-subjective order, existing in the shared imagination of thousands and millions of people.”⁴ It doesn’t only exist between families and friends of shared values and beliefs but is the “communication network linking the subjective consciousness of many individuals.”⁵ While searching for the answers to some of the most complex questions of life, it is important to remember this—that we are built internally to cooperate with others and know that the way life is now, is not how it has to be in the future; or better yet, how it ought to be. Which brings me to my next aspiration, one which encompasses societal and environmental awareness.

When further discovering the inter-subjective world order individuals discover that the world doesn’t have to be the way that it is if we work together. If we are willing, working and collaborating as strangers doesn’t have to be difficult if we are able to keep the order maintained by the imagined world order; however, incorporating an alternative imagined order may provide new challenges. This involves societal change and through this, far greater things will result. By threading the ideas of three authors, Yuval Noah Harari in *Sapiens*, Pope Francis in *Laudato Si*, as well as his UN address, and Timothy Morton in *The Ecological Thought*, an individual can discover the prevalent idea that resounds over time is that industrial progress and the capital society has been destroying the environment in which we live in. Whether being a part of the “throw away” culture, as so described by Pope Francis, buying new machines to facilitate our daily lives, or the mass destruction of the world’s megafauna, one must open their eyes and take note of these ecological issues. While it can be obvious for a few and far between, with issues regarding the environment, this mentality must be applied. Too little we think that nature is something far and distant, as Morton describes in *The Ecological Thought*, and not something that we are a part of too. The interconnectedness of the world must be discussed and applied. Earth is humanities common home; we are all living in the environment and it is up to us to help, in any way that we can, to be stewards and protect the environment from degradation.

We are living entities together and humans must act and speak for the creation that cannot do so themselves. Mankind must be open to seeing this as evidence to frame the research and make the injustice claims against this. But environmental justice isn’t just about caring and protecting “nature”, this far off being in the middle of nowhere, but also about protecting yourself and the environment you live in as well. Environmental justice is recognizing that unconscious decisions without thinking of the needs of others is effecting even the most vulnerable in society and those in other countries. One could say, what goes around comes around. As Harari emphasized, human beings have been shaping the world and its environment or over 70,000 years and we cannot escape this fact. For years we have seen progress in agriculture, industry, and economics which has converted into science and

³ Ibid., 116.

⁴ Ibid., 117.

⁵ Ibid., 118.

technology in the twenty-first century. But through our actions, we have created these problems such as climate change, deforestation, wasting resources and plastic contamination; and now it has come to the point that humans cannot deny it, it is our duty to try to fix them. These are the facts and claims that make this a reality and a serious violation of both environmental justice and human rights.

For now, crucial environmental issues today are discussed in large conference rooms by those that are not working on the ground-level and witnessing the issues first hand every day; those that are in accordance with the economic gains over protecting the planet. The topic of fracking and water justice surfaced within these rooms and eyes have been on what policy makers are doing to alleviate and fix these issues. While some individuals feel the need to delve right into immediate action, one important step is researching what is already being said about issues of environmental justice and whether or not government officials are seeking solutions. The UN Sustainable Goals for 2030 were released and accepted last September in lieu of the Pope's visit to the United States and his urge for the world to recognize their obligation to care for creation. Pope Francis emphasized that "First, it must be stated that a true 'right of the environment' does exist, for two reasons. First, because we are human beings are part of the environment. We live in communion with it, since the environment itself entails ethical limits which human activity must acknowledge and respect... Any harm done to the environment, therefore, is harm done to humanity"⁶. This chilling quote from Pope Francis's address to the General Assembly is not just fancy rhetoric but the truth that millions of people are missing in regards to environmental justice. One case in particular that I plan to hone in on while examining the destruction caused by fracking is that within the Sustainable Development Goals where a golden statement lies that the UN plans to recognize the Human Right to clean drinking water. They envision "A world where we reaffirm our commitments regarding the human right to safe drinking water and sanitation... [and] A world where human habitats are safe, resilient and sustainable and where there is universal access to affordable, reliable and sustainable energy."⁷ However, while all of this attempts at making great strides to overcome these issues, it is ultimately up to the participating nations and states to enact these rights and construct concrete plans that will make their Sustainable Development Goals an enduring reality.

