

## Aalok and Ali Exchange -- June 2019

While PECE is designed to leverage comparative analysis through several mechanisms -- metadata and analytics, for example, as described above -- TAF researchers do not always take full advantage of these tools. Or perhaps more accurately, as researchers, we have not always coordinated our analytic work through and with PECE. Such was the case for Kenner and Khandekar, who were ~~both~~ leading environmental health governance projects in Philadelphia and India respectively. In response to reviewers' requests for more empirical findings from TAF, Kenner suggested that a section could focus on comparative analyses from the findings of these two projects. Kenner created a Google document with five themes that were resonant with the Philadelphia case, emailing Khandekar to see if these were relevant to the Indian context. When asked why not do this work in the platform, Kenner's response was that she wanted very quickly -- within a 48 hour period -- to generate an exchange with Khandekar and thought that Google docs would be the most efficient tool for this rapid work. Kenner, at least, is logged into and using Google's infrastructure constantly. She is not logged into and using PECE constantly in the way she does for Google. Could it be otherwise: Could she use PECE like Google? The activity could have also been staged over email, which would have been even more rapid. Google Docs would allow multiple people to have access to the exchange without it added to their inbox.

Khandekar wrote back, in the Google Doc, but not in a way that Kenner had expected: His interpretation of the five themes, and empirical writing about them in the India project, spun in directions Kenner had not anticipated. It's worth noting here that the five themes generated by Kenner did not map completely onto any of the existing TAF analytics, but were of a higher order analysis that could be derived from answers to the analytics. For example, Kenner's first theme was simply "air monitoring infrastructure"; there is no specific analytic designed for this theme, but questions across multiple analytics --- "Reading a digital infrastructure," "Data in Service," and "Legacy Hazards" --- all contain questions that could be used for description and assessment of air monitoring infrastructure in cities.

It was through this activity that Kenner noted that there was no space in PECE for this higher level data analysis between collaborators. And if there were mechanisms that could be used in this way, they were not being used. Indeed, in this example, Kenner defaulted to Google Documents, which she uses extensively on a daily basis for collaboration. At the end of this exercise with Khandekar, and later with other TAF collaborators (Reddy, Morgan, Costelloe-Kuehn, and Poirier), Kenner proposed that we build a new collaborative tool in PECE, with capacity for the kind of back-and-forth demonstrated below, as well as the possibility to ping others.

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## 6+ Cities Findings (Aalok and Ali in conversation)

Ali:

Here are five areas that I think we could write across. But making sure we use/draw on examples in TAF to talk about each. Or aiming to do so, anyway. Wednesday 6/5 I'll add a bit of text for each of these for Philadelphia.

- air monitoring infrastructure
- transportation policy
- public discourse
- interventions in housing
- social movements

Aalok:

--Development OR Environment: an apparent framing tension, especially since the bulk of our power production comes from coal. This framing is beginning to be challenged, but this is a balancing act: even among activists, there is suspicion of the West telling India that we can't pollute. But there is also the recognition that emulating the West won't do either.

Ali → This is really interesting because in the PHL context, so much of our "development" gets billed as "green" or sustainable. Development and environment go hand in hand. But we're talking about urban redevelopment here. What is a framing tension in Philadelphia is community versus development-environment. Gentrification is HUGE here, probably one of the most important issues on the ground. So a lot of low-income communities I think see that care for the environment, through urban redevelopment, gentrifies neighborhoods and displaces people of color.

Aalok→ "Redevelopment" might actually be a good frame to write around. The articles I have linked below ([here](#)) are also telling how "Redevelopment" seems to be a ruling ideology in recent years. I have pinged Rohit and Prerna about this as well. Thinking through "redevelopment" as a discursive frame will be interesting, given that we have such well developed critiques of development in place. The links above talk about how this is simply another way to privatize public resources, very much in line with the idea of gentrification, while still appealing to the larger public good. As a conceptual frame, however, "gentrification," doesn't really have the same kind of academic purchase in India as it does in North America/ Europe. Not sure why.

