

Healing, knowing, enduring: Care and politics in damaged worlds

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Abstract

How can politics be articulated or at least imagined by ill, impoverished and abandoned communities? This article documents how care is invoked by activist groups and local citizens in their search for ethical recognition and environmental justice in Puchuncaví, Chile. The authors argue that in a context of prolonged and systematic harm, care emerges as a way to render their suffering understandable, knowable and actionable, and thus as a mode of intervention that instantiates politics in different spaces and at several scales. At the interfaces of feminist science studies, environmental sociology and political theory, this article examines how care acts as a grammar to enunciate problems and make connections deemed irrelevant by expert apparatuses. Specifically, the authors ethnographically track the capacity of care practices to create therapeutic spaces of affective endurance and healing, and to produce new forms of sensual and ecological knowledge about beings, things and relations. These different modes of caring and being cared for, it is suggested, underline the capacity of care for the politicization of harm and suffering: to re-arrange what is visibilized, valued and problematized in the face of intractable environmental crises – a crucial objective for collectives removed from every form of politics. Care, as it is articulated here, is not a coherent and predefined programme, but a fluid and adaptable ethico-political set of practices and potentialities always concerning specific individuals facing specific problems in specific circumstances. If care is to be mobilized to craft more responsible policy, researchers should think more thoroughly about these multiple configurations of care, and the disparate ways in which they can contribute (or not) to invoke new styles and formats, new sensitivities and possibilities for policy-making.

Keywords

activism, care, environmental justice, politics, toxicity

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Introduction

While driving around Ventanas, David, a long-time inhabitant and activist in Puchuncaví, draws to our attention different objects and places.¹ Each one of them tells a story of decay and neglect, and together they come to index the wider history of toxicity in Puchuncaví. ‘This was a beautiful beach’, he says looking at the long sandy coastline punctuated by massive pipelines. Until not long ago Puchuncaví, 150 km from Santiago in central Chile, was an isolated rural area whose population lived mainly from artisan fishery and peasant agriculture. In 1964 the ENAMI² copper smelting plant was installed with the hope of igniting a new industrial phase in 20th-century Chile. Nobody predicted an ecological catastrophe. On the contrary, the smelting complex was celebrated as the milestone in the progressive advance of both Chile and Puchuncaví. In 1957, when the smelting plant was approved, *El Mercurio de Valparaíso*, the most influential newspaper in the region, noted that the plant would ‘translate into wealth and jobs’ for Puchuncaví (*El Mercurio de Valparaíso*, 25 August 1957). The promise was only partially fulfilled. Local inhabitants benefited from new economic opportunities and plant workers received a house, education for their children and the prospect of an honest life under the protection of the state. But they also received excessive amounts of lead, arsenic and nitrogen oxide both in their working and domestic spaces.

This history of suffocation and abandonment becomes evident driving through Ventanas. While we pass by immense industrial complexes, barren wastelands, empty grocery stores and lethargic neighbourhoods, we get a glimpse of what its inhabitants experience everyday. People in Puchuncaví say they live ‘toxic lives’. Here toxicity refers both to chemical excess and harm, and –we realize driving around Puchuncaví – to the sense of abandonment and neglect that endures in Puchuncaví: the profound feeling that the area has been left to its own devices, discarded, forgotten as a damaged place that does not warrant any attention. Puchuncaví has been un-carefully treated. ‘We are alone’, as was unambiguously stated by the *Consejo Ecológico de Puchuncaví*, the Ecological Council of Puchuncaví, in one of their blog posts. Consejo was one of the first activist collectives to emerge in Puchuncaví, and David is one of its founding members. The feeling of neglect haunts the words and actions of Consejo. References to ontological invisibility and inaudibility abound in their narratives. Reading through their website and documents, one message is repeated time and again: that the people of Puchuncaví do not partake in the domain of the sensible, to borrow Rancière’s words (1999). In 2009, after failing in their attempt to stop the approval of a thermoelectric plant, Consejo denounced on their website, ‘the new assault on the livelihood of our communities contrived in the *repeated and shameful deafness of the state*’, that ‘*refuses to listen to the complaints of the organized citizenry*’ (Consejo Ecológico, 2009b, n/p, emphasis added). People in Puchuncaví see themselves as uncounted, unrecognized, unseen.

When beings and things don’t count in the inventory of political possibilities, indifference and disparagement follow. The accounts of Consejo are also saturated with invocations of demotion, disdain and inattention, invocations in which claims of negligence and affective pleas for caring are mixed together. ‘Today we denounce’, Consejo posted on their website, ‘the *total indifference of Valparaíso’s COREMA*³ to the health impact on its citizens’ (Consejo Ecológico, 2009b, n/p, emphasis added). Elsewhere, in a dramatic

plea against the complete abandonment of the state's responsibilities in Puchuncaví, Consejo asked, to whoever would listen to them, how 'can the disdain against the people [from Puchuncaví] be so intense?' (Vallejos, 2011). Their analysis and experiences seem to point at what can be called, after Thompson (2005), an *uncaring choreography*: a purposeful entanglement of sometimes improvised and spontaneous but always power-exerting actions, materials and dispositions that have consigned Puchuncaví a superfluous territory unworthy of attention in late capitalist Chile. It is, in other words, the complex production of un-protection: no shelter, no vital safeguards, the utter indifference towards the life and death of people in Puchuncaví. 'The government', Consejo concludes bluntly, 'does not protect us' (2009a, n/p).

This article is about how David, Consejo and other neighbours and collectives attempt to know, denounce and act upon the prolonged and systematic neglect suffered in Puchuncaví. And about the many ways the ethical practice of *care* emerges as a generative way of making knowable and actionable their expectations and sufferings. These practices of care pertain to the people of Puchuncaví. As shown in the narratives of Consejo, and as will be described in what follows, care (and un-care) are articulated as an alternative collection of enunciations, doings and propositions to make sense of, and navigate through, otherwise intractable conditions after five decades of continuous suffering: a grammar and a programme to cope with the cadence of slow violence (Nixon, 2013).

