

Social Representation and Identity: Background on the Study of Odors in Chillán Viejo, Chile

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Abstract

The objective of the research was to analyze social representation and identity based on the smells of Chillán Viejo. This is a qualitative study, the research paradigm is framed in the interpretive, descriptive-dense approach. The dimensions were social representations of smells and identity. The population was made up of regional and local authorities, social leaders and neighbors. The production of knowledge was carried out through case studies, through semi-structured interviews and document analysis. The results show the need for a relevant environmental policy and a more active and effective State in its regulatory role. It is essential to comprehensively address the challenges presented by the coexistence between urban-rural growth and industrial activity, without sacrificing the quality of life of rural communities and without allowing the lack of control and oversight of companies that generate pollution. Only through more committed and responsible management will a solution to this complex problem be found and a balance achieved between economic development and the protection of the environment and people's well-being.

Keywords: Social Representations, Smells, Identity, Chillán and Chile

INTRODUCTION

The present study focuses on smells and their relationship with identity in Ñuble, reflecting a late modernizing project that generates economic, social, educational and health changes (Ministry of the Environment, 2020). It is approached from a social and cultural perspective, considering that odors can affect health and quality of life, especially in areas impacted by landfills and pork companies (Bravo, 1995; Bourdieu, 2007; Pérez-Agote, 2019; Parada, 2020a ; 2020b).

Following the guidelines of Gleichmann (1982) and Corbin (1987), the urban cleaning process and the elimination of bad odors are historically analyzed. Since the 70s, progress has been made in the sociological study of odors, highlighting the relationship between identity and social status (Largey and Watson, 1972; Guérrer, 1988; Batalhone, Nogueira and Mueller, 2002; López and García, 2006). Recent studies on air pollution and the olfactory consequences of wastewater treatment plants and landfills complement this research.

The study is also based on the ideas of Mauss (1989) and Burke (1999), who maintain that odors are social representations loaded with cultural values that change over time. Thus, the control of bad odors in cities and its impact on the quality of life are effects of the state modernizing process.

Analyzing odors from a sociological perspective implies understanding their influence on social relationships, quality of life and the aesthetic values of the community. It is crucial to prioritize health and social well-being over economic activities that generate bad odors.

The research problem focuses on how industrial odors in Chillán Viejo affect social relationships and quality of life (Ley, 19,300, 2008; Undersecretariat of the Environment, 2013), the central area (Mardones, 2006; Nilo, 2010; Undersecretariat of the Environment 2013; AQUALOGY Medio Ambiente Chile 2014; Ministry of the Environment 2018; DICTUC, 2019; The objective is to analyze the social representation of smells and their relationship with identity in this commune. The research is carried out in Chillán Viejo, with a population of 34,311 inhabitants and a high poverty rate. It seeks to contribute to the sociology of smells and sociological

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theory (Mills, 2003; Durkheim, 2012b), exploring the relationship between olfactory identity and social status in Chillán Viejo.

Social representation and identity

Social representation is understood as “the contents of everyday life, with common thought, with the images and explanatory models that a certain social group has about an object of reality” (Moscovici, 2008). A social representation is capable of converting a perception or an abstract aspect into a concrete concept that is presented in the minds of all people. The above helps to explain the configuration of the representation of smells in Chillán Viejo.

Another concept that guides our research is identity, which has to do with the way in which individuals and groups define themselves by wanting to relate, "identify", with certain characteristics, allowing us to contrast the social representation of smells with identity and social status. For this, two constitutive elements of identity stand out. First, individuals define themselves, or identify with certain qualities, in terms of certain shared social categories. A second element would be that "when producing, possessing, acquiring or modeling material things, human beings project their self, their own qualities into them, they see themselves in them and they see them according to their own image" (Larraín, 2001).

The individual is a social being, as Durkheim (2001a) pointed out, he observes the world as a representation of the subjective (physical-psychic) and objective organization, with the intellect itself being the one that transforms into images that explain social construction from the social horizon in which is inserted. Based on the preceding ideas, society is defined according to what was expressed by Simmel (1986a) as “the sum of those forms of relationship through which society in its first sense arises from individuals” (p. 18) and, finally, culture is a determining factor for social cohesion (Durkheim, 2001a).