One Non-Governmental Organization in particular, Mercy Global Action, forefronted by the Sisters of Mercy of the Americas, has written extensively and worked with Grassroots organizations on the topic of fracking and water justice to try to get delegates and diplomats to recognize the violation of this Human Right in our own nation. Millions of Americans are living without clean drinking water every day and one of the principle issues—that can be changed—has been with that of fracking. Hydraulic fracturing, also known as fracking, is a method of pressurizing millions of gallons of water deep into the layers of the Earth, until it reaches shale, and within this shale lies natural gas. This process was "first used in 1947, but its use and scale have increased over the years as conventional formations have been depleted and drilling companies have sought to exploit unconventional deposits of oil and natural gas."⁸ While this may seem harmless, this water is being wasted. Once used in this process,

⁶ Larisa Epatko. "Full Text of Pope Francis' Speech to United Nations." PBS Newshour. September 25, 2015. Accessed April 10, 2016.

⁷ "Transforming Our World: The 2030 Agenda for Sustainable Development: Sustainable Development Knowledge Platform." Sustainable Development Knowledge Platform. 2015. Accessed April 1, 2016.

⁸ Aine O'Connor, *A Guide to Rights Based Advocacy* (Mercy Global Action, New York), 7.

the water becomes contaminated with the chemicals needed to extract the gas, as well as remnants of gas. After the process, it seeps into the ground water and wells—later becoming our nations’ flammable and toxic drinking water; and if not our drinking water, it is dumped into a toxic waste water pool, also known as impoundments, where it will sit and contaminate the health of many residents, the air and groundwater.⁹ Upon hearing the drastic repercussions, individuals may believe that this needs to stop now; however, this process has been occurring for over five decades and significant health and safety damage has already been done. While efforts may seem futile, I aspire that my research will assist those that are working to fight these issues, especially with fracking and water justice. This work will serve those in finding the correct ‘tool box’, if you may, to set the scope of the issue, know its importance today as well as the information that is out there. With this, educated individuals will be able to set right into direct action through using human rights based approach to advocacy.

Background on the Issue of Fracking

Before delving right into direct action and what can be done to prevent water injustice issues such as fracking, one must further understand what fracking truly is. “Fracking is the process of drilling down into the earth before a high-pressure water mixture is directed at the rock to release the gas inside. Water, sand and chemicals are injected into the rock at high pressure which allows the gas to flow out to the head of the well.”¹⁰ This process, as told by supporters, “is the biggest single reason America is having an energy revolution right now, one that has changed the U.S. energy picture from scarcity to abundance...[The Energy Information Administration (EIA)] estimates total U.S. gas production from 2012 to 2040 will increase 56 percent, with natural gas from shale the leading contributor.”¹¹ While this may not seem like it is as horrible as previously mentioned due to its obvious boost to the overall economy of the United States, I will now go into the specifics that many supporters and government officials will ‘extract’ from their explanation of the process. To begin, “it/[fracking] takes 1-8 million gallons of water to complete each fracturing job.”¹² Not only is this water water that could otherwise be used to distribute to developing nations in dire need of clean drinking water, but also those in our own nation that are suffering from both lack of water and lack drinkable water in many areas affected by fracking and other issues. While these millions of gallons of water are being used in this process “up to 600 chemicals are used in fracking fluid, including known carcinogens and toxins such as lead, uranium, mercury, ethylene glycol, radium, methanol, hydrochloric acid, and formaldehyde”.¹³ As the United States currently has 500,000 active wells, when calculated all up the numbers in this process are shocking; “72 trillion gallons of water and 360 billion gallons of chemicals [are] needed to run our current gas wells”¹⁴ in the nation. Once these chemicals are added to the fracking fluid, the water is then pressurized into the ground through pipelines. While this

⁹ "Our Look at Frack Pits, Tanks, and Impoundments." Marcellus Shale. 2016. Accessed April 9, 2016.

¹⁰ "What Is Fracking and Why Is It Controversial? - *BBC News*." BBC News. December 12, 2016. Accessed April 10, 2016.

¹¹ "Introduction - What Is Hydraulic Fracturing? | What Is Fracking." Energy From Shale. 2016. Accessed April 9, 2016.

¹² "What Goes In & Out of Hydraulic Fracking." Dangers of Fracking. Accessed April 9, 2016.

¹³ Ibid.