What has happened in Puchuncaví can be described without resorting to the analytics of care. The situation can be explained, more simply, by the lack of regulation or legislation to protect the rights of citizens and workers. And this is surely the case. But we are interested in the way the people of Puchuncaví *themselves* render knowable and intervenable their sufferings and the causes and effects of their ailments: we want to think *with* them the way harm, healing, life, death, community and politics are enacted in Puchuncaví.

Yet the practice and mobilization of care also pertains to us, as researchers. The idiom of care invoked in this article is both an ethnographic attention to the concrete ways people in Puchuncaví talk about and intervene in their toxic lives, *and* a theoretical trope to treat carefully the trouble in which people in Puchuncaví finds themselves. Donna Haraway (2016) suggests that for response-able worlding practices 'it matters what knots knot knots, what thoughts think thoughts, what descriptions describe descriptions' (p. 12). Here we heed her advice and find in the analytics of care – an analytics also invoked by our research participants – a mode of attention that commits to the ethico-political project shaped by housewives, fishermen, retired industrial workers and activists in Puchuncaví. It matters what concepts conceptualize concepts, and the notion of care is mobilized not just to describe the situation but also to engage our practices of thinking and knowing with the entanglements of life and death we encountered in Puchuncaví.

In the next section we discuss the affordances and limits of care as a concept to think with (Puig de la Bellacasa, 2012, 2017). We are especially interested in the capacities of care as a logic (Mol, 2008) that although open-ended and fractional, renders visible multifarious practices attentive to the worldly, affective and unruly dimensions of environmental injustice. Hence care, we argue, opens the possibility to think more seriously about what 'care-full policies' would mean in Puchuncaví and sacrifice zones more

broadly.⁴ We come to this debate in the last section, after having presented our empirical material. Based on ethnographic fieldwork in Puchuncaví, we describe two variations of care as a practice deployed by our research participants: self-care and mutual support as a way to articulate a common experience to endure as ethical subjects; and domestic care – cleaning, repairing, mending – as a mode of knowing and acting upon their harmed bodies and environments. These caring practices, we suggest, not only illustrate the multiple configurations of care but also indicate potential avenues for thinking the relation between care and policy.

Care and politics

But what is care? Is it an affection? A moral obligation? Work? A burden? A joy? Something we can learn or practice? Something we just do? Care means all these things and different things to different people, in different situations. (Puig de la Bellacasa, 2017, p. 1)

Although there has been a tendency, especially within feminist critical studies, to equate care with a particular affective economy – an attachment or a positive and emphatic feeling that it is at the same time ethically and politically good – care, both as a practice and a moral object, is anything but obvious (Murphy, 2015; Puig de la Bellacasa, 2017). Care, as Annemarie Mol (2008) reminds us, is an open-ended process with no clear boundaries. Care is fluid and adaptable, and it is always local. As Puig de la Bellacasa (2017) argues in the quote opening this section, care is always concerned with the specific problems of specific individuals in specific circumstances. What matters in care, Mol (2008) adds, is a continuous, persistent, and usually contradictory and forgiving, attempt at improving or making more bearable a specific condition, situation or suffering. Care cannot be easily reified. On the contrary, the analytics of care requires an understanding of how and when people invoke caring practices and sensibilities. This makes possible not only to identify the multiple configurations and arrangements of care (López & Sánchez Criado, 2015; Mol, Moser, & Pols, 2010) but also to examine the whole worlds it carries with it.

It is precisely in this regard that Mol defines care as a mode of organizing action and interaction. According to Mol, care is a specific way of understanding and adjusting bodies, people and daily lives, of dealing with knowledge and technologies, of distinguishing between the good and the bad (Mol, 2008). Care is everything we do for the *poiesis* of the relational web sustaining our lives (Tronto, 1993). But as Mol also reminds us, the logic of care is not a simple, single configuration. There are always other versions of care. Different institutional entanglements, different bodies, different sufferings will bring to bear different modes of caring, being cared for and encountering care. This is precisely the aim of this article, to examine how and to what purpose Puchuncavinos mobilize care and render it relevant to know, adjust to, and make more bearable the creeping, hushed violence experienced in their daily lives. By doing this we attempt to revisit what activism means in sacrifice zones like Puchuncaví, and to examine the implications and relevance of care practices in the provocation of politics.

If we define politics as the process of problematizing the partition of the sensible, or the capacity of actors – human or otherwise – to both disrupt and create social solidarities and

relations, this article is an attempt at exploring the political affordance of care. The importance of care as a mode of politicization has been especially studied by Maria Puig de la Bellacasa (2012, 2017). Engaging with a long discussion within STS on the politics of knowledge (cf. Haraway, 1997; Latour, 2004; Star, 1995), Puig de la Bellacasa reclaims care as an ‘ethico-affective everyday practical *doing* that engages with the inescapable troubles of interdependent existences’ (2012, p. 199, emphasis in the original). According to Puig de la Bellacasa, care emerges as a relational and affective activity with the capacities to create new worlds. Care articulates, connects and signifies lived worlds in particular ways (Tronto, 1993), and as such it has the political capacity to re-arrange what becomes visible and relevant. Or put differently, care inevitably challenges and redefines the practice of thinking and knowing, opening the possibility of ‘thinking with care’ with respect to our contemporary technoscientific arrangements. Hence care highlights the practical and relational character of knowledge as well as the embodied and affective processes involved in the shaping – and consequences – of possible worlds (Haraway, 1991).

