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Control, Fear and Suppression: A political ecology of voice study into resource extraction industry-community engagement in Peru's Loreto Region

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Abstract

This article studies resource extraction industry-community engagement and meaningful participation through a focus on the ability and willingness of local citizens to report environmental pollution incidents. This is conducted through the political ecology of voice (PEV) theoretical framework which comprises investigation into economic, political, social and geographical factors over an explicit period and their impact on different actors' voices. The case-study was centred around Peru's Loreto Region, the state-run oil company Petroperu and the interview testimonies of two communities affected by Petroperu pollution incidents. This PEV study finds that the community relationships are strictly controlled by Petroperu who, wherever possible, avoid citizen dialogue and engagement which raises significant difficulties for citizens wishing to report environmental contamination events. However, through deliberate threats to their provision of important community economic and development opportunities, Petroperu generated a climate of fear which sought to silence the willingness of citizens to report contamination events or the company's poor and abusive post-spill response. This suppression of voice was only overcome through the actions of strong, independent citizens, and the accessibility to exterior community-based organisations. However, the latter's involvement does not always outweigh the powerful influence which companies like Petroperu wield over citizens and their voice.

Key words: extractive industries; indigenous peoples; oil pollution; political ecology of voice; meaningful participation

1. Introduction: Exploring Oil Company Dialogue and Engagement with Stakeholders through the Political Ecology of Voice (PEV) Lens

Natural resource extraction lead to interactions between local communities on the one hand and resource extraction industries (REIs) on the other. Studies have explored the wider 'living environment' surrounding extraction sites (Rodrigues 2017), extractive industry-community relations (Owen and Kemp 2014) and how these companies can withhold and control citizen accessibility to state and non-state decision making mechanisms (Himley 2008). In the 20th century, these companies acted in an infrastructural and engagement capacity like 'enclaves' (Phelps et al. 2015) or 'gated communities' whose accessibility was 'rigorously controlled' (Rossi and Vanolo 2012 p. 115).

Since the 1990s, corporate scandals and pressure from NGO actors and social movements have transformed the operational environment of extractive industries (Gonzalez 2016 p. 514). A significant change has been the implementation of corporate social responsibility (CSR) initiatives which are designed to tackle social issues, though questions have been raised about CSR effectiveness (ibid.). Efforts have also been made to develop more ‘meaningful’ community engagement in the extractive industries, a term that has started to appear in different extractive industry international standards (Wilson et al. 2016). The Organisation for Economic Co-operation and Development (OECD) has defined this kind of engagement as ‘ongoing engagement with stakeholders that is two-way [sharing opinions and perspectives], conducted in good faith [active and honest participation to find common ground] and responsive [companies appropriately addressing adverse impacts through remedial action]’ (OECD 2015 p. 9).

This study explores the reality of ‘meaningful participation.’ It will investigate oil company-community engagement, specifically industry accessibility for local people and their impact upon peoples’ ability and willingness to report environmental pollution incidents. It utilises the political ecology of voice (PEV) theoretical framework set out within a 2015 paper (Gonzalez 2015). PEV has integrated the political ecology framework, an interdisciplinary approach which refers to the politics and the ‘relations of power’ surrounding environmental problems (Robbins 2004 p. 12) with Albert Hirschman’s voice theory. In a 1970 book, Hirschman described two consumer actions they could take in response to unsatisfactory situations stemming from economic actors. The first, exit (i.e. consumers stop buying a firm’s products) is normally a silent, private decision and activity (Hirschman 1995 p. 34). The second is voice, described as a public, messy action (due to the different levels that encompass it, i.e. from faint grumbling up to violent protest) that can be used individually or collectively (Hirschman 1970 p. 16). It’s predominantly considered an active action, although it can occur passively, e.g. muted remarks (Zuindeau 2009 p. 154) through horizontal and vertical scenarios (talking with one’s peers and discussions with higher level actors, respectively) (O’Donnell 1986). In situations affecting public happiness, like an automobile safety problem, food hazard (Hirschman 1981 p. 217) or, as PEV argues, an environmental issue, ‘one can understand voice as an active expression of protest against a disagreeable issue’ (Gonzalez 2018 p. 650).

PEV is ‘the study of a specific temporal, economic, political, social and geographical environment in which various stakeholders (e.g. citizens, community-based organisations (CBOs) and non-governmental organisations (NGOs) utilise their voice over an environmental issue’ (Gonzalez 2015 p. 466). This 2015 paper summarises the contextual influences surrounding stakeholder voice application and their amalgamation with four themes within political ecology (space, power, scale and time) (ibid.). The focus is on citizen use of orthodox formal voice ‘defined as legal or socially acceptable forms of non-violent voice action in horizontal/vertical situations, for example, electoral voting, petitions, discussions, debates, lectures’ (Gonzalez 2018 p. 650). Here, formal voice is explored through citizen-oil company dialogue and the feasibility of citizens to report an environmental pollution issue, an indicator of whether meaningful community engagement and responsiveness to addressing adverse issues is occurring.

PEV offers several advantages over other theoretical approaches when studying firm-community relations. For example, the generalised nature of participatory governance necessitates further placement ‘within the contours of place-based institutional and environmental histories’ as ‘institutional factors shape outcomes and these vary across a wide spectrum’ (Bixler et al. 2015 p. 177). PEV research incorporates the study of macro influences, such as political freedom and societal discrimination (see Gonzalez 2018) as well as localised factors that include the power relationships between different actors. PEV’s stronger theoretical approach can connect and examine these influences and their impact on participation.

PEV’s contextual specificity, in this case exploring firm-community relations, is also invaluable. Judging the social and environmental performances of all oil companies in the same way fails to consider their different individual operating styles and incorporation of environmental and social safeguards (Vasquez 2014 pp. 123-124). Therefore, the REI *type* can impact upon citizen voice, something which PEV has accommodated through a ‘typology of REIs’ (Gonzalez 2015 p. 475) to help increase the accuracy of the findings and prevent conclusions being generalised across the entire extractive industry. Here, the focus is on state-run Petroperu, defined as a ‘state controlled national resource extraction industry’ (SCNREI) (Gonzalez 2017 p. 78).¹

2. Methodology

2.1 Study region and study sites

In 2015, four months’ fieldwork was conducted in Peru’s Loreto Region (Figure 1). The discovery of significant oil reserves here by Petroperu in the 1970s coupled with the decline of north-west oil field production in the Piura Region have meant that Loreto has been integral to onshore oil operations (Philip 1984 p. 4). Loreto now houses Peru’s largest proven onshore oil reserves (1.4 billion barrels) (The Oil & Gas Year, n.d.) predominantly within Blocks 8 and 192 (formerly Block 1AB).