--Also points to the need to understand urban-rural linkages on many scales. On the one hand, urban spaces in India have been undergoing dramatic growth, fed by rural-urban migrations, given that the countryside is in economic distress. Power plants, however, are often located in rural locations, in order to support growing cities. [For example](#). In

Chennai also, Deepa's work documents how peripheral areas have been conceptualized as "industrial sacrifice zones" under modernist planning ideals. While attention to urban spaces is important, we cannot think of them in isolation.

Ali → This is yet another angle that I haven't at all thought about, the rural-urban linkages in industry and energy in particular, which is certainly a narrative in Philadelphia and PA. We have some data on this, related to natural gas, oil trains, good movement, and other things, but I haven't looked at it at all. Do we have an analytic for this?

Aalok → No analytic. Something that has come up for me very recently as well. We have known about it, of course, but its significance vis-a-vis air pollution wasn't obvious.

Ali (6/19/2019) → Yet, I remember from years past talking about transport pollution, and that being a dynamic that factored into air pollution. I'm think about Ohio Valley or Tennessee Valley coal-fired power plant pollution, and how this would impact cities upstream. I remember, in EJ movements, maybe in Appalachia, maybe in New York, that this was a reason to oppose coal power plants from afar. Historically, the discourse around acid rain was the same, how rural air pollution from energy production impacted people and ecosystems elsewhere. And finally, if I'm not mistaken, Knoxville has been known to use the "it's not us, it's them" argument when they've been flagged for air pollution. We see this most recently in [an April 2019 article](#), where the Air Quality Management Division Director pointed to the 2016 Gatlinburg wildfire as the reason for failed attainment that year. Certainly this was the case with the 2018 Camp Fire in California, and its impact on the Bay Area. In sum, there is an old transport air pollution thread that connects to legacy discourse on air pollution in social movements.

--"Implementation rather than laws/frameworks is the problem"

Ali → In Philadelphia people often say that it's a lack of capacity to regulate. There is simply not enough staff, not enough City resources to regulate air quality. But also I'm wondering about the questions of scale. In Philadelphia, attention on air pollution focus on very small scale neighborhood polluters and also the refinery in Southwest Philadelphia. But it feels to me like EJ groups are going after the small business owners rather than big industry... perhaps because its easier, but also because that's what residents complain about - the scrapyard down the street, not the refinery, which is on the other side of the city.

Aalok → If you follow a couple of links [here](#), the critique is that Environmental Impact Assessments (EIAs) are deeply flawed. And depending on whom you ask, the critique works on a spectrum of bad implementation to EIAs being inherently flawed. Of note here, equally, is also that historically bad actors have never really been penalized. Though the law allows for punitive action, this has really been invoked in practice. Malicious actors have no real disincentive to remain in check. And because the state is so in cahoots with private interests, civil society organizations have often looked at the judiciary as a way to keep them in check.

Ali (6/19/2019) → Yes, in Philadelphia too, I think the courts play a huge roll in the environmental regulation. It just seems like the system is so broken because these facilities or businesses pollute pollute pollute, then they get a citation, and it goes to

court, and it takes forever for anyone to pay the fine. Meanwhile, business as usual continues.

And what sectors are the bad actors located in? Are they government regulators? Are they in industry? I think it's interesting the way our analyses always focuses on the structure -- the limitations of the law, the lack of resources -- leaving little room for us to say, "This person isn't doing their job" or "This person is breaking the law." Are we asking too much of the system and expecting too little from actors? I wonder how Fortun & Fortun's strata framework would handle this.

--AQ isn't the most pressing concern--concerns over access to and quality of water, for example, seems to be more important. Methodologically, signals a need for "lateral arrival" to air via water. There is also a dissonance here: going by international reportage etc., the tone is generally alarmist, representations of just how bad India's AQ is have been proliferating. But that doesn't seem to translate into a significant concern on the ground, or even lead to much mobilization among CSOs (outside of Delhi, maybe).