Public policy around odors

The odor problem has received attention in European and Asian countries, such as Germany, Holland and Japan, in the last four decades. However, in Latin America, and specifically in Chile, this issue has recently begun to be incorporated into the public agenda, complicating regulatory regulation and the evaluation of its effects on society, both in urban and rural areas (Cenma, 2010).

Odors negatively affect people's quality of life and daily activities, causing health problems and decreasing property values. The sources of these odors are varied, including anthropogenic activities such as agriculture, food processing plants and wastewater treatment plants, as well as biogenic sources (Fernández, 2016).

In Chile, odor regulation is present in several legal documents. The Constitution (Article 19, paragraph 8) and the Civil Code (Article 937) protect the environmental heritage and the purity of the air. The Health Code establishes specific provisions to control environmental factors that affect the health and well-being of the population, sanctioning offenders (Fernández, 2016, p. 29). However, there are conflicts between constitutional property rights and the right to a pollution-free environment.

Law 19,300 regulates the right to live in a pollution-free environment and establishes that projects with potential environmental impact must be evaluated. However, studies show deficiencies in the evaluation of odors in projects submitted to the Environmental Impact Assessment System (SEIA), which underestimates odor problems (Fernández, 2016).

Control and monitoring of mitigation measures are not effective. The surveys and electronic noses used have not achieved significant results due to the lack of exposure or impact criteria (Fernández, 2016). Furthermore, Law 19,300 does not stipulate specific emission limits, which are developed through Supreme Decree 93 of the General Secretariat Ministry of the Presidency of the Republic.

The growing social concern about environmental issues has led citizens to demand public policies that address these problems. Municipalities have the power to issue ordinances on environmental issues, but these usually lack technical specifications. Decree No. 470 of 1947 prohibits unpleasant odors and toxic gases, but does not specify the minimum distance between industries and urban areas. Law 18,695 and the Law of Municipalities

allow functions related to public health and environmental protection, but do not regulate specific physical-chemical parameters (Fernández, 2016).

Odors in Old Chillán and Environmental Regulations:

Chillán's urban planning has been influenced by various historical events, such as earthquakes and modernization, resulting in two urban centers: Chillán Nuevo and Chillán Viejo. The latter, especially the El Quillay sector, faces serious odor problems due to the presence of the company Agrícola y Ganadera Chillán Viejo SA (Maxagro), which raises and fattens pigs in farms close to residential areas. The company, acquired by Maxagro in 2014, has not been able to adequately mitigate annoying odors despite implementing improvements such as biodigesters.