This work has served to highlight the importance of care as a way to pause expert interventions and imperatives, helping to amend and (re)articulate sociomaterial practices so as to include those to whom nobody pays attention, those marginalized or suffering from the consequences of our contemporary technoscientific arrangements (Martin, Myers, & Viseu, 2015; Puig de la Bellacasa, 2011; Sánchez Criado, & Rodríguez-Giralt, 2016; Tironi, 2015). In this article we follow people like David, co-founder and long-time activist of Consejo, as they engage in caring practices as a mode of both problematizing and coping with the complexity of the interdependent (and damaged) worlds in which they live. We find in these practices of caring and being cared for a political opening to conjure new, more just worlds and to navigate one’s way through intractable technopolitical violence. We are interested in the capacities of care, for instance, to illuminate the emotional and relational aspects of the worlds with which David has to deal – and sometimes suffer – on a daily basis. Care here, flourishing in the cracks left open by industrial devastation and state abandonment, may also elicit a more speculative political response to and in these worlds, as it creates the potential of *other* relations and possibilities of existence in contexts of environmental crisis (Povinelli, 2011; Tsing, 2015).

We are also interested in exploring how activist groups, such as ASOREFEN, use mutual support practices to produce and prioritize certain experiences – while excluding others (Brown et al., 2004). Taking inspiration from Murphy’s (2004) work, we follow the capacities of these care practices to transform insights and observations into commonalities and alternative collective knowledge. We document how these collectives craft therapeutic spaces of self-care to endure in their quest for justice and compensation. Similarly, and following Shapiro’s work (2015), we are also interested in the capacity of care to develop ordinary somatic modes of attention and knowledge that open up the possibility for contesting and acting upon the ubiquitous toxicity in Puchuncaví. We pay attention, for instance, to domestic practices of healing, cleaning and repairing as ways to render visible, knowable and intervenable somatic sufferings and intractable afflictions.

In sum, this article rehearses tentative and ethnographically grounded answers to the multiple (yet unexplored) ways in which different care practices may inspire, mobilize and actively engage with politics in Puchuncaví. Including, as we aim to make clear in the next sections, our own forms of knowledge production and research.



Figure 1. Map of Quintero Bay.

Source: www.tomtom.com/es_es/drive/maps-services/shop/travel-map/chile/andCodelcoDivisi3nVentanas.

Care as endurance: Affective atmospheres, perseverance and (self)caring

The construction of the smelting complex in Ventanas in 1964 was the starting point of what became the largest industrial district in Chile. Today the Quintero Bay in Puchuncaví houses 14 petro-chemical industries, including four large thermoelectric plants (see Figure 1). Since the first toxicology study conducted in 1985 that found high levels of arsenic in the population, the effects of contamination on bodies (human and non-human), watercourses, marine ecosystems, soil and plants have been well documented.⁵ No action, however, has been taken. Damage is both severe and ubiquitous in Puchuncaví. Suffering has become an uneventful, normalized feature of daily life. ‘Toxic lives’, as the locals like to call it: not a spectacular disruption lived in the excitement of the eventful, but a chronic, silent and creeping condition that is inseparable from life’s ordinariness.

After spending time with activists it is not difficult to identify a mood of frustration and resignation. Citizen organizations like Consejo Ecol3gico have had negligible success in trying to interrupt the cadence of toxic existence. And the main object of political contestation is precisely this incapacity to affect – not only pollution per se but the feeling of being displaced or, worse, unseen, unheard, unsensed. Put differently, the source of suffering for many of these people is not just somatic but *ethical*: the feeling that they have been both poisoned and existentially neglected.

Yet Consejo has not been alone in trying to denounce Puchuncaví’s uncaring choreography. Farmers complained about the effect of chemical contamination as early as 1970. In 1993 Luis Pino, an ex-worker from the smelting plant, designed and conducted his own survey to find out about the health conditions and causes of death among his retired colleagues. Luis worked for 30 years in the smelting plant. Originally from

Quillota, in 1970 he relocated to Quintero, a couple of kilometres away from the plant. Luis was trained as a metal worker and had just married. He happily accepted what he saw as an immense privilege: to work in a renowned state-owned corporation that offered unique labour and family benefits. In the late 1980s, while planning his retirement, he realized that many of his colleagues were dying from various types of cancer and cardiovascular diseases. Called *hombres verdes* ('green men') for the greenish lacerations produced by chemical reactions on their bodies, these ex-workers of the smelting plant received none or negligible medical attention from Codelco. Luis asked Codelco for data and explanations. Neither were satisfactory. He began collecting information about the chemical processes conducted at the plant and their potential health effects. He also began an enquiry into the fate of his former colleagues: Were they healthy? What sort of illnesses were they suffering and since when? Had they died already? To what chemical processes were they exposed during their time working at the plant? With the help of the survey Luis found a ratio of deaths caused by oncological and cardiovascular problems well above regional and national averages.⁶

An enthusiastic and natural leader, Luis founded ASOREFEN in 2006 with the mandate 'to seek truth, justice and reparations' for *hombres verdes*. The emergence of ASOREFEN inaugurated a new phase of political activism in Puchuncaví. ASOREFEN has conducted surveys, organized rallies and protests, participated in parliamentary committees and filed legal actions against ENAMI and Codelco. With the politicization of the *hombres verdes* the focus shifted from an ambiguous environmental problem to a case of occupational harm. ASOREFEN gained momentum when the widows of *hombres verdes* joined the organization searching for political influence. In 2008, and with the legal support of ASOREFEN, the widows sued Codelco. After four years of legal wrangling, the appeal court of Valparaíso accepted their demands. In an unprecedented action, the widows won the legal battle against Codelco to exhume 24 *hombres verdes* to examine the bodies of their loved ones for accumulated heavy metals.⁷

In May 2015 we were invited to attend the ASOREFEN monthly meeting. Their members have been meeting every first Tuesday of the month for the last nine years. That sunny evening we met in a high school lunchroom in Quintero. Our visit had been approved at the previous meeting and we immediately sensed that our presence provoked a mix of expectation and suspicion among the attendees. But other than that, everything unfolded as usual. The all-male board of ASOREFEN –the secretary, the treasurer, a couple of representatives – and ourselves sat in a long row in the room facing the rest of the audience, distributed in small groups of four to five people. There were maybe 30 people, mostly ex-workers in their seventies. Mostly *hombres verdes*. (See Figure 2.)