In Loreto, Petroperu’s infrastructural presence is extensive. In Iquitos, Loreto’s regional capital, Petroperu has a fuel supply plant which is connected to a refinery located 14 kilometres downriver in the village of Barrio Florido (Petroperu, n.d.a). It runs two connected pipelines: the North Peruvian and Ramal Norte. The first, with a total length of 854 kilometres runs from Station 1 at San José de Saramuro (Urarinas District, Loreto Province) to Station 5 (Borja, Manseriche District, Datem Del Marañón Province) where it joins the second pipeline, a 252-kilometre extension which transports crude oil from the Andoas oilfield area before continuing to the coast (Petroperu, n.d.b). These pipelines are a huge source of social and environmental damage due to their age and poor maintenance, evident in photograph 2.1. In 2016, the North Peruvian pipeline caused seven spills in Loreto and neighbouring regions,

¹ The acronym differs slightly from the published version (Gonzalez 2015 p. 477) to make clear that states can enter partnership with other actors but retain a controlling stake.

spilling an estimated 10,000 barrels of oil (Law in Action, n.d.).

Indigenous protests have forced the government to sign several negotiated agreements (2006 Dorissa Accords, 2011 Pastaza Accord, 2012 Accord of Topal, 2016 Saramurillo Accord) surrounding REI practices, for remediation and development and to formally recognise Loreto's environmental damage through the declaration of environmental emergencies in the Corrientes, Pastaza, Tigre and Marañón River Basins (Lu 2016 pp. 86-110; Peru Support Group 2018). However, remediation and development plans have not been implemented, which continue to fuel indigenous protests (Peru Support Group 2018).

Figure 1 Loreto Region and Petroperu oil installations



Key:

International boundary
Roads
Major rivers
Cuninico
Barrio Florido, including the site of the Petroperu refinery
North Peruvian oil pipeline
Northern Ramal pipeline
North Peruvian pipeline, Station 1, Jan José de Saramuro
Northern Ramal pipeline, Station Andoas
Northern Ramal pipeline, Station Morana
North Peruvian pipeline, Station 5 Borja

This paper focuses on two Petroperu oil communities affected by pollution. The first, Barrio Florido, approximately an 800-person non-indigenous community situated adjacent to the Amazon River and the Iquitos Petroperu refinery in the Puchana District, Maynas Province (Latitude: -3.64056, Longitude: -73.21583). Residents reported two pollution incidents in 2009 and 2011 in which small oil quantities spilt into the Ramirez River (a creek between the village and the refinery that feeds into the Amazon River) due to heavy rain (2009) and leaks from storage tanks connected to the refinery's storm drain system (2011).

Cuninico, the second village, is a 450-500 Cocama (or Kokáma) indigenous community situated on the Marañón River, Urarinas District, Loreto Province (Latitude: -4.81667, Longitude: -75.16667). In June 2014, they were affected by a 2,000-barrel spill from the North Peruvian pipeline, which flooded into its dredged flotation channels that flows into the Cuninico River, which in turn feeds into the Marañón River before feeding the Amazon River (Segovia 2014 p. 1; photograph 2.1).

2.2 Methodology

Data were obtained through a multi-method qualitative approach incorporating semi-structured interviews (SSIs) and micro geography analysis (Elwood and Martin 2000). The SSIs were conducted with Loreton citizens to evaluate the ability and willingness of citizens to report environmental issues. After participant consent, each interview was audio recorded, anonymised and conducted through a paid local interpreter. Interview questions were based upon a pre-fieldwork interview guide tested through pilot interviews and modified throughout fieldwork via contact summary sheets. Each participant was given a coded category based upon their broad professional occupation, ethnicity, geographical location and the number of the organisation and interviewee (*n*) (Appendix A). It's clear that fieldwork was undertaken with only one indigenous Loreton ethnic community. Other communities' histories, cultures and experiences of oil exploitation are different, so this one study does not "speak" for all Loreton

indigenous communities.

Initial contact was made with potential participants and case-study community gatekeepers, all found through a Google internet search. These were three NGOs (E-Tech International (NGO1R1), The Peru Mission (NGO2R1) and Alianza Arkana) and an indigenous environmental watch-dog CBO (Red Ambiental Loretana), all (except NGO1R1) based in Iquitos. Further interviews were found through the snowballing effect. Unfortunately, gatekeeper oil industry contacts did not translate into interviews with Petroperu or wider oil industry employees, which has left oil industry voices absent. Overall, 110 interviews were conducted with 105 interviewees from the stakeholder groups and other citizens of interest, but only interviewees directly cited about company-community relations are included (Appendix A).²

Transcripts were produced by paid UK translators and analysed through QSR Nvivo 10 software in which data was coded via a series of concepts, categories and propositions (typologies) through a weak form of inductive or conventional content analysis (Patton 1987 p. 150; Taylor and Bogdan 1998 pp. 144-146). Inductive analysis was joined with analyst-based typologies and indigenous typologies (Patton 1987 pp. 150, 152) so that participant voices were “heard” and utilised in a way that did not alter their voice. Poignant and powerful phrases have been written in Spanish accompanied by a bracketed English translation to connect more strongly with the original participant’s voice and Peruvian fieldwork context. To assist coding, a loose PEV theoretical framework storyline was established.

3. The Feasibility of Citizen Engagement with Petroperu and their Willingness to Voice

To fully understand Petroperu’s community relations, one must outline the wider PEV contextual environment in which they operate. There are two aspects to consider. The first is Peru’s political (or state) environment, which means assessing the freedom of voice incorporating societal legal rights and possibility for this action. The second is Peru’s state-community relationships, which entails examining the formers institutional presence and interaction with these communities.

In relation to Peru’s political environment, its consolidation of democracy and adherence to regional and international mechanisms and laws does bestow civil rights on its citizens and strengthens their legal freedom of voice. Even so, there are issues in implementation (governance) due to weak state mechanisms and regulation. Crucially, a contextual focus onto the PEV political environment surrounding hydrocarbon development finds a far more restrictive, suppressive setting for impacted stakeholders to voice. This is due to ‘the state’s aggressive hydrocarbon and wider development agenda ... categorised as a “*selva* [rainforest] hydrocarbon and development vision” (SHDV)’ (Gonzalez 2018 p. 657). This seeks to implement widespread Loreton oil exploitation at the deliberate expense and

² The Peru Mission representative had three interviews labelled – a, b and c – with a similar categorisation used for NGO ProNaturaleza representative 2 (NGO4R2) and Catholic Church interviewee 1 (CBO4R1).

dispossession of its indigenous peoples whose own power (and thus occupation) and use of this space is weaker than other actors like the state and extractive industries (Bury 2005; Acuna 2014 p. 85; Cuba et al. 2014 p. 250).