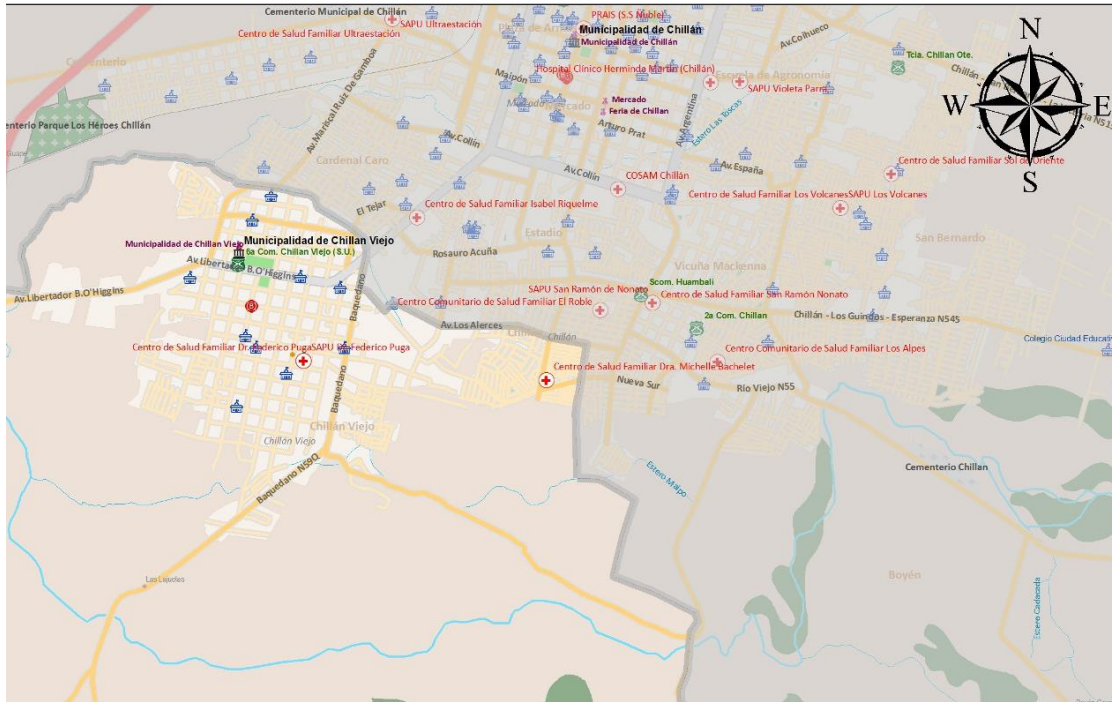


Figure 1. Chillán Viejo

Source: Library of the National Congress of Chile (2023).

The odors coming from pig manure and excreta have caused significant health problems in residents of the Cumbres de Quillay sector, such as headaches, vomiting and fainting. These odors, described as putrid and compared to rotten eggs, affect both adults and children, and have led residents to organize to record and report these problems (La Discusión, 2016).

Since 2018, the Maxagro company has been the subject of multiple inspections by the Superintendencia of the Environment (SMA), resulting in the installation of a continuous recording station for offensive odors and air quality. In 2021, the SMA concluded that the Maxagro project had failed to prevent the presence of bad odors and several measures were imposed, including a digestate control program and an odor management plan (SMA, 2021).

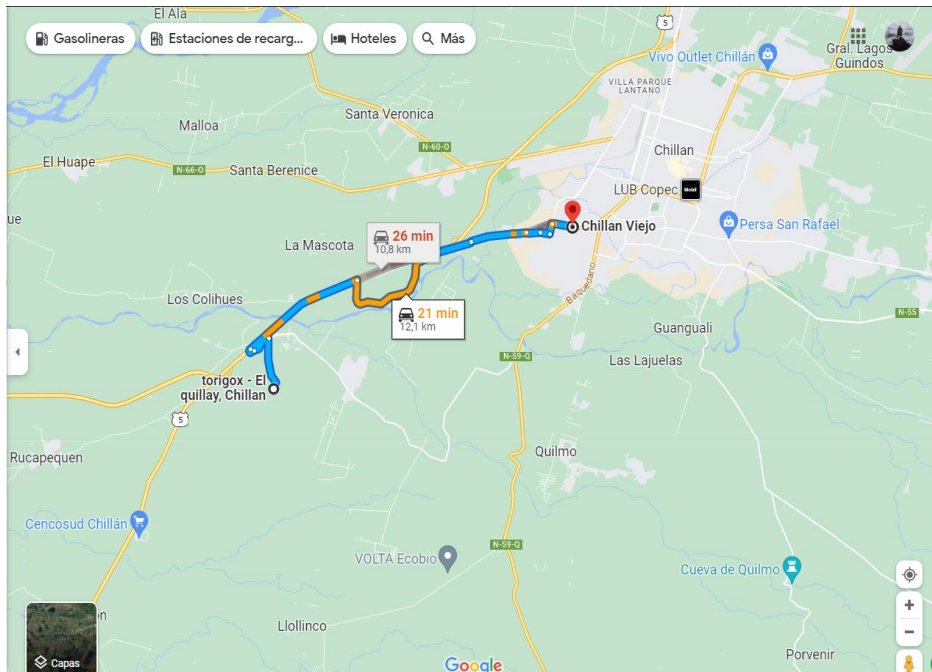


Figure 2. Location of the Maxagro plant

Source: Google Earth, 2023

Ecobio Sanitary Landfill

The Ecobio landfill in Llollinco has also faced complaints about odor and pollution problems, resulting in the revocation of its Environmental Qualification Resolution and multiple sanctions. The SMA audits detected deficiencies in the management of leachate and storage of hazardous waste, leading to the implementation of provisional measures to remedy the affected areas (SMA, 2022).