¹⁴ Ibid.

seems like a fairly safe procedure, it is not. The water used in fracking seeps into the ground and groundwater, eventually leading to the contamination of drinking water. “Contaminated well water is used for drinking water for nearby cities and towns. There have been over 1,000 documented cases of water contamination next to areas of gas drilling as well as cases of sensory, respiratory, and neurological damage due to ingested contaminated water”¹⁵. One town in particular that has experienced the horrifying effects of fracking is Dimock, Pennsylvania—where both Utica and Marcellus Shale lies conveniently 5,000 feet below the state¹⁶.

A state overview of Pennsylvania from “EnergyfromShale” details how “Pennsylvania is now the 3rd largest producer of natural gas in the nation. The oil industry supports more than 300,000 jobs in Pennsylvania, and... has contributed more than \$34 billion to the state’s economy. Energy production in Pennsylvania saved state and local government’s \$19 billion and public schools \$45.5 billion in 2012-2013.”¹⁷ While this is all very positive, those working in the industry and government are failing to recognize that the economic gains should not outweigh the suffering of their own people. Dimock, Pennsylvania is only one of many cities suffering from the extreme effects of fracking and can attest to the horrors they have experienced since Cabot Oil and Gas Corp. have begun fracking in their area. Within the initial drilling of the shale in the region “Tests by the Environmental Protection Agency of water in Dimock, Pennsylvania, found elevated levels of methane consistent with leakage from gas drilling nearby.”¹⁸ These levels of methane in the water also produce an explosive effect, which has been witnessed and experienced by many of the residents of the town.

In the initial Consent Order and Agreement between DEP [Department of Environmental Protection] and Cabot, dated November 4, 2009, the agency determined, “the presence of dissolved methane and/or combustible gas in...Affected Water Supplies occurred within six months of completion of drilling of one or more of the Cabot Wells. As such, Cabot is presumed to be responsible for the pollution to these...Affected Water Supplies.”¹⁹

This issue, clearly presents a greater health and safety issue as the contaminated water contains malignant chemicals. However, “Industry [argues] that methane occurs naturally in the environment in the Dimock area and therefore should be expected in the water supply...[but] A Duke University study found that drilling into the methane layer allows the natural but toxic gas to migrate into the water supply”²⁰, disproving the industry’s claims. This research published in the Proceedings of the National Academy of the Sciences of the United States of America discovered “what they described as a clear correlation between drilling activity and the seepage of gas contaminants underground, a danger in itself and

¹⁵ Ibid.

¹⁶ Mark Drajem, "EPA Official Links Fracking and Drinking Water Issues in Dimock, Pa." Washington Post. July 29, 2013. Accessed April 9, 2016.

¹⁷ "Fracking: Good News for Pennsylvania." Fracking From Shale. 2016. Accessed April 8, 2016.

¹⁸ Mark Drajem, "High Methane in Pennsylvania Water Deemed Safe by EPA." *Bloomberg L.P.* March 30, 2012. Accessed April 8, 2016.

¹⁹ "Dimock, PA: "Ground Zero" In The Fight Over Fracking." State Impact. 2016. Accessed April 7, 2016.

²⁰ "Hydraulic Fracturing FAQs." *Gasland*. Accessed April 7, 2016.

evidence that pathways do exist for contaminants to migrate deep within the earth”²¹. As the testing was done in Dimock, this is concrete evidence for those residents in the area and adds additional steam to the public debate on hydraulic fracturing.

Who has been talking about this issue?

After looking at the shocking facts, individuals may wonder whether or not these issues about fracking are being discussed within the nation. As mentioned earlier, while Mercy Global Action has been working on the rights-based advocacy portion of fracking on both a local and international level, other forms of media and news have discussed its dangers as well. Josh Fox’s *Gasland* showed the facts, figures and threats of Fracking in 2010; over the course of four years, he released another film to demonstrate the escalation of the problem. Fox’s website discusses why he has made the documentary in a section titled “Affirming Gasland” and writes:

When I was investigating gas drilling across the United States, I heard time after time from citizens that the industry disputed the citizens' claims of water and air contamination and denied responsibility for their health problems and other problems related to drilling. I now know how the people in my documentary feel, to have the things they know to be true and the questions they are raising so blatantly discounted and smeared. It is truly unfortunate that the gas-drilling industry continues to deny what is so obvious to Americans living in gaslands across the nation instead of taking responsibility for the damage they are causing.²²

