

Critiquing and Conveying Information about Fracking through Song Parody

The Annotated Libretto of *Frackville, the Horizontally Drilled Musical*, with Interpolated Bibliography

Introduction

When an oil and gas boom caused a frenzy of insufficiently-regulated hydraulic fracturing (fracking) in her hometown of Greeley, Colorado, the author's concern for the environmental future of her community and the planet pushed her to move away from an uninvolved political stance into the role of an outspoken environmental activist. Highby's commitment to environmentalism in her community has taken many forms, including organizing Weld Air and Water (a grassroots environmental watchdog group), speaking out at public meetings, assessing and critiquing the quality of information shared in her community by oil and gas interests, and writing her own protest song lyrics. The songs are adaptations that call attention to the environmental risks of fracking, which range from earthquakes induced by injection wells to noise pollution to benzene exposure, to name just a few.

At PLG Edmonton's 2014 Symposium, Highby presented a critique of a corporate-sponsored oil and gas website and advocated that librarians take on more critical roles in the processes of information production, dissemination,

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■ KEYWORDS: Hydraulic fracturing; Protest songs; Library Science — political aspects.

and interpretation. She also encouraged them to take action to ensure that information is used in ways that enhance participatory democracy. Finally, she pressed for situationally-dependent non-neutrality by information professionals. Punctuating Highby's critique were her parody songs, which join the long tradition of leftist protest songs. She is inspired by the satiric work of Reverend Billy and the Yes Men and suggests that the use of comic counterframes is therapeutic, subversively entertaining, satiric, and didactic. Below is a libretto, the lyrics of a sampling of seven song parodies, interpolated with first person commentary and an extensive bibliography of sources informing the lyrics.

See Further

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Yes Men. (2014). Home page. Retrieved from: <http://theyesmen.org/>

Part One: Where Is Frackville? Gasland, North America

Weld County, Colorado, and Alberta, Canada share a common challenge. Weld County is experiencing a fracking boom, and the province of Alberta is home to the Athabasca tar sands.

We're all river valley denizens living upon
Eastern Plains of the Rocky Mountains
Beneath us Earth replete with fossil fuels
Be they Athabasca tar sands or Niobrara shale
Corporations and governments collude to extract these resources
Yet they should be left in the ground to save our planet
From suffering the worst effects of disastrous climate change
To prepare, we must strengthen our sociopolitical culture and
ORGANIZE!

See Further

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Maps

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Part Two: When Will We Become Frackville? Coming Soon to a Backyard Near You

The first song parody is about Greeley, Colorado. It used to be infamous for its odiferous feedlots and meatpacking industry; now it's becoming infamous for its fracking. I have been writing song parodies for the last two years as an act of creative resistance against the encroachment of urban fracking in my community. The working title of my musical in progress is "Frackville: the Horizontally Drilled Musical."

Using comic counterframes is one of the most subversive, therapeutic, and effective ways to convey information, especially when it is of an existentially threatening nature, as in the case of climate change. As we face a local and regional political situation in which power is unbalanced, very much a proverbial David v. Goliath battle, comedy is a sane response. Plec and Pettenger (2012) argue that comic counterframes of resistance "offer the consumer alternative frames within which consumer and environmental activists can challenge and re-appropriate the messaging process. If a comic frame can emerge, then so too might the angry consumer who does not want to be deceived by the sins of greenwashing" (p. 471). These ideas inform my work.

The lyrics convey, with self-deprecating humor, the oft-times painful experience of testifying before my City Council and going against the dominant pro-oil and gas economic narrative of my community. My intent is self-therapeutic, but also to seize the opportunity to be satirical and didactic. For instance, in the following song, I wanted to make people aware of Bill McKibben's "Do the Math Tour" regarding global warming.

We're Fracked

Sung to the meter of "Get Back" by Lennon, J. and McCartney, P., with Preston, B. (1969). Apple Records.