Ali → This is one place where we "match" for lack of a better word: AQ isn't the most pressing concern, not even close. I think I can say that, across the sectors that I work in, air quality isn't the thing. It's development and housing and stormwater and the heat vulnerability index. And it's the opioid epidemic.

In Philadelphia, we don't have the international reportage that Aalok reports. What we do have are small small small neighborhood organizations, community organizers, and freelance journalists who occasionally are like, "Um, hey, what about [this refinery fire](#) yesterday..." Or are complaining about the neighborhood scrapyards or auto-shop, that is operating illegally ANYWAY but no one in the city can do anything about it... because air quality of this scale isn't the most important thing. So in Philadelphia, I would say that there are different kinds of "concern on the ground" but none of them are the most pressing issue in the city. Mobilization isn't the right word, but some actions are taken on a small, fragmented scale.

--Expertise fragmented; public participation superficial, if at all; state institutions dominate decision-making

Ali → I want to know what kind of expertise we're talking about there. AQ expertise? I think in Philadelphia I could easily say that expertise is fragmented. I think my most common experience is, sitting down with someone who works tangentially on air quality --- the director of community engagement at one of our neighborhood associations, the engineer at Clean Air Council, the faculty in the School of Public Health --- and none of them know how industrial facilities apply for air emission permits and what the public process is for questioning those applications. It's a half day job to track down how this works, and since we haven't done that yet (we'll do that tomorrow AM at Drexel) we don't even know how long it takes. Community organizers at NGOs and CDCs and journalists want to know how this works, but I would say they are an exceptional public. No "public" i.e. community member that I've interviewed has ever questioned this. Mostly there is ambivalence, apathy, and disgust with the Philly political machine.

It's unclear to me, in sum, whether it is PA state, EPA, or City of PHL who dominate decision-making regarding industrial air permits, enforcement, and penalties. It depends on the industry. Scrapyards seem to fall under the jurisdiction of License and Inspection, a city municipal agency since there are no air permits for these facilities, though they nonetheless cause major air quality problems --- semi-regular fires, dust, and fumes --- in the micro-local area.

--Health effects of pollution disavowed, have only recently begun to be the focus

Ali → Disavowed by who? Air pollution? This is something that I should look for. There is a lot of disavowal around the health effects of lead exposure in Philadelphia, amazingly. In this story, for example, [lead was found in soil samples at an athletic field](#) but PDPH suggested that, because the percentage of children with elevated blood lead levels was lower in that neighborhood than the city average, there was little cause for concern. They closed the field with “an abundance of caution.” It's an interesting way to use data and maps to dismiss public health concerns.

Actually, one of the most common citizen concern about air quality is related to construction. There is so much construction happening across the city -- much of which may be informal -- that late industrial dust is probably the most talked about pollution source in my fieldwork.

Aalok → Disavowal by state actors. Specifically, the Minister of Health at the national level, who is also a trained medical doctor ([e.g.](#)). His argument is in the face of negative international attention to India in relation to AQ, his argument turns on the lack of “Indian” data to back up the claim. The linked piece also seems to deliberately underplay the particular mechanisms through which bad AQ produces health effects and vulnerabilities.

Ali (06/19/2019) → With regard to disavowal of health impacts, [this article](#) on Philadelphia Energy Solutions (PES) most recent refinery fire mentions two kinds of air pollution related health impacts. The first is high rates of asthma and cancer in neighborhoods surrounding the refinery. The second, headaches and nausea experienced by nearby residents in the hours after the refinery fire.

It's interesting that the article opens with the statement, the fire “did not affect neighboring residents, although some contest that claim.” The default power position -- held by the refinery and others with power -- remains innocent until proven guilty. I was delighted to see that my colleague Pete DeCarlo in engineering responded by saying,

“It's absurd to say there are no offsite impacts when a plume of smoke is clearly visible extending well beyond the area of the refinery, and that's only the stuff we can see,” DeCarlo said in an email.