Peru's indigenous people remain excluded and discriminated against in a form of historic 'silent racism' (de la Cadena 2001), which is entrenched in the country's social and political structure. Therefore, one finds a highly racialised character to development thinking (Drinot 2006 p. 15) in which indigenous people and their ontologies are deliberately marginalised and viewed as inferior to the liberal extractive governance framework (Acuna 2014). They are an obstacle to the SHDV despite the important lessons that their values on public wealth, well-being and good life can teach post-industrial societies (Santo-Granero 2015). Consequently, though the Peruvian state recognises the need for improved citizen (notably indigenous) participation, their ability to voice remains curtailed by limited consultation mechanisms which do not give people the opportunity to provide informed consent to development (Gonzalez 2018).

The Peruvian state's SHDV and discrimination has impacted upon its rural Loreto community relationships. Interviewees made clear that the state is heavily centralised on Iquitos with an 'almost negligible' (NGO2R1b), 'invisible' (IJ1; NGO1R1) presence in Loreto's smaller villages. This is evident in both case study communities, which are in a state of socio-economic decay, lacking access to clean water, electricity, ICT capabilities and state services such as legal functionaries or secondary school facilities. The state is not "present" within these communities, which makes citizen efforts to connect with the government through orthodox formal voicing methods difficult. Moreover, the absence of roads and reliance on limited, privately-run river transport means that these rural, impoverished citizens struggle to "reach" the state in Iquitos, further reducing their ability to voice.

Simultaneously, discrimination, political disinterest and an urban socio-spatial divorce from rurally located indigenous citizens results in highly infrequent contact between state representatives and *selva* communities. This leaves both case study villages operating beyond the state political system and necessitates them becoming reliant on their own informal systems of voluntary governance. This state disengagement from rural communities filters into their regulation of oil companies. A government interviewee confirmed that Peru's environmental impact assessments (EIAs) have no specific regulation surrounding the level of company-community dialogue (NSI2R1) which for Petroperu, an SCNREI, reinforces the state's wider *selva* political and civil detachment.

These state-community relationships create an environment where citizen orthodox formal voicing to the state is difficult and mutually reinforced by their informal governance systems and where their relationship with REIs is left undetermined. Broad-based citizen-state participation is impossible, and, due to the SDHV, actively discouraged. It is in this light that the next two sections will show that Petroperu is not using meaningful engagement and is instead deliberately controlling, through fear and repression, local citizen voice.

3.1 Cuninico's Accessibility to Petroperu

'Petroperu doesn't want to talk to us' (IRC22, a Cuninico housewife).

Prior to the 2014 oil spill, interviewees confirmed that Petroperu had never visited Cuninico. 'They've never been friendly with us. Never.' (IRC3), stated an interviewee, which lead to a relationship described as 'contradictory' and 'not in balance' (IRC17). This is surprising given that Petroperu's Station 1 pipeline is located only three hours by fast vessel (see Figure 1). Consequently, whilst Petroperu has geographically close personnel, this has not improved local people's accessibility.

This dialogue absence has major repercussions in crisis situations. One farmer described how inhabitants were left not knowing 'what ... the proper process for us [is] to follow.' The Cocama were uncertain who to ring because they weren't sure which company was responsible for the pipeline. However, even with this knowledge, they lacked a Petroperu telephone number and only found one by chance after looking in school books donated by the REI and distributed by the education institution, which put them through to the Talara refinery.

One can see that the feasibility of Cuninico citizens voicing to Petroperu over environmental pollutions was non-existent. Were it not for the spill, it is probable that the lack of contact would have continued. Petroperu therefore had no interest in providing Cuninico with meaningful engagement. Furthermore, it becomes clear from their estimated six-month stay in Cuninico that this was deliberate and built on a wider platform of discrimination.

Petroperu post-spill engagement with Cuninico

'[E]llas eran unas personas que no sabian sentir por otras personas' (They seemed like people who didn't know how to feel anything for others) (IRC5 discussing Petroperu engineers).

Petroperu employees, arriving on the day of the telephone call (30th June 2014) failed to apologise for the spill, and were angry and 'direct in [their] treatment' (IRC8), even willing to go as far as to blame villages for the spill. Roughly 25 oil workers rented village properties and once established, proceeded to minimise their interaction.

A young male topographer wished that Petroperu had 'held a general assembly' so that they would inform the community about 'what the problem is and what it'll cause' (IRC18). Instead, they communicated solely with Cuninico's volunteer authorities, the *Apu* and his deputy, thereby helping to deflect wider critical questions towards the community leaders

The two community *asambleas* (public meeting) that five interviewees mention only occurred due to residents' protestation and extreme action. In the latter case, Petroperu engineers were locked in the *Apu's* house as they were leaving Cuninico in December 2014. All other instances of invited attendance at *asambleas* were refused, showing that dialogue was

strictly restricted.

Cuninico's access to information was negligible. Residents confirm that Petroperu refused to provide them with information on the spill size or implemented security measures, water quality results, a remediation report, how the spill could affect residents e.g. bathing in certain areas or consuming certain food, any idea of 'when it will get better' (IRC6) or the diagnosis and treatment of sick oil laborers.

There were also conscious efforts to misinform Cuninico. One resident recalled that engineers announced it would take only 15 days to clean and resolve the spill whilst the *Apu* was informed that it was 'mild' and that oily water near Cuninico was 'vegetable oil' (IRC2). At the second *asamblea*, residents reported that Petroperu personnel were angry with residents and denied that there was any contamination of water or fish which could be drunk and consumed safely. During my fieldwork, I visited three oil spill sites on the Cuninico River situated between 20 and 45 minutes upriver from the village (see Photograph 3.1). This pollution, present 11 months after the spill, shows that villagers were right to question 'what's safe and what's not here' (IRC7).

Despite the legal requirement for Petroperu to provide clean drinking water until it is declared safe to not do so (Ministry of Health of Peru (MINSA) 2015 p. 3), they provided only limited provisions for five months (August – December 2014). This compelled the Cocama to eat contaminated fish 'out of necessity' (IRC7) and drink boiled rain or river water, an issue still affecting villagers in 2016 (Fraser 2016).

However, Petroperu's employment of 150 predominantly male Cuninico citizens as emergency remediation workers for roughly four months reveals the true extent of the SCNREIs discrimination and abuse.³ Cuninico and other community residents were split into work groups numbering roughly 100 people tasked with fixing the pipeline and environmental remediation. Though the work incorporated manual and heavy labour, they were not given any initial training or protective clothing, and almost no equipment.