Greeley was a cow town
Now it is an oil town
Searching for a sobriquet
Is it unexpected
That it's greatly ground up
Caught up in this fracking net
We're fracked we're fracked
We're rackin' up the carbon debt
We're fracked we're fracked
Hijacking generations hence
Get renewable Greeley

NIMBYs are a problem
Spreadin' lots of rumors
Weld Air and Water fractivists
We tell you that the fracking's
Proven to be safe now
But you stir the hornet's nest
Relax, chillax
You fear mongerin' fractivists
Relax, chillax
Crazy ecoterrorists
Get back tree huggers

I'm no Nostradamus but I see two pathways
Diverging for this fracking town
One redemptive science
Another leads to ruin
Perhaps the science will win out
The path the path
Have you done Bill McKibben's math
The math the math
Of global warming's ruin and wrack
It adds up Greeley

Wendy's a tree hugger
Organized the NIMBYs

Raises bogus fears 'bout health
Claims she finds good research
But her views are biased
Shaky as her Parkinson's
Don't want no facts
Shut up about the peer review
You're cracked, you're whacked
Don't want a jeremiad from you
Shhh Marion Librarian

Once you take the water from the Ogallala
There's no turning back the clock
Once the seismic action moves the Earth's formations
There's no relocating rock
Tick tock tick tock
You've set the global warming clock
Tick tock tick tock
Disturbin' Niobrara chalk
It's no hopscotch game Greeley

See Further

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Part Three: Taking the Best Evidence, Impact Science, to the Frackville City Council

Bierman, Kulp, and Foote (2011) found that prior to 2010, most literature on fracking did not address environmental concerns. The extant literature was chiefly in two areas: geology/geophysics and petroleum engineering (p. 339). Thus, the research lags behind the technology.

When I testified before our City Council, I gathered the best information possible from impact science. Impact science is defined by sociologist Aaron

McCright (2013a) as science that supports the understanding of human impacts on the environment and human health. Examples of impact science include environmental science, technology assessment, and conservation biology. Impact science contrasts with production science, which is science that serves economic production. Examples of production science include physical and engineering sciences such as polymer chemistry, nuclear physics, and petroleum geology.

See Further

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Part Four: Pleading for the Precautionary Principle before the Frackville City Council

What else do you need in order to convince your elected officials, once you are armed with the best scientific evidence? You need moral support from friends to encourage you to speak publicly. And you need to be able to ethically justify your position, advocating that fracking be suspended until it is proven to be safe and non-threatening to public health. This ethical principle is known as the precautionary principle. Accordingly, I deem it ethical to use precaution

and slow down or stop fracking until it is proven safe and not harmful to public health and the environment.

Here is a song parody acknowledging the strong feelings involved in the decision to act publicly and politically along with the courage such action requires.

The Reluctant Citizen

Sung to the meter of “My Favorite Things” by Rodgers, R. & Hammerstein, O., II. (1959).

Ecru and eggshell and white picket fences
Lovely beige tanks on which benzene condenses
My neighborhood platted neatly so square
Fracking’s not dangerous they wouldn’t dare

Civil and pleasant and rarely debated
Measured and moderate not overstated
My neighborhood has innocuous tanks
My neutral pretense hides paralyzed angst

Why be neutral why immobile when you can take a stand
Just simply remember your reasons for courage
And then you won’t feel so bland

Focus grouped adverts and well-tailored jackets
Commercials for natural gas pretty press packets
My neighborhood kids are soon to be fracked
Oh I am afraid that it’s courage I lack

Don’t want to make waves and hate public speaking
What will my friends say, bad things they’ll be thinking
My neighborhood kids are soon to be fracked
For them I’ll find courage meet the attack

Why be neutral why be passive when you’re not alone
Remember we’re with you there’s safety in numbers
And then you won’t feel so scared

I wrote these words to encourage the parents of children attending Frontier Elementary School. A fracking site was proposed just a few hundred feet from their school playground. Discernment is accomplished by clarifying our

values. Does the situation rise to a level that justifies taking a position? In this example, the endangerment of children rose to a level that arguably justified non-neutrality. Zinn's autobiography, *You Can't Be Neutral on a Moving Train* (2002), is a useful example here. In explaining his title, he notes its application to situations in which "events are already moving in certain deadly directions, and to be neutral means to accept that" (p. 8). I contend that fossil fuel induced global warming and the public health implications of fracking constitute movements in certain deadly directions.

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Part Five: Using Librarians' Strength to Stop or Slow Down the Frackville Train

The analytical skills of librarianship transfer well to the arena of political advocacy. And while professional neutrality is sometimes appropriate, you don't have to be universally neutral; every situation needs to be examined for the proper course of action. Of course, neutrality should remain a central tenet of the ethics of librarianship, especially in collection development and reference service provision. But non-neutrality should be chosen when discerned to be ethically appropriate for a given situation.