For ASOREFEN the origin and fate of the *hombres verdes* is a tale, just like the one inculcated by Consejo, about abandonment and inattention. In the case of ASOREFEN, however, the actors, settings and victims of the uncaring choreography constitute a more intimate dramaturgy. The tragedy that ASOREFEN attempts to invoke is not performed against the background of a ruthless yet abstract state, but against and within the domestic spaces and routines lived for decades in the shadow of the smelting plant. The tragedy features colleagues and friends that died stained by verdant lacerations, and alongside company technicians and corporate cadres who are now under scrutiny but whom they used to know by name and with whom they shared works parties and their (unheard) anxieties about toxic harm. The primary aim of ASOREFEN has been to make visible



Figure 2. ASOREFEN meeting, May 2015.
Photograph by Manuel Tironi.

that intimate story of industrial labour, comradeship, sacrifice, toxification and betrayal in which *hombres verdes* make sense: a group of proud workers that devoted their life to the advancement of Chilean industrialism and that, in return, were discarded and un-carefully treated when the plant's chemicals exhausted their lives.

A feeling of solidarity envelopes the meeting. Luis Pino constituted ASOREFEN to unveil, not primarily the harm done to his colleagues, but rather the way they were abandoned and sacrificed for a cause whose resulting aberrations have not been attended to. This is why ASOREFEN is much more than just a legal platform seeking economic compensation. ASOREFEN is also an affective space in which its members look for the attention and recognition denied by Codelco and the state at large: a space where ASOREFEN members care for themselves and in so doing persevere in their search for justice. And that search extends well beyond the *hombres verdes* themselves. It stretches out to encompass their families and their entire affective ecologies. On that May afternoon, for example, many *hombres verdes* arrive accompanied by a supportive daughter or son. An all-women group sat quietly in the upper-right corner. We were told that those were 'the widows'. Until recently only affiliated members could attend the meetings. But when many of them began to die, the widows were invited to represent their husbands – and to demonstrate that suffering is not extenuated with the extinction of the suffering body.

The meeting begins. Between the board and the audience, Luis stands next to a bunch of documents and folders carefully displayed on a table. We assume they are related to the meeting's agenda: legal paperwork, application forms, new reports. We soon realize they are not. In spite of the formality imbued by Luis, no relevant decisions will be taken and no new information about the legal process will be given. At the end of the meeting some housekeeping information is delivered – date and place of next meeting, a reminder to members to pay their dues, etc. But the meeting is entirely devoted to much more affective aims. For the next two hours Luis vividly recounts the complex web of

irresponsibility, denials, abandonments and corruption that has brought them to their medical and legal condition. He also repeats by rote names, places and situations. Invoking anecdotes and vignettes of everyday life in the plant, Luis reminds his audience about what was in play in their task as workers of the Chilean state, their responsibilities as employees in Chile's first and largest copper smelting plant. Recalling the un-careful choreography that explicates the origin and obduracy of *hombres verdes*, Luis reclaims their collective identity as citizens and workers. His aim, it seems to us, is to *take care* of those things, relations and affections that have been neglected by technocratic policies. Philosopher of science Isabelle Stengers (2005) suggests that transformative politics can only be achieved if articulated 'in the presence of' those recalcitrant entities, actors or things that empower a situation. Hesitation – the condition of possibility for politics according to Stengers – is only brought about when all those invoked around a question attend with their 'cosmos', the multiple and messy consequences attached to their acts and decisions. And this is precisely the provocation Luis rehearses: to slow down what counts as relevant in the story about the *hombres verdes*; a dramaturgy in which the 'green men' are brought into careful attention not as toxicological subjects but as part of a social project, and thus politicized as a complex affective-political entanglement that is not possible when *hombres verdes* are presented as biomedical cases.

To take care of *hombres verdes* as political subjects, Luis's public dramaturgy evokes what Ben Anderson (2009) calls an affective atmosphere: a collective 'mood, feeling, ambience, tone' (2009, p. 77) that surfaces as 'the shared ground from which subjective states and their attendant feelings and emotions emerge' (p. 78). This atmosphere inspires new affective connections with the issue at hand and empowers participants by reinforcing feelings of belonging, identity and dignity. And this is materially done in very theatrical way: Luis stages a live performance full of silences, role-playing, gestures and dramatizations in which the invocation of *hombres verdes* as political bodies is manifested. To be sure, this theatrical logic is not alien to experimental methods in the social sciences. Classic experiments in social psychology overtly engage in the articulation of atmosphere in which not only the participants are asked to play a role, but often the experimenters themselves play fictionalized characters in settings specially conditioned to ensure the appropriate ambience needed for the experiment (Brown, 2012; Lezaun & Calvillo, 2014). Luis, as an experimenter, also needs to engineer a very specific psychomaterial sphere (Sloterdijk, 2001) to invoke an 'elsewhere within here' (Murphy, 2006).

In Luis's elocution dramatic pauses abound. His performance is rich in emphases, gesticulations and hard stares. Far from being an endless monologue, Luis provokes his audience: he makes us think, anticipate and conclude. Luis guides an argument, but the revelation is left hovering for us to reach out to. 'So you can see, every single one of these workers from the Chilean state accomplished a task to enrich this country', says Luis pointing at the audience with a semi-circular sweep of his hand. He stays silent while continuing the hand gesture and staring at his audience. It is as if Luis wants us to fully weigh up what is involved in his assertion, to grasp the intensity of the situation he is describing. There is a tense and expectant atmosphere. And then Luis continues: 'Some of these *viejos* [old men] worked *al llamado* ['on call']. The emphasis on '*al llamado*' augments the tension in the room. That image, ENAMI workers devotedly working on call, cracks open for us – and for the rest of the audience, we assume – the complex

intermingling of labour exploitation, medical negligence and state developmentalism that lurks behind the situation recounted by Luis. He waits for us to react to his cue and to connect the dots presented in front of us. Whispers in the room increase. After a couple of seconds, Luis gives the final stroke: ‘At any time!’