These workers' experiences, particularly those locating the pipeline break, were harrowing, visible in photographs 3.1.3 and 3.1.4. A community leader watched citizens, 'under the instruction of engineers,' go into the channel

without protection ... wading into the oil. Because it was crude oil ... it was twice as thick. That's what you need to imagine, that they were working right in it, trying to find out where the break was, because it was underwater, it was about three metres deep. So ... to find the break ... they dived until they found it and raised it up, and they were all completely exhausted, but they patched it up (IRC2).

³ A further 350 indigenous citizens from other local communities (San Antonia, Esperanza) were also employed but only 12 were women.

A Cuninico lady saw her husband return from the oil site ‘really black, you could only see his teeth and his eyes, nothing else’ (IRC24).

Others were given ‘very simple gear’ (IRC25), including a helmet, long-sleeved shirts, trousers, boots and gloves, which can be seen in photograph 3.1.5. Those clearing oil scooped it into buckets and used a funnel to pour it into cylinders, a process that spilt it onto their bodies whilst the gloves would ‘break ... with the heat from the oil’ (IRC20). Photograph 3.1.6 shows citizens showering and cleaning themselves with significant quantities of Petroperu-provided gasoline and moisturiser. The hours were long, with residents roughly leaving Cuninico between 3 and 6 a.m. and returning between 6 and 8 p.m. or working at night from 5 p.m. to 2 a.m., resting only to eat limited provisions.

Most damning was the employment of four indigenous children,⁴ an action which explicitly contravenes Article 32 of the Convention of the Rights of the Child, which Peru has signed. One of these, IRC25 (who was 15 at the time), stated that the contractor knew he was under-age when he provided them with his yellow DNI national identity card for minors. He went on to explain that, initially, he worked gathering rubbish but was soon ‘working with the oil, getting it out of the water’ sinking ‘my body up to the waist’ without any protection (ibid.). Despite their employment ending with the arrival of journalists, it continued in a clandestine fashion for several months afterwards.

According to Cuninico residents, they worked at the site for almost a month without any protective clothing, which caused major health impacts. Workers suffered headaches and bronchitis, burns, rashes, allergic reactions and boils, numbness and weakness in their bodies, sore and locked joints, stomach problems, breathing difficulties, fevers and pain and blood from urinating. As one former oil worker lamented ‘*para que trabajar para la recuperacion de esta compania de la muerte*’ (why work on the recovery with this company of death?) (IRC8). The provision of thin white protective overalls seen in photograph 3.1.7 proved to be inadequate protection and routinely ripped.

Discrimination is rife. If Petroperu could arrive with ‘barriers’ (IRC2; see photograph 3.1.2) and specialist pumping equipment 15 days later, why did they also not have adequate protective equipment? Furthermore, indigenous people were given the most dangerous and challenging task of locating the pipeline break without any training, protection or equipment. As IRC13 noted, ‘they just waited for us to do the toughest job’ before lifting the fixed pipeline into place themselves.

Since leaving Cuninico in December 2014, Petroperu have failed to communicate with the whole community despite citizens trying to get in touch. Instead, Cuninico’s only contact occurs through the *Apu*, who visits the Station 1 pipeline office. Whilst the community leader suggests the meetings signal that Petroperu is thinking about the geographical distance involved, they remain in control, continuing their ‘difficult’ communication, something ‘we

⁴ IRC25’s mother stated that two children were aged 16 and 17, respectively, and two others were aged 15 (IRC23).

don't understand, we don't know why they don't come to coordinate with us' (IRC2).

3.2 Barrio Florido's Accessibility to Petroperu

In Barrio Florido, an appraisal would suggest that their situation is radically different: 'We have a friendly relationship' (MRBF6) due to there being 'more communication here' (MRBF4) and the ability to be 'hand to hand with Petroperu' (MRBF7), which can be seen in their close geographical proximity, the refinery's important electricity provision and jobs for residents.⁵ However, a more cautious evaluation of citizen interaction is needed.

In periods like 2015 when '*las aguas estan calmas*' (waters are calm) (MRBF13), Petroperu maintains an infrequent, controlled cordiality with Barrio Florido. Interaction with the refinery 'isn't very often, it has its moments' (MRBF15). Petroperu seeks to only infrequently liaise with the three volunteer authorities concerning their cultivation work.⁶ These authority-based, refinery-located exchanges are controlled by Petroperu, who require an appointment made through a formal written letter delivered by a volunteer official.

However, larger community meetings and wider engagement do happen. Petroperu visits roughly four times a year by *inviting* residents to events. During the summer holidays, they run sports activities and a football competition for children. In April, they deliver school supplies, whilst September sees another football competition called the 'Poleoducto Cup,' a pipeline community tournament. In October, they hold community games and prizes, and in December they visit for Christmas, bringing toys and holding a *chocolatada* (a chocolate based social event). The annual flooding of Barrio Florido sees Petroperu staff visiting to make donations and provide support like groceries.

Other non-specific calendar engagements also take place. Health support is provided, e.g. when medical emergencies occur, residents are seen in the refinery and taken to Iquitos while medical staff accompany Petroperu employees to the village to provide medicine for children for flu, parasites and diarrhoea. Barrio Florido is also supplied with water for their reservoir tank, transported from the refinery every week in big containers by canoe.

One must acknowledge that Barrio Florido 'is in a better position than other villages' (MRBF3). However, '*apenas lo que ellos quieren, no lo que el pueblo quiere*' (they provide what they want, not what the town wants) (MRBF14), indicating that their power in these interactions is absolute. This allows Petroperu to 'promise things and then ... never do anything' (MRBF6). For instance, residents spoke about their request for an increased water supply, something which the refinery offered and then failed to implement.

⁵ Every few months, Petroperu pays Barrio Florido approximately 4,000-6,000 soles for pipeline maintenance by cutting away vegetation. This work is also converted into electrical consumption explicitly laid out in a 'covenant' signed between volunteer officials and the refinery, which commenced six years after its establishment in 1982 (Petroperu n.d.b). The refinery is also the main employer (an estimated 90 per cent of citizens work there), usually taking the form of short-term temporary (elementary occupation) contracts.

⁶ These are a Judge, Agent and *Teniente* (Lieutenant).

Part of this situation is attributable to the significant impact from the change in refinery manager every year or two. Some managers were proactive, willing to have village meetings and establish ‘a fluid relationship,’ but others such as the one during 2015 fieldwork were ‘quiet’ and unwilling to ‘reach out here so often’ so that residents ‘barely saw him’ (MRBF3). ‘This one is a little rebellious, as the authorities say’ and wasn’t friendly (MRBF25).