His work acts as a voice to stand up for the residents in the affected area against the industries that are spreading falsehoods and spinning misinformation. He also lists actions that can be taken, such as contacting elected officials in the area, learning more about local organizations against fracking, and setting up action alerts to be more involved in the banning process.²³ In addition to *Gasland*, major conversations have been happening on Twitter where there are numerous hashtags such as #fracking, #keepitintheground, #BanFracking and #StopTheDrill surfacing against groups that support the process. These social media platforms have facilitated and expanded these conversations across borders, making the stance more profound. Furthermore, many countries, including France, Germany, Scotland, and Bulgaria,²⁴ have already banned the process due to the amount of harm that it causes; however, North and South America have not joined the coalition and continue to see the economic benefits over the threats to the environment and its people. Despite efforts from Josh Fox, Twitter, and other nations, The New York Times, Foreign Affairs Journal, and environment Yale, have released information on the lack of research by the government and companies, water demand, and the overall safety of the procedure for the workers and the community. Essentially, the facts are out there before everyone’s eyes. Plans and actions for the future need to start now with the education of the ugly truth of what fracking truly is.

²¹ Lustgarten, Abrahm. "Scientific Study Links Flammable Drinking Water to Fracking." *ProPublica*. May 09, 2011. Accessed April 7, 2016.

²² Josh Fox, "Affirming Gasland." *Gasland*. Accessed April 7, 2016.

²³ "Take Action." *Gasland*. Accessed April 7, 2016.

²⁴ Johnny Linehan, "List of Bans Worldwide." Keep Tap Water Safe. September 14, 2012. Accessed April 4, 2016.

Critical Thinking and Interdisciplinary Approaches

Returning back to the ideas discussed previously, how can we change the mind of millions of individuals that do not see the priority of these issues? In a world that is changing rapidly before our eyes through the current ecological crisis, some may feel the urgency and call for action, whereas others may not see it. Polar ice caps are melting causing sea levels to rise, natural resources are being depleted by means that are contaminating the groundwater, such as fracking, and deforestation is causing the destruction of some of the most precious species on Earth. Nicholas Kristof, Op-ed columnist to the New York Times, detailed the reasoning that many humans have issues grasping the gravity of the environmental situation within his article “Terrorists, Bathtubs, and Snakes”. He writes:

Unfortunately, our brains are not well adapted to most of the biggest threats we actually face in the 21st century. Warn us that climate change is destroying our planet, and only a small part of our prefrontal cortex (which worries about the future) will glimmer...the kind of threats that we evolved to deal with are those that are imminent rather than gradual, and those that involve a deliberate bad actor, especially one transgressing our moral code.²⁵

Knowing this does not give humans the right of way to overlook these issues. It is now time to realize how the human brain has “evolved so that we systematically misjudge risks and how to respond to them”²⁶ and surpass it by thinking ecologically. Environmental justice issues, such as fracking, have been affecting those around us and now it has come to the point that it is no longer debatable, and “things will get worse before they get better, if at all.”²⁷ Ecology is the study of the connections between living and nonliving entities; yet many still feel that our environment is just something beautiful far away and not something that surrounds us on a day to day basis. Timothy Morton, author of *The Ecological Thought*, writes “Ecology includes all the ways we imagine how we live together... [and] existence is always coexistence.”²⁸ Educational systems that I have attended throughout my life have stressed the need to protect our environment to children through means such as recycling or picking up litter on the ground. While this helps sanitize the environment around us (or give off the impression that we are sanitizing the environment) we need new interdisciplinary approaches towards thinking and speaking out for the things around us that cannot speak for themselves.

One of the most influential ways to do this is through critical thinking—looking at the bigger picture and how the environment is truly an interconnected system. “It’s necessary to convince many strangers to cooperate with one another. And this will happen only if these strangers believe in some shared [ideals]. It follows that in order to change an existing imagined order, we must first believe in an alternative imagined order.”²⁹ If this isn’t something easy to grasp it might be easier to evaluate other aspects of a daily routine, such as eating, shopping, going to work etc., and analyzing all of the energy and resources that have

²⁵ Nicholas Kristof, *Terrorists, Bathtubs, and Snakes* (The New York Times, New York) Web.

²⁶ Ibid.

²⁷ Timothy Morton. *The Ecological Thought* (Cambridge: Harvard, 2010), 17.