Luis’s narration is rich in names, places and anecdotes. Every fact is connected to a colleague’s affliction and every technical argument is recounted as a quotidian moment in the plant –lunchtime amid toxic vapours or jokes about unwashable green stains on overalls. The story of the *hombres verdes*, insists Luis, is primarily about Juan Hernández Olmos, his brother Pedro Hernández Olmos, ‘el Pelao’ Pérez, or Julio González Pardo. These poisoned colleagues were friends; they shared good and bad moments with those attending the meeting this evening; they had family ties, and the specifics of their sufferings – how they died, where, when – are well known to those in the room. Luis stages an account that situates the audience in that affective realm of kinship, friendship and intimacy. An example from the meeting:

- Luis:** There are almost no survivors among those that worked in the smelting plant ... one is *Pelao* [‘Bold’] Pérez. But there is one more I can’t recall, a doctor ... do you remember Agustín? [Luis turns towards Agustín, one of the board members] The doctor that did your surgery?
- Agustín:** Don Julio González Pardo.
- Luis:** Don Julio González Pardo!
- Agustín:** The other one is ‘Campito’ [Little Campos], he worked with me ...
- Luis:** Campos as well! ‘Campito’ ...
- Agustín:** ‘Campito’, yes.
- Luis:** ‘Campito’, that’s the other one. They are alive. Here we have so you can see [Luis exhibits an old photograph of several workers having lunch next to a furnace]. Here we have Juan. Juan is there wearing a baseball hat [Luis points at a man in the audience]. This was the dining room in the smelting plant. [Long, tense silence.] You ate next to the furnace ... [Several whispers confirming Luis’s description.] This is the reality. There is Juanito [Little Juan], Juanito Hernández Olmos [Luis points at the person wearing the baseball hat in the back of the room].
- Person wearing the hat:** Pedro.
- Luis:** Pedro! Pedro Juan.
- Member of the board #2:** *Peter John* [in English]
- Agustín:** ‘Lechuga Grande’ [Big Lettuce].
- Luis:** Lechuga! Lechuga Grande! [laughter from the audience]
- Member of the board #2:** Because ‘Lechuga Chico’ [Little Lettuce, Lechuga Grande’s brother] died.

The narration articulated by Luis prompts the memories and affections of the audience, and many feel the need to re-enact and share their own suffering. Other ‘green men’ give their testimony during the meeting. They share their experiences and add details and nuances that corroborate and enrich the narrative weaved by Luis Pino. They laugh, recalling situations and old jokes and they support each other when memories are less happy. Taken together, this collage of emotions, memories, sentiments, gestures, testimonies and discourses – this affective atmosphere – creates a shared story in which the connections between labour and toxification, sacrifice and abandonment, camaraderie and forgetfulness are repeated time and again, and where the *hombres verdes* can support and recognize each other as such.

Hence ASOREFEN meetings attempt at literally ‘taking care of’ the *hombres verdes* – and in different ways. First, the meeting rehearses a therapeutic function since it invokes people, memories and emotions that soothe and make bearable the afflictions faced by the *hombres verdes*. The meeting is literally comforting. For these neglected workers to talk about their situation and share experiences, anxieties and anecdotes is ‘good for us’, as one participant explained: the meeting emerges as a space of basic healing, self-care and attention. Second, this process is also an important mechanism of involvement, a ‘device of affection’ to create awareness and empathy (Despret, 2013). It is through the therapeutic exchange of stories and testimonies that the ‘green men’ reinforce their emotional ties, affinities and identifications with each other and make their life a matter of care (Puig de la Bellacasa, 2011), either for themselves, for poisoned workers and neighbours, or for occasional visitors such as politicians, journalists, experts and researchers, as in our case. And third, the act of sharing, supporting and feeling-with also functions as a mode of subject-making, since it validates and enriches what the *hombres verdes* are, both individually and collectively: in recounting the stories of the ‘Lettuce brothers’ or the workers ‘on call’, a resilient, dignified, persistent, humble and caring subject is unearthed. A noble subject that was not only poisoned by toxic chemicals but also by toxic politics and relations (cf. Chen, 2012).

What we would like to highlight from these experiences and affections is not just the dramaturgy instilled by Luis and other *hombres verdes*, or their oratory and charismatic capacities. We want to underline the way this affective atmosphere is articulated as a *space of endurance*. These multiple forms of ‘taking care of’ are conjured by the *hombres verde* as they strive to persevere as both victims in need of compensation and as citizens in need of recognition. Anthropologist Elizabeth Povinelli has pointed to all the labour needed by those that have been unattended to not to succeed but, more painfully and fundamentally, to withstand in their project of enduring as ethical subjects (Povinelli, 2011). As a self-caring and subject-making space, ASOREFEN meetings attend to and to some extent heal bodies and subjectivities that have been neglected and abandoned.

This therapeutic vocation of care has proved crucial in Puchuncaví: care as a practice of material, corporeal and affective recomposition without which those that suffer cannot get on with their lives. However, the restorative power of care has been blatantly neglected in the policy-making arena. Deemed as conflictive or stubborn, ASOREFEN has to struggle not just to find political validation, but more basically to find a place to meet and funding for xeroxing documents, making field visits and hiring doctors. *Hombres verdes* have not only been un-cared for, but their caring

practices to endure as ethical subjects, instead of being recognized by the state, have also been politically discarded.

Care as knowledge: Ecological modes of attention and the politicization of *hombres verdes*

Eliana Morales is almost 80 years old. She lives in Puchuncaví, the small town after which the wider municipality is named. She lost her husband, Raúl Lagos, in 2009 after months of agony. His poisoned body had unusually high levels of lead, copper, arsenic and other metalloids. Sr Lagos had worked at the smelting plant for almost two decades and had always been proud to be part of a large national corporation such as Codelco. After spending day after day for several years attending to her husband's altered body, Sra Morales now thinks differently about her husband's national pride. Although corporate technicians had ensured that levels of atmospheric pollutants in the plant were not harmful, Sra Morales came to understand that her husband's sick body was revealed by and entangled in a larger constellation of actors, relations, entities and institutions in which the plant played a significant role.