Andersen (2008) encourages librarians to become public intellectuals and to publicly practice information criticism. I'd add to Andersen's theory the fact that librarians are uniquely positioned to become information critics because they often have fluency in a multiplicity of disciplines, and high comfort level with inter-disciplinary approaches to an issue—what might be characterized as a holistic or systems-oriented view. Librarians are trained to navigate the scholarly communications system and so have an awareness of the impact of politics and economics on the knowledge production, communication, and organization processes.

See Further

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Part Six: Train Wreck in Frackville – When Corporate Information and Science Information Collide

McCright (2013a) observes that the seeming conflict over environmental science-related issues is really, at heart, a conflict over competing values regarding economics:

Much research on public scientific and technical controversies finds that what often appears at first glance to be a conflict over science is more accurately defined as a conflict over competing values. . . . Our study here supports this finding. We find that political ideology aligns closely—but not perfectly—along a fault line between views defending the current economic order and views promoting reform of the current economic order to protect environmental and human health (p. 7).

Last Train from Frackville

Sung to the meter of “Last Train to Clarksville” by Boyce, T. and Hart, B. (1966). RCA Victor.

Take the last train from Frackville
There's no Greeley oasis
Five hundred feet from frack spills
So rare the unfracked spaces

No No No
No frack free zone
No frack free zone

So I'm crying and I'm mourning
Toxic 'sposure makes me leave
Flee town I that was born in
And how it makes me grieve
That I must go
To a frack free zone
To a frack free zone
My home town's become a sacrificial zone

Take the last train from Frackville
Break up with this colony
I refuse to drink the Kool-aid
Or the frack fluid
That they've kindly offered me
Won't sign the lease
Won't sign the lease
D-d-d-d-d-d-d-dotted line dotted line
Dotted dotted line

Take the last train from Frackville,
Now I must give up the fight
I can't hear you from this noisy wellpad
Where it's lit up all the day and night
No frack free zone
No frack free zone
My hometown's become a sacrificial zone

Take the last train from Greeley,
Ground up in this great gas gush
They have pawned the public health
In this mad corporate profit rush
So just say no
So just say no
So just say no
Don't let it become a sacrificial zone.

May 8, 2014 was a difficult day. The *Denver Post* reported on a study by the Cooperative Institute for Research in Environmental Sciences that indicated much more serious levels of air pollution than previously estimated.

Oh I Need Clean Air Babe

Sung to the meter of “Eight Days a Week” by Lennon, J. and McCartney, P. (1964). EMI.

Ooh I need clean air babe
Guess you know it's true
Know you need clean air babe
Just like I need you
Inhale exhale
Inhale exhale
CRED says we've got blue skies
Eight days a week
Eight days a week
They air T-V commercials
Eight days a week
Our air pollution they ignore
May 8th read Bruce Finley
Guess you know it's true
In the *Denver Post* babe
Can't hide it from you
Inhale exhale
Inhale exhale
Ain't got nothing but bad news
Eight days a week
Headline, it said
“Seen from air, it's dirtier”
19 tons an hour
The amount of methane
That they spew

NOAA's Petron measured
Emissions in our air
NoCo's atmosphere much
Worse than we had feared
Inhale exhale
Inhale exhale
Ain't got nothing but benzene
Eight times the rate
Eight times the rate
C-D-P-H-E knew of
Eight times the rate
Do they expect us to sit back?

V-O-Cs are doubled
In our county's air
Climate is in trouble
I am in despair
Inhale exhale
Inhale exhale
Ain't got nothing but methane
Three times the rate
Three times the rate
E-P-A estimated
Three times the rate
We've got to increase the setbacks.

Loveland's next to Greeley
Larimer's next to Weld
Air knows no firm boundaries
By storm fronts it's impelled
Westward eastward
Northward southward
Greeley's unexpected
Drifting gift to you
We'll share the risk
With all adjoining counties
Our ozone drift
The gift that keeps on giving grief

Say yes to safety setback
Two thousand feet or more
Preserve urban oasis
Vote for a buffer zone
Retro-fit wells
Inspect often
Got to stop pollution
Right at the source
Eight times the risk
To public health and safety
Eight times the risk
We've got to take a stand today

See Further

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Part Seven: Corporate & Science Communication – Why It's Not Reassuring to Hear that Frack Fluid Ingredients Can Be Found Under My Kitchen Sink

A good example of hard-to-access information is the proprietary nature of the contents of frack fluid. Colorado does have the Hydraulic Fracturing Chemical Disclosure Rule 205-A with the following requirements:

- Filing within 60 days of the fracking process a list of all the chemicals used, and their concentrations, with FracFocus.org (the publicly accessible, independent online database).
- Filing with the Colorado Oil and Gas Conservation Commission for any proprietary chemical a company does not want to disclose, claiming under penalty of perjury that the chemical is a trade secret (and must disclose the chemical family of any trade-secret chemical and its concentration).