²⁸ Ibid., 4.

²⁹ Yuval N. Harari, *Sapiens: A Brief History of Humankind* (New York: HarperCollins Publishers, 2015), 118.

been put into the products we have been using. For a relatable example, when eating, where did the food come from? Was it factory farmed? Was it wrapped in plastic that won't decompose on Earth for a thousand years? How many gallons of water were used in that process? Was the food sprayed with pesticides? Were the animals treated humanely? These are all questions we must ask ourselves and can apply to other environmental issues like fracking. Where is the natural gas coming from? How many million gallons of water will be wasted? Are their communities that will be effected by this? Who is talking about these issues? Who is pushing them away? Do the economics behind fracking truly outweigh the serious land and health issues that resound if the process persists? Looking at all of the disciplines, whether it be economic, environmental, governmental, psychological etc. "our perspective becomes very vast... [and] more and more aspects of the Universe become included in the ecological thought."³⁰ We come to see that these disciplines, that seem so separate, are not so easily divided. Critical thinking is taking a generality such as food consumption or fracking and looking into the particularities that are involved in this process. If humans can change their outlook on the world, it is imperative to use this approach in our own lives and apply this to other environmental justice issues such as fracking. Once an individual breaks their old ways of thinking and begins to grasp the importance of all the "little things" that are involved in our lives, humanity can work on producing alternative measures of production and consumption to save the environment.

Direct Action and Ethical Approaches to Battling Fracking

While thinking critically and ecologically and realizing that the imagined world order can be changed, the possibilities to the end of fracking can seem achievable with cooperation and knowledge of imperative literature. The varying actions that have been taken regarding environmental justice, within the scope of fracking, has revolved both around its social media presence and the issues of its violations of multiple human rights recognized by the United Nations, as well as environmental degradation. One may ask, what does human rights have to do with fracking natural gas? And the answer is quite simple:

The UN Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment has observed that: '*Environmental degradation can and does adversely affect the enjoyment of a broad range of human rights.*' This degradation can be caused by activities or events such as 'climate change, desertification, and, in particular, mining operations.'³¹

Fracking alone has violated several areas of human rights, as detailed in Sr. Aine O'Connor's *A Rights Based Guide to Fracking: International Human Rights Law and Fracking*, including "the rights to health, water, food, housing, information, participation, and the preservation of culture."³² Furthermore, these areas of violation within human rights laws have not only been on a national level, but on a local level as well within individual states that promote the usage of hydraulic fracturing of shale within the earth. Fracking is not a new

³⁰ Timothy Morton, *The Ecological Thought* (Cambridge: Harvard, 2010), 38.

³¹ Aine O'Connor, *A Guide to Rights Based Advocacy* (Mercy Global Action, New York), 13.

³² *Ibid.*, 5.

means of technology and has been damaging the earth for many decades. A rights-based approach to advocacy can prove to be the most successful while combating fracking because it “can be used by local communities, activists, governments and policy makers at the national, regional, and international levels to better understand the issue of fracking and combat its detrimental effects.”³³ As the most marginalized and vulnerable of society are generally those most effected by environmental issues such as fracking, this approach can be used to empower and encourage conversation amongst them; however, it also serves as a guide to assisting those who “sit on top of privilege, [those that] sit on the systems that perpetuate privilege”³⁴ learn how to help and collaborate among others.

One of the most important human right that has been violated with the process of fracking has been the right to water and sanitation. As mentioned previously, the United Nations released their Sustainable Development Goals for the year 2030 which includes in Goal 6 that they plan to “ensure availability and sustainable management of water and sanitation for all.”³⁵ They recognize that water is an essential means to life for all communities and ecosystems and specifically note in Goal 6.3 that “By 2030, [the UN aspires to] improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.”³⁶ The process of fracking uses millions of gallons of water during pressurization to extract the natural gas; therefore, enormous quantities of water are being depleted in this process. While millions of gallons of water is being used, this water is also being contaminated and improperly disposed of causing harm to the environment in fracking areas. Therefore, this process is in direct violation of the human right to water and sanitation. Some may contend that with the vitality of water in our daily lives that this is even a right to life issue.³⁷ Little do people realize that there are millions of people in Pennsylvania that are fighting for clean drinking water in their own city because of the issue of fracking. I believe that these communities and people “must not ‘be deprived of its means of subsistence.”³⁸ Issues with clean water and contamination happen in the United States every day. Within the past five years alone, there have been over 150 spills and accidents, or ‘fraccidents’, caused by fracking in Pennsylvania alone.³⁹ It is time to get serious about advocating for the environmental injustices happening in our own backyards by taking action.