In this section we focus on how Sra Morales and other people in Puchuncaví became experientially and ethically aware of the relational and multi-scalar nature of their companions' poisoned bodies. The production of corporeal and experiential knowledge about multi-scalar afflictions by otherwise ordinary actors has been well researched by STS scholars (Murphy, 2004; Murphy, 2006; Shapiro, 2015). Along these lines, we are interested in the epistemic and affective process by which Sra Morales carefully and gently managed an *ecological mode of attention* towards her husband's malfunctioning body. Here, we suggest, affective and domestic practices of healing and nurturing are elevated and transformed into *insights*, in some cases even into evidence, through the knowledge-making capacities of care.

Sra Morales never imagined what life had waiting for her. Absorbed by her domestic duties at home, or wholeheartedly involved in her husband's recuperation, she never had time for nor was interested in political affairs. She was not a 'political person'. Breathing and skin problems had accompanied Sr Lagos for a long time. He had become an *hombre verde*. But neither he nor his wife made any conjectures about these reactions. Verdant lacerations, unwashable stains on his working equipment and the strong chemical odour that impregnated his body were, they thought, part of the material and sensorial archive of labour anecdotes. Things changed in 2006 when Sr Lagos suddenly lost his memory. They thought he had Alzheimer's and paid for a private consultation with a neurologist. When the neurologist realized that Sr Lagos worked at the smelting plant, he asked for a complete toxicological examination. The test was merciless: Sr Lagos's body was poisoned through and through, and his days were numbered.

From that time Sra Morales took full care of her husband. His final year was terrible. He was bedridden for three months, after which he died of bladder cancer weighing just 32 kilos. Sra Morales narrated what it meant for her taking care of her intoxicated husband. 'We suffered horribly', she remembered, 'Raúl threw out part of his guts. At night he screamed. You could smell a strong odour of ammonia throughout the house. My

husband was rotting away inside.’ Once in the hospital, the doctor confirmed what she already knew: Sr Lagos was a case of severe lead, copper, arsenic and cyanide poisoning. Tubes were inserted to drain his poisoned body. His wife, however, was bewildered when she realized her husband was draining out little pieces of skin and flesh through the tubes. She asked the doctor what was going on, to which he replied that those remnants were his internal organs. Sr Lagos was disintegrating from the inside out.

Sra Bernal, the widow of Roberto Álvarez, recounts a similar story. Sr Álvarez worked at the plant’s furnace for 20 years. He was admitted urgently to the hospital when he suddenly started to lose his memory and vomit a green coloured liquid. Sr Álvarez weighed about 120 kilos and lost almost 50 in just three months. His kidneys were shattered and part of the lower abdomen had exposed skin sores. All of his teeth fell out. After three months in the hospital and many examinations, no apparent cause for his ailment was found, ‘The doctor, an oncologist, didn’t understand it’, explained Sra Bernal with a tone of bafflement.

The confusion of Sra Bernal was not just related to the inability to find a precise causal factor explaining her husband’s affliction – just as the bewilderment of Sra Morales was not simply predicated on her husband poisoning. The puzzlement was about organs, tissues and internal chemical reactions that, as if reinvigorated by Puchuncaví’s lead-loaded atmosphere, began behaving in awkward ways – in ways the doctor *didn’t understand*. Sra Bernal and Sra Morales kept a close track of their husbands’ transformations, a vigilant register of their lesions. However, there could be no reference to a normal body, with its expected chemical reactions and physiology. ‘My husband suffered in ways I had never imagined that a person could suffer’, Sra Bernal explains, perplexed by the extraordinary biochemical reconfiguration of Sr Álvarez’s poisoned body.

Put differently, Sra Morales and Sra Bernal realized that the somatic aberrations they were healing and attending to were embroiled in an uncanny web of vectors and relations. Their husbands’ suffering was relational, the two women understood this by putting the pieces of the puzzle together. The abnormal conduct of their husbands’ bodies needed chemical and *political* explanations beyond their own sick physiologies. And the starting point was the smelting plant. Just like Sras Morales and Bernal, Carolina Vega, another widow of an *hombre verde*, never questioned the multiple occupational afflictions suffered by her husband. When he died in 2007 of laryngeal cancer, she joined the dots:

When they were working [at the plant] they had to handle drums with liquids that were unlabelled and they had to open them ... One Saturday he was called to clean some tricycles they used to carry the material. He came home with his face all red, like when one boils crabs. I got scared and asked him what had happened. He told me he was hot and that his face itched. (Urquieta & Saleh, 2012, n/p)

Attending to the small yet perturbing somatic transformations in their husbands, Sra Morales, Sra Bernal and Sra Vega came to a far greater appreciation of the scale, sources and consequences of chemical harm in Puchuncaví. This ecological awareness also extends to the garden. In caring for and attending to her plants and trees Ester (Figure 3), a local from Los Maquis, also began to form suspicions, conjectures and hypotheses about the larger meshwork explaining her backyard environmental crisis:

Today I went to see my lemon trees and I ask myself why their leaves are black, that's my question. I think it's because of the contamination from Ventanas. The lemons are black and ugly just as other plants I have. I planted a pine and it's black too ... I went to see the avocado plant I have and it is also black and I have tried to clean it but it is impossible because I clean it and the next day it is dirty again.