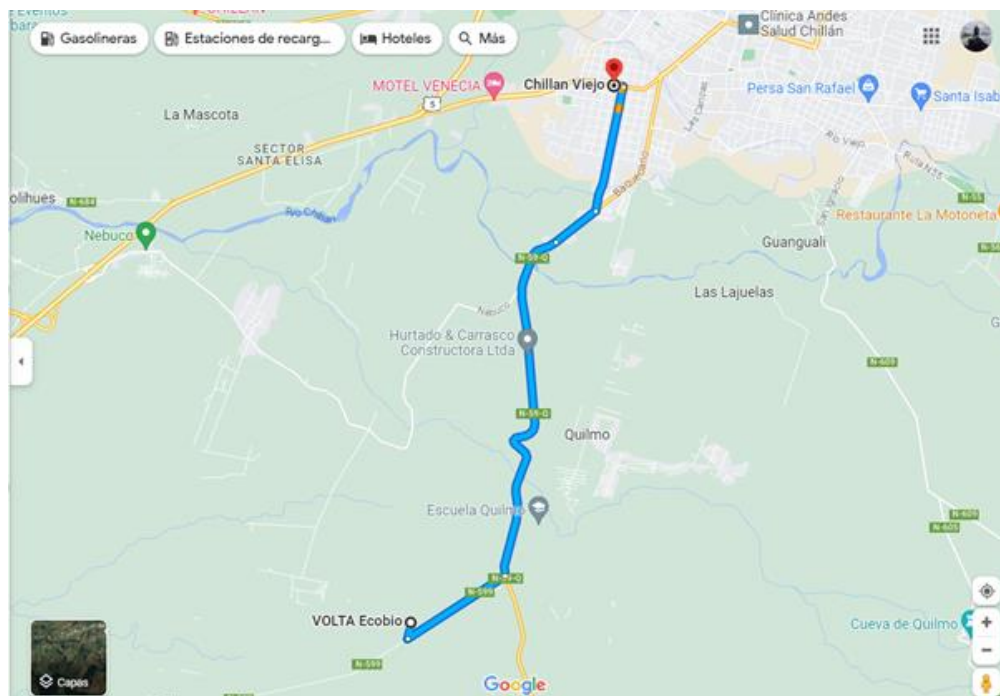


Figure 3. Location of Ecobio

Source: Google Earth, 2023

The odor situation in Chillán Viejo highlights the need for effective central planning and robust environmental regulation. Persistent odor problems and lack of adequate mitigation measures have severely impacted residents' health and quality of life. It is imperative to strengthen the regulatory framework and improve institutional capacities to manage these environmental and social problems more effectively.

METHODS AND MATERIALS

The research approach is qualitative and its epistemic positioning is socio-historical, which allows the study of social representations and identity in relation to the odors present in Chillán Viejo, such as chancherías and landfills. The epistemological paradigm that guides the research is framed in the interpretive approach (Gadamer, 1997) and the dense-descriptive approach (Geertz, 1983; Denzin and Lincoln, 2012).

The instruments used to collect the information were the documentary review and the semi-structured interview. A theoretical sampling was applied, in which 5 key informants were selected. The selection process ended when no new relevant data was obtained, that is, when information saturation was reached. Data analysis was carried out by data reduction using the constant comparison method (Strauss and Corbin, 2002). The context of the study focused on the swine plant and the Ecobío landfill, located in the commune of Chillán Viejo. The population studied included: Regional authorities and inhabitants of the mentioned sector.

The information collection technique was content analysis, allowing information to be extracted from the content of the text, whether explicitly or latently. To then analyze them, in isolation and counted to finally be interpreted. The triangulation of the information, the data obtained from the review of documents and semi-structured interviews were combined, in order to verify that the interpretations of the sources were appropriate and thus meet the objective of the research.

RESULTS

Public Policy Around Odors and its Implication on the Population in Ñuble

When inquiring about public policies regarding odors and their implication on the population in Ñuble, those interviewed expressed the need for a regulation that regulates the problems linked to odoriferous emanation, since currently there is no applicable norm. for the regulation of this problem. While there are no studies in the field of odors at the regional level, the following is noted in this regard:

“(…) Regarding the regulations, for example, local ordinance, there is nothing about odors. At the legal level, there is a pig plant odor law, a decree, but it has fine print, it regulates plants that have up to 300 pigs and from there upwards it is free to execute. In other words, in the end what they regulate are small plants, like pig SMEs. The one here has about 4,000 or 40,000, I don't know how much, it has a lot, I think, it has two schools. (...) So, for example, the law no longer applies to that establishment, but rather it applies to small pork companies” (E.5).

“There is no definition, an answer or a definitive solution, because the law is very vague, 19,300 is the general basic environmental law, but it is so old that it does not have the capacity to control, of course, what is already is happening now, that is, in the 21st century, it is true that a lot of time has passed since that law was created, and in reality things have changed a lot. So, the authorities that have the capacity to supervise and enforce the regulations according to what the law stipulates often do not do so because the law does not require them to do so either” (E.2).