When considering taking action, individuals must not only direct their concerns towards the big businesses and corporations, but remember that “communities can exercise their rights and hold governments accountable.”⁴⁰ This accountability is important as they must make the governments responsible for enacting and upholding the rights they said they would. A rights based approach to conquering the issues of fracking is one of the most powerful and can educate individuals on their rights as well as the policies involved. Furthermore, other actions

³³ Ibid., 4.

³⁴ Christiana Z Peppard, "Women, Water, and Wellbeing." Commission on the Status of Women, United Nations Headquarters, Conference Room 11, New York City, March 22, 2016.

³⁵ "Transforming Our World: The 2030 Agenda for Sustainable Development: Sustainable Development Knowledge Platform." Sustainable Development Knowledge Platform. 2015. Accessed April 1, 2016.

³⁶ Ibid.

³⁷ Christiana Z Peppard, "Women, Water, and Wellbeing." Commission on the Status of Women, United Nations Headquarters, Conference Room 11, New York City, March 22, 2016.

³⁸ Aine, O'Connor, *A Guide to Rights Based Advocacy* (Mercy Global Action, New York), 23.

³⁹ "Pennsylvania and Fracking." SourceWatch. January 21, 2016. Accessed March 15, 2016.

⁴⁰ Aine, O'Connor, *A Guide to Rights Based Advocacy* (Mercy Global Action, New York), 67.

could be by bringing attention to the concerns within your environment to the government and stressing “that companies and other private actions ‘routinely monitor for associated toxic substances at the mine site as well as in nearby sources of drinking water or aquatic habitat, when hazardous substances that can contaminate water are used, such as cyanide and hydro-fracking solutions.’”⁴¹ This has been done in many areas and will continue to be stressed within others.

If you feel like these aren’t the approaches for you, one of the first calls to action would be through the continued social media presence on numerous platforms including those as Facebook, Twitter, and film. The ability to be able to express our opinions and beliefs on a subject through social media is a right in our nation and should be utilized in situations where other rights have been suppressed, such as the issue of fracking impeding on the right to water. It is also imperative to continue to be educated on the subject and know what information is truthful or not. With continuous presence and passion on the subject, individuals and governments will start to hear the cries of those affected by this issue and do something about it. Although one person may start the initiative, it is the work of everyone’s little actions that have the power to emphasize the issues of fracking on the environment and its people.

Conclusion

Through this research it is hoped that readers will work to prevent these issues from spreading. In the case of fracking, the issues are documented daily, yet local, state and national governments are failing to recognize the coincidences that are repeatedly occurring. Is our world so deeply disconnected from nature that we do not see the injustices with fracking? When one breaks the bond of the imagined world order and begins to notice that humans, nature, and these institutional systems are connected, we will begin to see change. Until then, it is important to emphasize the protection of our environment in the midst of debilitating consumer capitalism; strive to work for a world that is “harmonious, just, and merciful”⁴², like the mission of Salve Regina University; and let it be your mission as well as a “[steward] of God’s creation.”⁴³ Promoting and encouraging international human rights law in conjunction with the issues of fracking, Aine O’Connor, with the Sisters of Mercy through Mercy Global Action within the United Nations, details numerous options to exercising your rights. Through exercising your rights, it is also important to know the literature and hold the government accountable for protecting and upholding your rights. This is what we have to do to make and see change within our lifetime. While it is easy to be cynical, especially surrounding issues of environmental justice, one must remember this proverb, “They tried to bury us but they didn’t know we were seeds.”⁴⁴ I hope that this work inspires those to stick up for what they believe in and not be swayed by the magnetizing hold that the consumer economy has on the world.

⁴¹ Ibid., 27.

⁴² "Mission Statement." Salve Regina University. Accessed April 19, 2016. <http://www.salve.edu/about/mission-statement>.

⁴³ Ibid.

⁴⁴ Meera Karunanathan, "Women, Water, and Wellbeing." Lecture, Commission on the Status of Women, United Nations Headquarters, Conference Room 11, New York City, March 22, 2016.