Nevertheless, a Harvard Law School study by Konschnik, Holden, and Shasteen (2013) notes that the FracFocus Registry is not a panacea because it:

- Prevents states from enforcing timely disclosure requirements
- Creates obstacles for compliance for reporting companies
- Allows inconsistent trade secret assertions

Here's a spoken word/song parody revealing the ingredients in fracking fluid. Although the whistleblowing figure is made up, the ingredients come from a real list of chemicals from the Endocrine Disruption Exchange.

Frack Fluid No. Nine

Sung to the meter of "Love Potion No. 9" by Leiber, J. & Stoller, M. (1959).
United Artists.

I took my gas lease
To Coinman & Sons
An urban fracking company they run
They'll give me a bonus
if my lease I sign
They're injectin' wells
with Frack Fluid No. Nine

I asked Coinman 'bout the ingredients
Been wonderin' 'bout them since 2010
He looked at my acreage and made a dollar sign
Said what you need is
A swig of Number Nine

He bent down and turned around and gave me a wink
Said all the ingredients were under my sink
It smelled like silly putty and looked like gooey slime
I held my nose I closed my eyes
I took a drink

I didn't know if it was day or night
I started signin' every lease in sight
But when I finished signin' I felt so much remorse
I knew I was mistaken
I had to change my course

I took my worries to Greeley's planning board
But concerns they pretty much ignored
The vote was four to two and one planner chided us
She ridiculed our fears o'er
Frack Fluid Number Nine

I took my troubles to Denver's Capitol dome
Oil 'n gas lobbyists the halls they roam
Workin' hard to keep trade secrets under wraps
Keep it proprietary
The parts of Number Nine

To endocrine disrupters add formaldehyde
A little pinch of acetic anhydride
Then you add carcinogens some mutagens and more
But say its brine don't make them fear
Frack Number Nine

I didn't know if it was day or night
I started tellin' everyone in sight
It's your right to know what's in your water
Air you breathe
Public health debacle
Frack Fluid Number Nine

Stepped out to Colfax tried my mood to fix
Takin' a break from crooked politics
Psst down at the corner shadow figure
Gave a sign a whistleblower offered me
Some Fluid Number Nine

I took the fluid to the chemist's lab
'Bout five percent I couldn't wait to blab
Apothecary's formula I'm gonna give to you
Here's what they put in
Frack Fluid Number Nine

Developmental toxicants make up the soup base
Two-butoxyethanol and more for the chase
Ethylene glycol and methanol too
Isopropanol and dazomet
I took a hit

They say FracFocus brings it all to light
But self-reporting has no teeth, no bite
It's your right to know
What's in your water, air you breathe
Information slowdown
Frack fluid number nine

I surfed the web lookin for any news
Found Theo Colborn's site revealed the brews
She's got lists of chemicals on her web page
At endocrine disruption dot com she's the sage

Five chloro two methyl to be continued
Four iso-thia-zotin three one okay
Monoethanolamine and then you bake it
Sodium bicarbonate and that's all it takes

I didn't know if I was wrong or right
But we need more from COGCC oversight
The fugitive gasses are escapin' all the time
Chemicals dispersed from Frack Fluid Number Nine

See Further

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Part Eight: Accidents Happen – A Lesson about the Importance of Information

The next song parody uses a minor traffic accident to underscore the need for accurate information to address the many industrial dangers inherent in fracking-related procedures. Based on a real life situation, the event makes clear the importance of keeping up-to-date Material Data Safety Sheets.

“Frack Fluid Truckers’ Blues”

Sung to the meter of “Raindrops Keep Fallin’ on My Head” by Bacharach, D. & David, H. (1969). Scepter Records.