And I'm glad to see the DeCarlo maintained that there were impacts, without question, but that the impacts cannot be known because PES refuses to share data: They refused to release any information about what was burned and what was released. It's

interesting that DeCarlo seems convinced that they would have such data. Matt Walker of Clean Air Council also stated that neighboring residents deserved to know what they were exposed to and the quantity. There is the broad sweeping claim that the refinery impacts public health, without giving specific information about how.

Philly Thrive, the EJ movement that focuses its efforts on holding the refinery accountable, states that the refinery causes higher rates of cancer and asthma in neighboring communities.

--“Activist” judiciary (Supreme Court, National Green Tribunal) as guarding against ineffective legislators and executives → Speaks to the role of different institutional actors, while some look toward the Supreme Court in the recent past as a champion of the environment, others are critical of this mode of governance since it by-passes elected officials, due process, and generally works against the development of capacity  
Ali → In Philadelphia, we really haven’t look at all at the judicial branch of governance. There has been legal action in Philadelphia against scrapyards, for safety violations that have led to large, four-alarm fires, for example. I haven’t kept up with these legal battles, and to my knowledge, they’re not reported in The Inquirer. You kind of need to be in the know to keep track of the legal proceedings with scrapyards. I could certainly interview people to get this story. Do you have an analytic that speaks to work that happens in the courts?

→ This strikes me as an example of the reiterative process that happens through collaborative ethnography on this platform. I’m reading Aalok’s work and realizing that this isn’t something that we cover in Philadelphia. I can’t find an analytic or questions that really cover this, but I’m also not sure if I’m missing something or not entering the right words. Aalok’s line of thought, however, is going to lead me to do interviews here in Philadelphia. But I think we can also say, that the minor cases happening in Philadelphia never make it to the supreme court level, certainly not with small businesses like scrapyards...

--Data is both abundant and scarce at the same time

(Ali) The same could be said here about Philadelphia — that the data is both abundant and scarce. Land use data seems to be abundant, in Philadelphia, for example.

Numerous organizations provides maps and dockets with information, including the Philadelphia City Planning Commission. But this data is often cursory and opaque: The dimensions of a parcel and the name of an owner, for example.

The Philadelphia group has resorted to site visits and use of Google Maps satellite view to get a sense of the conditions of properties and their use.

With regard to air monitoring, Philadelphia has the apparatus required by the Clean Air Act, as well as a few additional monitors positioned around the Philadelphia Energy Solutions, which is the largest refinery on the U.S. east coast. But community members and environmental organizations say that city-wide monitors fail to capture the smaller

scale, often illegal, activity that impacts people at the scale of neighborhoods. The Clean Air Council has, for example, argued that the City's air monitoring network provides no data for neighborhoods that have the highest rates of childhood asthma.

Deepa via Aalok→ To elaborate on data abundance that is still experienced as scarcity A lot of these comments come from Shweta Narayan and maybe Nity Jayaraman, some may be in the interviews, others are just from subsequent conversations. I might have notes. There's no doubt that there's a lot of data, but the experience is nonetheless one of scarcity. Who can read the data? Who can figure out if it's clean/good/useable? Who can verify if it's been collected appropriately? It's like having the numbers in a research paper, but no methodology section. And what sense any of it makes to anyone is another story. So even if there is data, we don't know how good it is & it's not easily readable. Telling that the AQ data in Chennai is out there for any driver to see, but it's the goddamned US consulate that publishes an AQ index that actually tells me what it means and what to do with it! Two issues then: data and data quality on the one side, accessibility on the other. Both lead to the "there's no data" frustration.