Figures and Appendixes

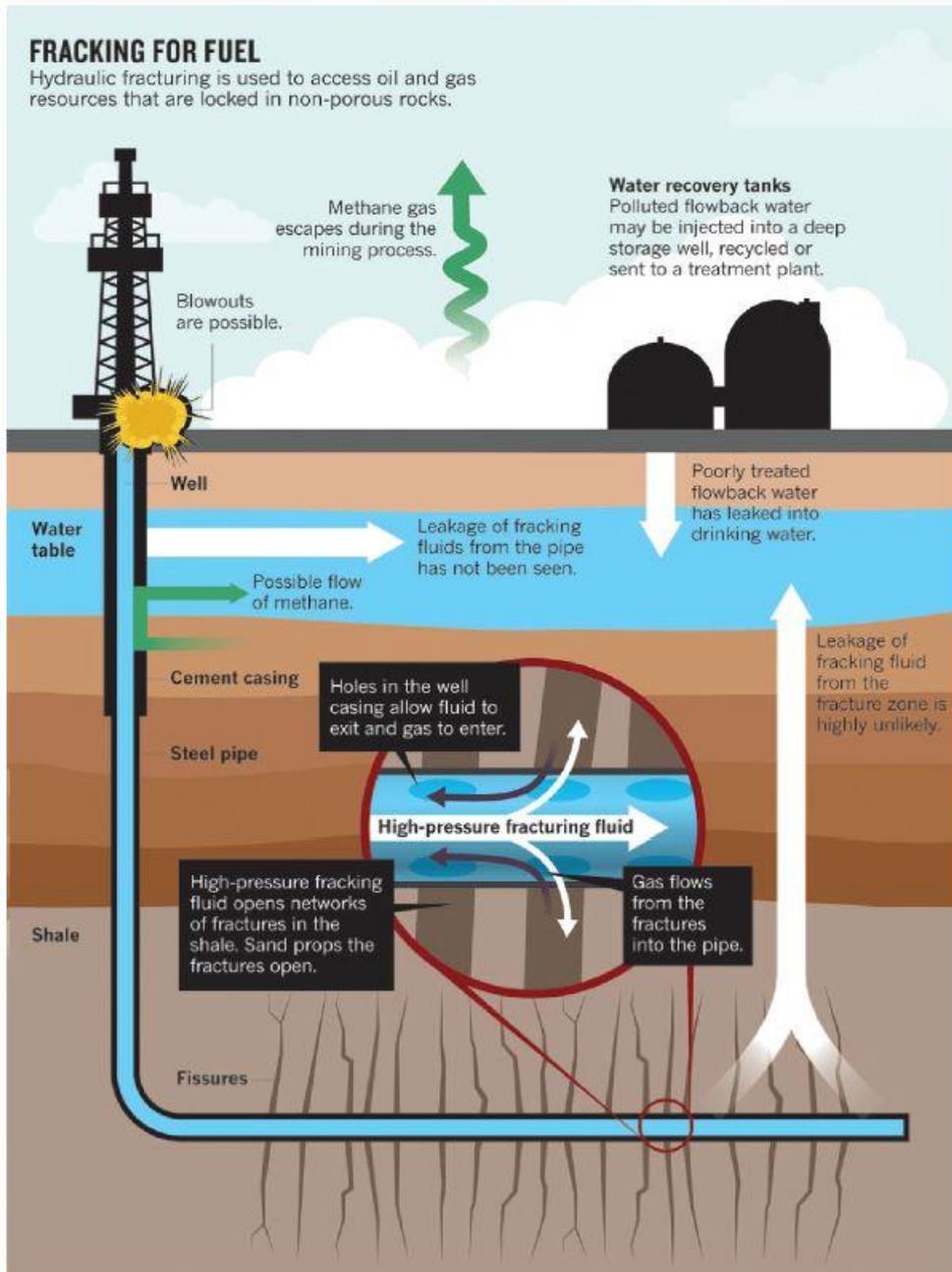


Figure. Basic mechanism of hydraulic fracturing and potential routes of water contamination.² Reprinted with permission.

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This image demonstrates the process of hydraulic fracturing, also known as fracking.



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Pictured is an 'impoundment', a pool that contains the left over fracking fluid. Millions of gallons of water will sit here wasted and unusable due to the high density of chemicals.

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