Fracking is safe and sound I swear
Just like the truth stretched out
So tight like rubber bands
It snaps back to sting you
You’re never gonna change
The truth by your spinnin’

So there are many associated tasks
Involved in the process
To cull from shale natural gas
On and ‘neath the surface
Wastewater ‘n pipelines
Don’t forget infrastructure

I’ve got a job full time
The economy is booming
Every day and sometimes overtime
I drive a truck
Oil service sector

Today I transported down the road
A tank full of fluid
To be flocculated fast

It slipped off my truck bed
Splattering Highway 34
Snarling traffic

So I just did me some talking on the phone
The Greeley firemen
Responded then hazmat
Wouldn't touch with poles ten
Feet even longer
They said it's not our problem

We tried to recall the protocol, oops
Were data sheets tossed out
So long ago in trash?
Gone material safety
We waited for two hours
For corporate cleanup

But tell those fractivists
Those Chicken Little foil heads
To get over their hysterics
It's just stuff found in
The kitchen cupboard

Greeley fireman he said
"Had it been raining we'd
Be great because it would
Probably...be gone" those
Raindrops they cleanse us
They dilute our pollution

But there's one thing to know
The chemicals not harmless
They need proper handling
Emergency preparedness
Intensive training

Greeley needs help from you the state
Slow down the fracking
Until we are more prepared
Ready for the worst case
This was a wakeup call
And thank god that it was small

Fracking's a heavy industry
Traffic and transport of
Frack fluid's fraught with risk
Trav'ling through our city
We'll refuse egress
You imperil our children

It's not care free
Fracking's heavy industry

See Further

Kansas State University, James R. Macdonald Laboratory. (2009). Brief history of the MSDS. Retrieved from <http://jrm.phys.ksu.edu/safety/msdshist.html>

Silvy, T. (2014, September 12). Fracking fluid spill backs up Greeley traffic for hours. *Greeley Tribune*. Retrieved from <http://www.greeleytribune.com/news/12997163-113/greeley-cary-department-fluid>

Part Nine: How Many Progressive Librarians Does It Take to Change the World? While There Are No Dumb Questions, I Might Suggest You Phrase Your Question Differently

It's time for progressive librarians to put their intellectual prowess to public use. We've got to organize citizens at the grassroots, to stop being neutral on this moving train. We need to work on our local sociopolitical infrastructure, to develop the networks necessary to survive impacts of climate change. Howard Zinn (2002) ended his autobiography saying:

We don't have to engage in grand, heroic actions to participate in the process of change. Small acts, when multiplied by millions of people, can transform the world. . . . And if we do act, in however small a way, we don't have to wait for some grand utopian future. The future is an infinite succession of presents, and to live *now* as we think human beings should live, in defiance of all that is bad around us, is itself a marvelous victory (p. 208).

Here are some happy lyrics, inspired by the rallying calls of Zinn and his fellow progressives, Naomi Klein and Ralph Nader.

Greeley's Great from the Ground Up

Sung to the tune of "Oh What a Beautiful Mornin'" by Rodgers, R. and Hammerstein, O., II. (1943).

Greeley's great from the ground up meat products
Greeley's great from the ground up meat products
The gases of greenhouse are warming the globe
The grain-feeding livestock increasing the load
Oh what a legacy Greeley
Oh what a legacy Weld
Think what you're leaving your grandkids
Climate change we can foretell

There's a rumble beneath Niobrara
There's a rumble beneath Niobrara
Mother Earth's reached
Her limit of carbon it's true
We've got to go fossil free
It's up to you
Oh it's your legacy Greeley
Think what you leave to your young
Sobriquet bragging of greatness
Hubris it rolls off your tongue
There are ways to make
Everything cool down
There are ways to make
Everything cool down
Conservation of energy
Be locavore
Share transportation
You'll think of much more
Oh what a gentle soft footprint
Transform the bad legacy
Greeley is great from the ground up
When we tread earth so lightly

Progressive librarians can change the world (with small acts, in concert with millions of others)! Perhaps in a concert singing the satirical parodies within! Don't let anyone's backyard become Frackville, because fracking is a global public health issue. Go forth and be public in your critique, selective and situational in your neutrality, and active in your political participation.

See Further

Klein, N. (2014). *This changes everything: Capitalism vs. the climate*. New York: Simon & Schuster.

Nader, R. (2012). *The seventeen solutions: Bold ideas for our American future*.
New York: Harper.