My sense is that this fits with what Prerna was saying Kalapana Balakrishnan & co are saying -- there's a LOT of data, but a need to use it (?). Yeah, ok. But then when your ordinary/non-technical researcher comes to it -- what sense do you make of it? And if you can't (either because the data isn't there or verifiable or clean or readable), then you create your own (what some of these groups are doing) but that's just to get a foot in the legal door, so to speak; that's to make environmental noise and maybe just even ascertain for yourself that there's a problem you've been only just *sensing* for so long. Actual state/legal recognition of environmental problems and any hope of redressal comes from presenting trusted, recognized state source data. So you're back in an interminable loop. That's half the issue. The other half, I'd add is: what happens when the "intermediaries" and intellectuals who CAN read the data and DO publish on it -- only present at academic conferences and such like? Not speaking to other researchers, for example :D They're either so busy or hiding or being proprietary or all of the above, whatever it is they have to say about this clearly isn't getting to the right places. Expert cultures are their own firewalls.

Health data is another story -- I think Rakhal Gaitonde spoke about it a bunch. Here you need longitudinal studies which the IITs or other big institutions have to put their money and might behind, or you just don't get the right numbers and connections. So groups are after the public health--AQ connections, but they can only make these in cursory ways. Which is ok to make some media noise, but not sufficient to drive policy or the next NGT case. And they know it.

The question I wanted to raise in the call the other night, but didn't know how fully: we're used to thinking of AQ as a data-driven problem. But that's a super rationalist approach, and if that's right the right data should be compelling enough to drive significant change.

But clearly that hasn't happened. Of course what counts as the "right data" is difficult to determine (experiential data gathered by groups can have a lot of political weight, but little legal value etc.). We're still asking why "compelling" data isn't so compelling really. I do wonder what's up with that. A cultural thing? (we're not a data-driven society in thinking no matter how much we walk the walk?) A political thing? (we'd trust data if it came only from certain sources, no matter what the data actually showed?) An experiential thing? (the only data that really ever drives anything is one that speaks to experience, so it's not *just* about the data..).

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There are persistent frames, binaries, in this exchange: development versus environment, and the tension between rural and urban conditions, for example.

Stories about data are more complicated than simply that data is abundant or scarce. As Khandekar said, data is both abundant and scarce. It seems as though once you get on the ground, important differences emerge. In Philadelphia, Kenner argues that there is a clear lack of air quality data. There is little infrastructure beyond NAAQS, and in interviews,

Things that stand out to me from these exercise:

-It's not clear to me that there is a mechanism in the platform currently that executes the kind of work here.

-Writing in reference to the analytics, without using the analytics themselves.

-New ideas for analytics emerged from the conversation; but it was only because I was thinking with the analytics in mind from the start.

-Ali → I'm really struck by how this piece is about digital methodologies; using digital tools

-Lindsay → the analytics as not quite a boundary object, or a translation tool that works as a catalyst for pushing forward the conversation. How do we theorize what the analytic becomes in this case, "having a little bit of structure" helps to take the argument further.

-Alli → “The platform provides a frame for thinking about our data, but doesn't overdetermine it this in some ways an example of collaboration as method.”

Aalok → Can we set up a cross-scale prompt?

What is new about what we're learning?

Brandon → Think about the maintainers work, in response to Ali saying that, we don't always have to be doing something new, we don't need to do the paradigm.

Lindsay → Highlight the making and the doing that we have been... doing... is the new here.

Brandon

1. The part about PECE not needing to do it all, and existing in larger systems, makes me think of Abrah Dresdale's definition of regenerative (as in regenerative design) and how regen systems should connect to other systems in ways that exemplify, say, the permaculture principle of “functional interconnectedness.” A whole other paper could be analyzing PECE through the lens of the 12 primary permaculture design principles and how the design logics resonate and how each set of principles/logics can twist the other in interesting ways.
2. On Development OR Environment - see Ethan Miller's Reimagining Livelihoods: Beyond Environment, Society, and Economy (but maybe not here...)