Though the impact of the refinery manager leaves their interaction in a state of flux, overall engagement is infrequent, and whilst cordial friendly relations ‘have [been] fought for’ by the volunteer authorities (MRBF6), they are strictly controlled by Petroperu. An extension of their power can be seen in their cheap ‘symbolic support’ (MRBF11) and again, despite the elected authorities fighting for it, it is Petroperu *not* Barrio Florido which decides this.

4. The Suppression of Citizen Voice

The case studies show that Petroperu’s *selva* operations are a reactionary ‘sticking plaster’ approach (NGO2R1b). There is not an ongoing style of communication, seen especially in Cuninico where they ‘distanced themselves from the community’ (IRC8) and left them without any knowledge or accessibility to voice. In Barrio Florido, their geographical proximity and economic ties calls for some form of exchange, but the relationship remains controlled by the SCNREI, who internalise dialogue through the volunteer authorities.

One can see a deliberate effort to ‘decouple’ (Meyer and Rowan 1977; Backer 2007 pp. 33-34) their relationship from *selva* inhabitants and minimise interaction. However, further analysis shows that the SCNREI also establishes a climate of fear which seeks to minimise the possibility of citizens reporting environmental issues and thus avoid performance quality improvements (Hirschman 1981 p. 241).

4.1 Cuninico

‘[H]e said you know this is a private company and they would never want information to filter outside, the things they do’ (Cuninico emergency worker IRC13 recounting a conversation with a Petroperu engineer).

Petroperu was intent on suppressing citizen voice through their offer of remediation employment. According to Cuninico’s Catholic priest, they sought to ‘negotiate silently with ... [the village] without anyone’s knowledge’ to conclude a deal to ‘hide everything’ (CBO4R3), clean the spill quickly and thus silence their potential vocal engagement with the state.

Petroperu embarked upon silent ‘little secret meetings’ (IRC8) with the volunteer authorities who were shut off by themselves rather than with the rest of the community. This led to an agreement that included job provision in exchange for their silence, reinforced through

a climate of fear. Residents were told that ‘if you speak out against us [Petroperu], there won’t be any work at all’” (IRC7) which, given their economic poverty meant that this threat was taken ‘seriously’ and left them, as Petroperu hoped, feeling ‘scared’ ‘afraid to talk ... [and] silent [with] ... only three or four people ... who spoke up and defended the village’ (IRC7).

This economic suppression continued for the remediation workers. Resident laborers were warned not to criticise Petroperu, otherwise they would lose their job. The threats became reality: IRC13 was fired for questioning Petroperu about the spill, their remediation methods and for secretly overhearing an oil camp meeting between Petroperu and state representatives, which none of Cuninico’s volunteer authorities could attend. Unsurprisingly, residents were ‘throwing themselves at this work’ (IRC7) and were being forced to complete tasks they were hesitant about; the female worker group were threatened with dismissal unless they helped remove oil from the flotation channel without protective clothing.

This economic voice suppression also ran parallel to a range of unfulfilled development promises made to community members in exchange for their silence. Interviewees spoke about Petroperu promising to ‘send us everything’ like ‘food for a year’ (IRC5), the provision of a generator so ‘you don’t talk’ (IRC15), a staffed medical post and a water tank. Other residents don’t recall these promises being made, suggesting that Petroperu were making individual verbal commitments to generate a web of falsehoods that would suppress any immediate community protestation. Indeed, upon asking one fisherman why Cuninico hadn’t staged a protest over the pollution or attempted government contact, their reply highlights the initial success Petroperu had:

Because we thought that Petroperu was going to cooperate and keep their promises to us, because they told us “we’re going to help you with whatever you want, so don’t protest. We’re going to keep our word to you.” So.... that’s why we didn’t do anything earlier (IRC3).

4.2 Barrio Florido

Here there are instances, notably the electricity agreement or pollution issues, which cause Barrio Florido to protest and test Petroperu’s dialogue control. Nevertheless, the SCNREIs power and village’s economic dependency enables it to try and suppress, diffuse and disperse instances of citizen protestation, again generated by creating a climate of fear and internalising debate away from any state involvement.

On a fieldwork visit, one female resident I approached for an interview declined to take part upon learning what it was about. MRBF13 felt this happened because ‘everyone is afraid ... [as] they all depend on the refinery.’ Some residents suggested a reluctance to openly voice due to the ‘essential’ electrical provision (MRBF15) and the threat from Petroperu to ‘take away the electricity’ (MRBF25). Though these ‘rumours’ ignored the long-running covenant (MRBF12), they would be useful in making citizens fearful of criticising Petroperu. Testimonies also spoke about refinery workers’ reluctance to criticise Petroperu because they

would lose their jobs.

Others believed that their volunteer authorities were also caught up in this economic suppression which, given their important dialogue role with the refinery, is highly crucial. Volunteer authorities working at the refinery were threatened with job losses or bribed, which helped suppress their willingness to voice by keeping them ‘quiet’ (MRBF24; MRBF29) or ‘asleep’ in their jobs (MRBF6), reducing the threat of radical voice action being taken (e.g. protests) (see Gonzalez 2015 pp. 477-478) and making them obedient to the refinery manager. The root cause of this situation is Barrio Florido’s economic dependency, which means that the election of impartial volunteer authorities is all but ‘impossible’ (MRBF12). Consequently, when pollution events or other issues occur, they don’t ‘do anything’ (MRBF6).

Yet these job losses would appear to be based on fears and rumours rather than fact. No interviewees could name citizens who had lost their job. Are these rumours spread by Petroperu, or are residents concerned that the vocal actions of others may cause them to be fired? The source(s) will never be substantiated but this misses the point: for Petroperu, they are a useful economic threat to suppress protestation. As one young manual refinery labourer noted, there was no need for Petroperu to ‘say anything to us’ as we ‘know that if we complain or say something [pause] they’ll just fire us’ (MRBF16). Words do not need to be expressed; the climate of fear which envelops Barrio Florido provides the necessary deterrent.

5. Breaking the stranglehold of voice protest

However, the climate of fear was successfully punctuated by the strength of individual citizens undaunted by Petroperu’s repression, meaning that they ultimately failed to silence each community. In Barrio Florido’s 2009 pollution incident, a commission of 20 residents was formed, but people were reluctant to report the spill due to the threat of job losses (MRBF13). This left this interviewee without conventional (i.e. volunteer authority) dialogue accessibility to Petroperu and forced her and another resident to ring the radio. Why were they willing to break Petroperu’s stranglehold on their voice? There are several reasons behind this.