According to the bibliographic review and this also appears in the findings on the ground, only the Superintendence of the Environment has, in organizational terms, the power to make final and/or sanctioning decisions regarding odor pollution problems raised by companies. However, the communal government, that is, the Municipality, is the one that frequently collects the problems of the neighbors, who are referred to the Environmental Directorate department who make complaints to the authority.

“There is a lack of civic education, they (those affected) do not know that they can go to complain to the Superintendence of the Environment, they do not know that they can even place protection resources as a

result of these situations against a certain company, and what they do “For them, due to a lack of civic education, they have to resort to their first government, which is the communal government” (E.2).

“They come here, they call me, they send me messages on WhatsApp, videos, photos, emails, they tell me, today there is a smell of such and such things, it affected such and such people. (...) So, what is the way to pursue this complaint, I generate a letter, which is directed to the superintendence of the environment, on behalf of the mayor, and I actually explain what the complaint is, for what reason, since when this episode is generated, what it produces in the community, etc. And then, once that office leaves here and reaches the environmental superintendency, that environmental superintendency is the body that supervises and sanctions companies, it is empowered to do that, to sanction, we as Municipality we cannot sanction, we can only support and actually monitor a little that the RSA of each company and what the neighbors ask of us is complied with” (E.5).

In this way, the role played by the Municipality is merely informative; no sanctioning possibility falls on it. Therefore, although the neighbors make complaints to the Municipality, an immediate sanction is not generated, since there are no regulatory tools that force the company to a solution in the short term, “there is no policy that is generated or that we As a Municipality, it obliges us or empowers us to carry out a sanctioning process that is more general, or that is stronger” (E.5):

“(…) The lack of regulations on environmental matters is serious, because if you start to review the regulations on environmental matters, first, in terms of odors, we practically have none, because they are all construction projects for emission standards. of certain odors, which are in the pork sector, in the fishing sector, mainly those that are being worked on in our country (E.3).

To date, there is no appropriate institutional framework for decision-making regarding this problem. That is, the State still does not have a clear orientation in terms of environmental policy and its corresponding legislation and implementation, so the instances to generate sanctions are limited and deficient. “In the case of the pork plant, the truth is that the pork plants have been inspected, they have been fined, they have complied and have returned to normal” (E.5):

“There is not enough oversight, and that is a serious problem, because the inspectors, today, mainly those in environmental matters, are all those from the health service, which the Superintendence of the Environment can do, and in the case There are few people from Chillán, very few people, as it is a new region and we are the region that has a lack of inspectors and officials working, and not because we want to, but because this happened that way, it was created that way with this professional staff (E.2).

There is, therefore, no clear legislation regarding the approach that the country wants – or should – take to decide which, how and in what way an environmental strategy will be developed in accordance with the needs of the region and its territories. Therefore, we find that the connection of Public Policy around odors and its implication on the population in Ñuble lacks transversal, open and active communication with the inhabitants of the region and the surrounding communities most affected by the emanation. of odors from companies:

“There is little information, currently there is also a poor decline on the part of the SEREMIA of the Environment to be able to work on these issues. There is little citizen participation, there are some milestones that they advocate and there is no greater direct link between SEREMIA and social organizations.” (E.2)

“The truth is that when you talk to the neighbors, there is no citizen participation in the development, let's say, of what the odor emission project is.” do a little more like a follow-up, true, of the way in which... or when odors are generated, at what time, in what situations, what causes it” (E.5).

Based on what we gathered with our interviewees, we can confirm that the expeditious dialogue with who would be directly affected has been overlooked, leaving aside any social consideration they had for them, ignoring the immediate social impacts produced by the odoriferous emanation of companies, and also ignoring the needs that these territories have in relation to environmental demand. “Who has gone house to house and asked what their problem is regarding the environment? They don't know him!” (E.4).

From the above, we can point out that the community's expectations regarding these companies are not favorable, especially when public policy has worked for them as a complex network of relationships rather than a mandate that comes directly from the organizations responsible for formulating and applying them to provide a solution to environmental pollution, which would be expected to be a priority "In other words, there is no law that controls the development of this company with respect to the emanation of odor pollution, whether in water, on the ground, in the air" (E.1)

"The expectations of the citizens are always high, they look for a solution, they have been dragging on this issue of odors for years, as there is no regulation, there is no greater control and not because of a lack of control, but they simply do not have a way to control. But the expectations of the neighbors, in reality, are to avoid this type of situation (...)" (E.3).