The intimate and affective concurrence between Ester and her garden has facilitated something that activist groups have unsuccessfully attempted for decades in Puchuncaví: to act locally and think globally; a connection between daily sufferings and the broader political economy of Puchuncaví's contamination. Ester does not restrict her observations to the actual deposits of particulate matter on her trees but also speculates about the causes and the larger phenomenology of the toxic atmosphere harming her world. *Why*, she asks, are her lemon and avocado trees black, summoning a political enquiry that goes well beyond her garden. 'It is because of the contamination of Ventanas', she suggests, connecting the locality of her suffering to an ecological assemblage of beings and forces: the smelting plant, chemical toxicants, wind behaviour. Likewise, when she observes that it is impossible to clean her avocado tree because of the relentlessness of chemical toxicity she is not just making an empirical statement, she is also making sense of the magnitude, timing and malignity of the contamination, thus relating her own affective disruptions to the temporality of industrial pollution and production.

By taking care of their companions, human or otherwise, people in Puchuncaví opened up a space for political speculation and imagination. Bodies, fluids and wounds, usually kept aside in a personal space, were suddenly apprehended as semiotic effects of larger ecologies. It is nonetheless a particular epistemological recognition. On the one hand, plants, human bodies and the atmosphere enveloping them appeared in ways their caregivers had never imagined. Paying meticulous attention to minor yet vivid mutations, assessing subtle alterations and apprehensions, our research participants realized the uncompromising nature of their biochemical world. On the other hand, the recognition of this plethora of empirical and eerie abnormalities endowed Ester, Sra Bernal and Sra Morales with an ecological awareness about the causes, effects and temporalities of Puchuncaví's environmental crisis. Their intimate suffering was at once irreducible, bodily and affective, *and* relational, politicized and scalable.

In the stories of Ester, Sra Vega, Sra Bernal and Sra Morales care – cleaning, healing, attending, sheltering – functions as a mode of attention that helps join the dots, make connections, identify actors and establish patterns. Political action for these ladies and other people in Puchuncaví remains largely intimate (Tironi, 2015). But the attention to the minute alterations affecting their loved ones has allowed a larger vision about causes, consequences and liabilities. If politics implies some kind of engagement in the public sphere, the domestic practices of care deployed in Puchuncaví has politicized otherwise de-politicized entities.

Discussion

In June 2016 I was invited to a ASOREFEN monthly meeting.⁸ A year had passed since the meeting described in this article. The *mise-en-scène*, however, was identical: the same school lunchroom in Quintero; the all-male board of ASOREFEN sitting at the front; the audience distributed in small groups with women – widows, sisters, daughters



Figure 3. Doña Olivia, Ester's neighbour, in her garden.

Photograph by Manuel Tironi.

– clustered together; and Luis Pino deploying his charismatic capacities. The only novelty that evening was the presence of an anthropologist with her research assistant filming the meeting. The anthropologist was doing research, just like us, on Puchuncaví's environmental conflict. After being introduced by Luis Pino, she briefly explained where she was coming from, what her research was about, and what her expectations were regarding a potential alliance with ASOREFEN. The anthropologist explained the need for strengthening ASOREFEN as a political collective. She explained that many other communities, even in the same region, were experiencing similar situations and that a solution would only come if they came together in a coordinated political alliance. Her talk was enthusiastic and concepts such as 'empowerment', 'local knowledge', 'human rights' and 'community' were often invoked.

Sitting in the back of the room, I listened to the researcher's exposition. Four women of different ages sat near me. They politely listened to the anthropologist, but I could sense a mix of boredom, discomfort and anxiety in their eyes and whispers. It was as if they were listening to something at once related but unrelated to the issue at hand that evening. Perhaps the anthropologist sounded a bit too academic, or too much like a left-wing activist, for these women that had come to that chilly room to hear if Luis had made any progress with their compensation demands. The anthropologist was there because she *cared about* the situation in Puchuncaví and she presented her careful attention to *hombres verdes* through the logic and grammar of (progressive) academic research – just like I, needless to say, had done in her place.

In that room different forms of caring were enacted. The anthropologist actioned a form of care that did not match that of the women with whom I sat. They had attended the meeting to be updated about their legal processes, and also to see each other and to talk about their grandchildren and their health afflictions. They were there to suffer (and hope) together: they came to the meeting to care for and support each other. The talk of the anthropologist cared for different objects. When the presentation ended, and as if Luis had captured the mood of my companions, he swiftly took the microphone from the anthropologist and in an almost apologetic tone, he explained to the audience: 'What is important is that the project involves *lawyers*', he emphasized. 'She can put at our disposal lawyers from University of Valparaíso, and *that* would be really helpful.'

What do people in Puchuncaví do against chronic suffering, what kind of politics do they invoke and what is the role of care in those actions? The above vignette embraces different stories around this question, all of them important in this article. But for the larger point of our argument, one is particularly relevant. The political and affective mismatch between the anthropologist, us as researchers, Luis Pino and the women with whom Manuel sat that evening illustrates not just the multiplicity of care, but also the choreographic folding and unfolding of care (and un-care) in Puchuncaví. Like a mosaic of related but not fully connected pieces functioning in unison, on that chilly evening care was displayed at one and the same time in the way the anthropologist framed, talked about and made visible suffering and damage in Puchuncaví; in the practices of mutual support among the widows and daughters of the *hombres verdes*; in the empowerment of these women that found in the ASOREFEN meetings a space of subjective dignity; in the attempt of Luis Pino to get expert (and free) legal counsel in his search for economic compensation; and in our rehearsal of a care-full mode of research. These are all forms of care, actions purposefully aiming at the establishment of an affective compromise with those that have been harmed. But far from establishing a coherent *agencement*, these forms of care have different affordances and imply divergent connections to politics and action. These forms, put another way, resist any attempt at configuring a single, strategic arrangement of care.

These frictions and partial connections resonate with the choreographic nature of care and un-care in Puchuncaví we have described. In this article we identified two specific capacities of care for the expansion of politics within struggles for ethical recognition and environmental justice in Puchuncaví. We described the power of care practices to create spaces of ethical and affective endurance and to produce knowledge about beings, things and relations. We recounted how, by crafting affective atmospheres of self-help and collective memory, those that have been harmed strive to endure and persevere. Here care unfolds as an analytics to enunciate problems and make connections, but also as a therapeutics to heal, soothe and convene. We illustrated as well the way everyday practices of healing sick bodies and plants allowed people in Puchuncaví to develop more sensual and ecological forms of knowledge, a type of evidentiary regime overlooked or simply deemed irrelevant by expert cadres.