Firstly, Petroperu’s economic pressure does not impact all residents as neither MRBF13 nor her family were refinery employed and were thus unaffected by any possible employment loss. Secondly, Barrio Florido’s climate of fear is not a continuous cycle. MRBF13 felt that whilst people had previously feared job losses, ‘right now it seems that people aren’t that afraid,’ illustrated through an unknown resident’s 2011 phone call to the radio to report pollution. Thirdly, the newfound optimism may also be based on recent volunteer authorities. The volunteer judge (MRBF6) also worked at the refinery but refuted that he could be bought or have his voice silenced. His strength of character, aided by a family relative acting as *Teniente* allowed them to ‘fight’ and not ‘just stand there and not do anything about it [i.e. issues]. We will listen to what they [Petroperu] say, but then we’ll do what’s necessary.’ Nevertheless, the annual volunteer authority electoral cycle means that staunch leaders won’t always be elected.

In Cuninico, strong, resolute citizens were also key. IRC3, an organiser for the Catholic Church in Cuninico, had considerable influence over the decision to repeatedly contact this institution for help (CBO4R3). In his role as an ‘animator’ (IRC29), he requested their support for Cuninico’s situation was instrumental in their Catholic Church alliance, specifically, the Commission for Justice and Peace – Human Rights of the Vicariate of Iquitos. Moreover, despite Petroperu’s efforts, one elderly resident concluded that the ‘the *Apu* cannot sell himself’ not only because he has grown up in Cuninico but because ‘[h]e’s very much a stand-up guy’ (IRC9), a phrase taken to mean honourable, moral and principled. This was a leader who was willing to ‘[fight] for the people’ (ibid.) and not be silenced through bribery or intimidation. This strong leadership and Catholic Church connection meant that an almost unanimous decision⁷ was taken to seek out this actor’s support, thereby breaking Petroperu’s stranglehold on Cuninico’s voice.

At first glance, this focus on individual agency would appear to be a distinctly unpolitical ecological. However, it is precisely because of Peru’s wider PEV political environment and weak state-community relationships in Loreto (the study of which is key for political ecologists) that broad-based meaningful citizen participation cannot occur. Political ecology aims to represent the ‘ever-changing dynamic tension between ecological and human change, and between diverse groups within society at scales from the local individual to the earth as a whole’ (Peterson 2000 p. 324). Thus, one finds that the actions of resilient, local individuals can point to wider political-institutional issues and ever-changing dynamic tensions, which the PEV framework can highlight.

The situation for these Loreton communities makes CBO and NGO actor support extremely critical. The Catholic Church Loreton Human Rights Commission and its partner organisations (the Institute of Legal Defence (IDL) and the Regional Organisation of Indigenous Peoples of the Northern Amazon of Peru (ORPIAN)) have sought to hold Petroperu responsible for the Cuninico spill and their mistreatment of the community (Peru Support Group 2016). Nevertheless, a Catholic Church priest, whose parish covers Marañón River Basin communities, provides an illustration of San José de Saramuro:

San José de Saramuro [adjacent to pipeline Station 1] [where] people value the possibility of having a job at the oil [site], and that is above any other claim. When the spill in Cuninico took place, one week before that, there was a spill in San José de Saramuro. Does somebody know about [this spill]? No Why [do] people know about Cuninico? Well ... because they requested our help ... but San José de Saramuro, which is also part of the parish ... didn’t want anything (CBO4R3).

Therefore, even CBO/NGO community involvement is not always enough to induce initial citizen voice and outweigh company power to shape local community reactions.

⁷ IRC19 noted that only a handful (two to four) inhabitants who worked for Petroperu (what capacity isn’t clear) were reluctant to forge a Catholic Church connection for fear of what it might lead to.

6. Conclusion: Suppression and empowerment

Three important points can be concluded. Firstly, Petroperu's power means that meaningful community engagement, understood as a two-way process conducted in good faith and responsive, is not occurring (OECE 2015 p. 9). Though Petroperu has a moral 'obligation' (IRC2) to coordinate with oil communities, citizens cannot *force* it to do so, as the EIAs show. Petroperu's position is further strengthened by chronic state *selva* under-development, which leaves oil companies adopting states duties such as basic service provision (which aren't their 'responsibility' (IUA2) or 'obligation' (RGR1)) in exchange for local community operational consent. These bargaining exchanges, with 'little government involvement' (Vasquez 2014 p. 65) reinforce community oil company dependency and client-patron relationships. The potential loss of these '*special favours*' (Hirschman 1981 p. 241 author emphasis) allows Petroperu to create a climate of fear so that citizen protest voice is suppressed. Though one cannot know precisely how many communities have been silenced, their weaker power and oil company dependency means that citizens will struggle to report and hold oil companies responsible for pollution.

This climate of fear can be broken by strong resolute citizens and/or community connections to exterior CBO/NGO actors who can help strengthen their REI engagement. However, San José de Saramuro indicates that their involvement isn't always enough to empower citizens. Therefore, despite voice having an 'occasional edge' over exit in situations which affect public happiness (Hirschman 1981 p. 217) like the environment, the strong motivation to defend one's quality of life (Hirschman 1970 p. 53) can be outweighed, in some instances, by the power that business actors can wield in their relationships with local citizens.

Secondly, the absence of orthodox formal voice accessibility raises the prospect of citizens taking other types of voice action. The high number of Peruvian social conflicts, 70 percent of which are socio-environmental in nature (CooperAcción et al. 2016 p. 16), show that radical voice actions are prevalent. There are myriad reasons for this including people's powerful incentive to defend their local quality of life (Hirschman 1970 p. 53) alongside specific Peruvian socio-political issues surrounding consultation problems, the overlapping of indigenous lands, the impact of ongoing environmental pollution and absence of legal justice (Gonzalez 2018 p. 658). However, these activities can also become 'weapons of the weak,' to cite Scott's (1985) book title, and are a form of resistance used by the less powerful to express disapproval of corporate activities (Newell 2005 p. 548) or, equally, force the state or industrial actor to listen (Brosius 2006 p. 316; see also Gonzalez 2015 pp. 477-478).

MRBF13's call to the radio is not a radical, violent act. Instead, it is an example of what can be termed an unorthodox informal voice action in which vertical or horizontal voicing to voice actor(s) occurs through an irregular method. Like radical voice action, it is not orthodox and in no way guarantees success. Similarly, it can indicate the difficult accessibility which citizens can face in their efforts to achieve meaningful community engagement.

Lastly, these case studies and other recent pipeline spillages show that Petroperu is

utilising sub-standard practices against citizens who can lack the resources, expert knowledge and external contacts to challenge them. These SCNREI practices are built on an intentional policy of localised community decoupling and indigenous discrimination evident in Cuninico and mirror Peru's state institutional suppression and detachment. Sadly, indigenous employment, including unverified reports of minors in 2016 remediation work,⁸ confirms that Cuninico's experiences are not unique and that Petroperu has shown little interest in improving its operational practices away from the systematic abuse and exploitation of indigenous people who face a struggle between voicing and staying silent.

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Appendix

Appendix A: Grouping of interviews

Case-study interviewees

Barrio Florido

Coded as: **Mestizo resident of Barrio Florido *n* (MRBF*n*):**
MRBF1-MRBF30

Cuninico

Coded as: **Indigenous resident of Cuninico *n* (IRC*n*):**
IRC1-IRC29

State representatives

National Government

Coded as: **National state institution *n* representative *n* (NSI*nRn*)**

- **NSI2R1.** National Environmental Monitoring Agency (OEFA)

Loreto Regional Government (GOREL)

Coded as: **Regional government representative *n* (RGR*n*)**

- **RGR1.** GOREL Manager of Health and Environment.

⁸ The first two 2016 North Peruvian pipeline spills saw reports (denied by Petroperu) of children employed in remediation work (Davies 2016; Post 2016) whilst indigenous remediation labourers lacked proper safety equipment for the third spill in June 2016 (Knight 2016).

CBO

Coded as: **CBO *n* representative *n* (CBO*n*R*n*)**

- **CBO4R3.** Catholic Church Priest from The Apostolic Vicariate of Iquitos working in the Marañón River Basin.

NGO

Coded as: **NGO *n* representative *n* (NGO*n*R*n*)**

- **NGO1R1.** E-Tech International.
- **NGO2R1a, b, c.** The Peru Mission.
- **NGO4R2a, b.** ProNaturaleza (Peruvian Foundation for the Conservation of Nature).

Other Citizen Voices

- Academic

Coded as: **Iquitos university academic *n* (IUAn)**

IUA2. Chemical engineering professor at Universidad Nacional de la Amazonia Peruana, (National University of the Peruvian Amazon).

References:

- Acuna, R. M. 2015. The politics of extractive governance: Indigenous peoples and socio-environmental conflicts. *The Extractive Industries and Society* 2(1): 85-92.
- Backer, L. 2007. Engaging stakeholders in corporate environmental governance. *Business and Society Review* 112 (1): 29-54. <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8594.2007.00285.x/abstract>.
- Bixler, R. P., Dell'Angelo, J., Mfune, O. and Roba, H. 2015. The political ecology of participatory conservation: institutions and discourse. *Journal of Political Ecology* 22. http://jpe.library.arizona.edu/volume_22/Bixler2.pdf.
- Brosius, J. P. 2006. Between politics and poetics: narratives of dispossession in Sarawak, East Malaysia. In Biersack, A. and Greenberg, J. B. (eds.) *Reimagining political ecology*. Durham, North Carolina: Duke University Press, pp. 281-322.
- Bury, J. 2005. Mining mountains: Neoliberalism, land tenure, livelihoods, and the new Peruvian mining industry in Cajamarca. *Environmental and Planning A: Economy and Space* 37(2): 221-239.
- CooperAcción, Fedepaz and Grufides. 2016. 18th observatorio de conflictos mineros en el Peru reporte primer semestre 2016. Observatorio de conflictos mineros en el Peru (OCM), Lima, Peru. <http://www.conflictosmineros.org.pe/?q=reportes/13/07/2016/18-observatorio-de-conflictos-mineros-en-el>.
- Cuba, N., Bebbington, A., Rogan, J. and Millones, M. 2014. Extractive industries, livelihoods and natural resource competition: Mapping overlapping claims in Peru and Ghana. *Applied Geography* 54: 250-261.
- Davies, W. 2016. Indigenous community in Peru suffer oil spill. *BBC News*, 15 March. <http://www.bbc.co.uk/news/world-latin-america-35803496>.

- de la Cadena, M. 2001. The racial politics of culture and silent racism in Peru. Paper presented at *Racism and Public Policy*. Durban, South Africa, 3–5 September. Accessed December 27, 2017. [http://www.unrisd.org/80256B3C005BCCF9/\(httpAuxPages\)/EE7EB1E30A96C11F80256B6D00578643/\\$file/dcadena.pdf](http://www.unrisd.org/80256B3C005BCCF9/(httpAuxPages)/EE7EB1E30A96C11F80256B6D00578643/$file/dcadena.pdf).
- Drinot, P. 2006. Nation-building, racism and inequality: institutional development in Peru in historical perspective. In Crabtree, J. (ed.) *Making institutions work in Peru: democracy, development and inequality since 1980*. London: Institute for the Study of the Americas, pp. 5-23.
- Fraser, B. 2016. Cuninico: the fight for clean water continues. *Mongabay*, 19 December. <https://news.mongabay.com/2016/12/cuninico-the-fight-for-clean-water-continues/>.
- Gonzalez, A. 2015. The political ecology of voice (PEV); an innovative approach to examining environmental pollution and the accountability of economic actors. *Journal of Political Ecology* 22: 466-485. http://jpe.library.arizona.edu/volume_22/gonzalez.pdf
- Gonzalez, A. 2016. Poverty, oil and corruption: the need for a Quad-Sector Development Partnership in Nigeria's Niger Delta. *Development Policy Review* 34(4): 509-538.
- Gonzalez, A. 2017. *Access engagement, suppression, and empowerment: a political ecology of voice (PEV) study into Peruvian citizen ability and willingness to report Petroperu environmental pollution incidents*. PhD, Royal Holloway, University of London. [https://pure.royalholloway.ac.uk/portal/en/publications/access-engagement-suppression-and-empowerment-a-political-ecology-of-voice-pev-study-into-peruvian-citizen-ability-and-willingness-to-report-petroperu-environmental-pollution-incidents\(14dd9eac-4bd4-4590-8b5d-6ce444ea1ca7\).html](https://pure.royalholloway.ac.uk/portal/en/publications/access-engagement-suppression-and-empowerment-a-political-ecology-of-voice-pev-study-into-peruvian-citizen-ability-and-willingness-to-report-petroperu-environmental-pollution-incidents(14dd9eac-4bd4-4590-8b5d-6ce444ea1ca7).html).
- Gonzalez, A. 2018. "A salute to the bandido": a political ecology of voice (PEV) exploration into Peru's freedom of voice surrounding hydrocarbon development. *Society & Natural Resources* 31(6): 649-665.
- Himley, M. 2008. Geographies of environmental governance: the nexus of nature and neoliberalism. *Geography Compass* 2 (2): 433-451. <http://onlinelibrary.wiley.com/doi/10.1111/j.1749-8198.2008.00094.x/abstract>.
- Hirschman, A. O. 1970. *Exit, voice, and loyalty: responses to decline in firms, organizations and states*. Cambridge, Massachusetts: Harvard University Press.
- Hirschman, A. O. 1981. *Essays in trespassing: economics to politics and beyond*. Cambridge, UK: Cambridge University Press.
- Hirschman, A. O. 1995. *A propensity to self-subversion*. Cambridge, Massachusetts: Harvard University Press.
- International Business Publications. 2013. *Peru mineral, mining sector and investment and business guide. Volume 1: strategic information, oil and gas exploration*. Washington: International Business Publications.
- Knight, N. 2016. Repeat oil spills turning Peruvian Amazon into 'sacrifice zone' for big oil. *Common Dreams*, 28 June. <https://www.commondreams.org/news/2016/06/28/repeat-oil-spills-turning-peruvian-amazon-sacrifice-zone-big-oil>.
- Law in Action. n.d. How many oil barrels have spilled in the Amazon. 2 October. <http://www.alphabetics.info/international/how-many-oil-barrels-have-spilled-in-the-amazon/>.