We labelled these capacities of care as enduring and knowing. These care-powers do not intervene separately, but neither in a completely integrated manner. Members from Consejo Ecológico or ASOREFEN take care of their lives and environments by healing

their loved ones but also, at the same time, by denouncing state abandonment in blogs and websites; care is invoked to expose the affective and emotional consequences of 50 years of contamination, and also to demand economic compensation. Care is about bodies and health, while simultaneously about working conditions, plant companions and rural poverty. Care allows for the politicization of both the intimate and the public, Ester's vegetable garden and Chile's late liberal developmentalism. Care points at the formation of a collective sentiment of community, while, in parallel, at the configuration of an individualized notion of wellbeing. Care situates the conflict in the history of the smelting plant, and at the same time in the future of this zone of sacrifice. People in Puchuncaví have found in care, both as a practice and a value, a way of talking about, acting upon and getting to know their 'toxic lives'. But it is precisely the complexity of their lives and the accumulated despair after decades of abandonment that prevents the mobilization of care as a complete and well-articulated resource. In the face of the incommensurability experienced by the people in Puchuncaví, care cannot offer a one-size-fits-all template or an organized discursive device to explicate existence, politics and bodies. Always precarious and changing, providing temporary answers and subtle arrangements, the choreography of care in Puchuncaví is predicated on a world, the world of those that have to cope with intense suffering, that resists definite answers and univocal interventions.

This brings us to the question of policy in Puchuncaví. Caring practices, we have identified, allow for critical actions by which Consejo, ASOREFEN or the widows opened up the possibility of a political *otherwise* (Povinelli, 2011). After all, this seems to be the crucial question: How can things be different in Puchuncaví? And how can this change be instigated or at least imagined by displaced, harmed, impoverished and abandoned communities? Our account suggests that in Puchuncaví a politics of potentiality is inculcated by inventing new forms of talking about toxins and the state, by creating affective spaces of mutual support, and by establishing new – more sensual and embodied – evidence-making procedures. It is through these practices that the ecologies and logics of the visible and invisible are cracked open by activists in Puchuncaví.

The question, however, remains: Can the practices of activists and families in Puchuncaví be translated into a new generation of care-full policies? What are the conditions for their extension into the sphere of state action? After spending time with David, Ester, Luis Pino and other members of ASOREFEN, it seems that a good starting point for the design and implementation of more care-full policies is to be more careful with and about them: a new, more affective disposition towards their lives and worlds. Perhaps this entails something as basic as the capacity to listen to them, rather than talking about them. To be disposed to taking seriously the words with which they describe their torments, to validating the realities unearthed in their testimonies, to paying close attention to their ailments, however small they may be. To be a modest witness (Haraway, 1997). And this goes for state officers and technocrats but also, and maybe primarily, for us researching toxic or otherwise deprived worlds. The epistemological and ethical void between the anthropologist and the women sitting next to Manuel in the meeting is a tale about our own ethical compromise. Like a mirror, it shows to what extent goodwill, as we have learned from

Isabelle Stengers (2005), does not suffice if it is not preceded by the capacity to stand ‘in the presence of’ those upon which we exert our good intentions. This article is an attempt, however rough, towards a more affective and attentive relation between us and our research participants – and hopefully a first, rudimentary step to the realization of more care-full policies in Puchuncaví.

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Notes

1. Ventanas is a small fishing town of around 6000 inhabitants within the municipality of Puchuncaví. Maitenes, Pucalán, Los Maquis, La Greda and other villages that will appear in this article are within the municipal remit of Puchuncaví. Most of Quintero Bay, as well, falls within the limits of Puchuncaví’s municipal administration. See Figure 1.
2. The smelting plant was launched in September 1964 and was operated by the *Empresa Nacional de Minería* (National Mining Company), the company in charge of copper processing. In 2005 the plant was transferred to the *Corporación Nacional del Cobre*, the National Copper Corporation (or Codelco for its acronym in Spanish). Codelco is in charge of copper extraction and production, and is the largest state company in Chile, and the largest state mining company in the world.
3. COREMA, or *Comisión Regional del Medio Ambiente* (Regional Environmental Commission) is a committee composed of regional ministerial representatives that coordinates the Environmental Impact Assessment System at the regional level.
4. The label ‘sacrifice zones’ first emerged in Cold War era North America to designate areas heavily contaminated as the result of uranium extraction, processing and storage (Lerner, 2010). The reference to a sacrificial logic behind the contamination of these sites expresses both the role of the state in the offering up (of livelihoods and ecosystems) in the name of development, progress or nationhood, and the systematic abandonment of these places once they have been sacrificed. In Chile and elsewhere, the concept of sacrifice zones has been mobilized by NGOs and citizen collectives to name territories, like Puchuncaví, purposefully configured by the state for the clustering of polluting industrial activities.
5. The latest additions to a long list of research studies measuring health and environmental damage in Puchuncaví include the reports commissioned by the Ministry of the Environment on ecological risk, atmospheric exposure and health risks in Puchuncaví (www.mma.gob.cl/1304/w3-article-55902.html) and Pontificia Universidad Católica’s report on the health effects on children from La Greda (www.ispch.cl/sites/default/files/Informe_Final_La_Greda_PUC.pdf).
6. Around 400 men and women worked at the plant with Luis. Approximately 140 have died, according to Luis.
7. While the exhumation was a surprise to everyone in Puchuncaví, the widows are still waiting for the exhumation results. Many see beneath the delay the signs of political interventionism to slow down or even annihilate the process.
8. This vignette is taken from Manuel Tironi’s field notes.

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