- Lu, G. M. M. 2016. *Struggles over governance of oil and gas projects in the Peruvian Amazon*. PhD, University of Oregon. https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/20458/LuDeLama_oregon_0171A_11540.pdf?sequence=1.
- Meyer, J. W. and Rowan, B. 1977. Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology* 83 (2): 340–363. https://www.jstor.org/stable/2778293?seq=1#page_scan_tab_contents.
- Ministry of Health of Peru (MINSA). 2015. Informe No 00731-2015/DEPA/DIGESA, contained in Oficio No 706 -2015/S6/MINSA. Lima: MINSA http://www.justiciaviva.org.pe/userfiles/Respuesta%20SALUD_JC.pdf.
- Newell, P. 2005. Citizenship, accountability and community: the limits of CSR agenda. *International Affairs* 81(3): 541-557.
- O'Donnell, G. 1986. On the fruitful convergences of Hirschman's exit, voice, and loyalty and shifting involvements: reflections from the recent Argentine experience. In Foxley, A., McPherson, M. S., O'Donnell, G. A. and Hirschman, A. O. (eds.) *Development, democracy, and the art of trespassing: essays in honor of Albert O. Hirschman*. Notre Dame, Indiana: University of Notre Dame Press, pp. 249-268.
- Organisation for Economic Co-operation and Development (OECD) 2015. *Due diligence guidance for meaningful stakeholder engagement in the extractives sector*. <https://www.oecd.org/daf/inv/mne/OECD-Guidance-Extractives-Sector-Stakeholder-Engagement.pdf>.
- Owen, J. R. and Kemp, D. 2014. Mining and community relations: Mapping the internal dimensions of practice. *The Extractive Industries and Society* 1(1): 12-19.
- Patton, M. Q. 1987. *How to use qualitative methods in evaluation*. Newbury Park: SAGE Publications Limited.
- Peru Support Group. 2016. Petroperu admits to jungle spill. <http://www.perusupportgroup.org.uk/news-article-1129.html>.
- Peru Support Group. 2018. Renewed protest in Loreto over oil spill damage. <http://www.perusupportgroup.org.uk/article-1543.html>.
- Peterson, G. 2000. Political ecology and ecological resistance: An integration of human and ecological dynamics. *Ecological Economics* 35(3): 323-336.
- Petroperu. n.d.a. Refineria Iquitos. <http://www.Petroperu.com.pe/portalweb/Main.asp?Seccion=73>.
- Petroperu. n.d.b. Instalaciones. Oleoducto Norperuano <http://www.Petroperu.com.pe/Main.asp?Seccion=76>.
- Phelps, N. A., Atienza, M. and Arias, M. 2015. Encore for the enclave: The changing nature of the industry enclave with illustrations from the mining industry in Chile. *Economic Geography* 91 (2): 119-146.
- Philip, G. 1984. Bonanza development? The selva oil industry in Peru 1968-1982. London: Institute of Latin American Studies, University of London http://sas-space.sas.ac.uk/4538/1/B50_-Bonanza_Development_The_Selva_Oil_Industry_in_Peru_1968-1982.pdf.
- Post, C. 2016. Oil spills contaminate major river in Peru's Amazon. *Peru Reports*, 13 February. <http://perureports.com/2016/02/13/oil-spills-contaminate-major-river-in-perus->

- [amazon/](#).
- Robbins, P. 2004. *Political ecology: a critical introduction*. Oxford: Blackwell Publishing.
- Rodrigues, C. U. 2017. Configuring the living environment in mining areas in Angola: Contestations between mining companies, workers, local communities and the state. *The Extractive Industries and Society* 4(4): 727-734.
- Rossi, U. and Vanolo, A. 2012. *Urban political geographies: a global perspective*. London: SAGE Publications Limited.
- Santos-Granero, F. 2015. Introduction: Images of public wealth. In Santos-Granero, F. (ed.) *Images of Public Wealth of the Anatomy of well-being in indigenous Amazonia*. Tuscon, Arizona: The University of Arizona Press, pp. 3-34.
- Scott, J. C. 1985. *Weapons of the weak: everyday forms of peasant resistance*. New Haven: Yale University Press.
- Segovia, R. 2014. The view from the field: another spill in the Marañón basin. New Mexico: *E-Tech International*. <http://www.etechninternational.org/s/CuninicoArticle081514.pdf>
- Taylor, S. J. and Bogdan, R. 1998. *Introduction to qualitative research methods: a guidebook and resource*. 3rd ed. New York: John Wiley & Sons Incorporated.
- The Oil & Gas Year. n.d. Peru overview. <http://www.theoilandgasyear.com/market/peru/>
- Vasquez, P. I. 2014. *Oil sparks in the Amazon: local conflicts, indigenous populations, and natural resources*. Athens: University of Georgia Press.
- Wilson, E., Best, S., Blackmore, E. and Ospanova, S. 2016. Meaningful community engagement in the extractive industries: stakeholder perspective and research priorities. *International Institute for Environment and Development (IIED) (UK)*. <http://pubs.iied.org/pdfs/16047IIED.pdf>
- Zuindeau, B. 2009. Responding to environmental risks: what can Albert Hirschman contribute? *Ecological Economics* 69(1): 155-165.