"I imagine that a large part of the community hopes that the plant closes at some point, and that it leaves, and that hopefully nothing like this will ever arrive. Or that, in another way, they comply with what they stipulate in the environmental regulations, that they find a way to manage, mitigate these odors and not cause more pollution" (E.5).

Environmental policy, therefore, as a matter of State, as a tool for the integral development of citizens, is strained by these shortcomings that do not allow an effective solution to pollution and abuses by business with respect to the environment.

Social Representation of Smells

In relation to the configuration of the social representation of smells in the places and non-places of Ñuble. We will begin by making a distinction in terms of territory, essentially because when trying to identify the physical-geographical space that is affected by the problem of odors, we find shared notions, since the interviewees agree that Chillán Viejo is affected in its entirety, But it is not easy for them to distinguish up to what geographical space the affectation transcends, since there are natural factors that lead to the affected population being constantly redefined:

"The entire commune of Chillán Viejo is affected by odors, because it also depends a lot on the change in wind direction. Yes, for example, it happens more in the area in the summer because obviously the amount of leachate there is evaporates more, but it happens most of the time, most of the year in fact, the issue of odors occurs. And I believe that, I would dare say that the smell reaches Chillán, because of course, the smell travels with the wind. So, everywhere it goes, I imagine that there is a large radius of odors that is produced, which has not been able to be measured yet, because there is no way to measure it. That is, there are no instruments that measure odor, odoriferous, or the range, some... there is no way... there is no way to measure something more tangible to measure the smell, because of course, it is difficult" (E.1)

Based on the above, we can point out that the interviewees distinguish the town of Nebuco, Lollinco, and the communes of Yungay Pemuco and even Chillán as the affected area. "The community of the Lollinco sector, Quilmo Bajo, are the people who are most affected by the issue of odors due to the companies that generate these odors." (E.1)

"The impact would begin in Nebuco, in Nebuco, the residents of Nebuco have filed complaints, that they are close to the pork plant, even though it is free space and everything, we are talking about the affected area more or less from a little towards the south of Pemuco. There are people in Pemuco who have suddenly smelled the smell and who have told us about it" (E.3).

"At the hospital, responsible people told me that the smell of pork was coming to the hospital. Yes, I say responsible, (...) I have gone at 8:00 in the afternoon, I was last week at 9:00 at night in the square. (...) And the smell was like stirring a septic tank" (E.4).

When investigating the problems that the installation of these companies in the sector has generated, a greater problem has been revealed, which is a generalized feeling that Chillán Viejo is an area of sacrifice:

“But today Chillán Viejo is a sacrifice zone, we have all the farms installed there, we know of 6 pig farms and there may be more, because they do not necessarily have to have large industrial equipment but they are also low-class, There is the wastewater treatment plant that is Essbio, there is Ecobio and, remember that the entrance to Chillán Viejo is the industrial zone” (E.3).

“Since it is not going to be a sacrifice zone, we have sewage treatment, a landfill, garbage collection truck washing, we have coal manufacturing instead of Larque, we have the Copec fuel oil plant, we have an impregnation plant, we have plants seaweed drying! Imagine the mixture of these concentrations of smells that they transform into! between algae, between chemicals, between decomposed garbage, between benzine that could escape odors, between the sewage of all the human feces and that's all that is found, more pig farms, more poultry farms, poultry farms” (E.4)

In relation to the direct repercussions that the facilities of these companies have generated in the community, these are of diverse nature. We have, on the one hand, the impact on the health conditions of the surrounding population, which are a direct consequence of the odors “there are odors that make them nauseous, that cause dizziness, that cause headaches, irritation of the eyes, the nose” (E.1).

“They cannot coexist, nor live healthily, nor freely in their daily life, nor with dignity in their daily life, in their daily life that is always impacted by these odors, it affects their health, it could be affecting their daily life, for example, I don't know, that there is a child playing in the patio of those houses, this emanation of odors arrives, and of course, the child is going to get sick, the child is perhaps going to get dizzy, vomiting is going to occur. (...) They do directly cause a health condition” (E.5).

We can also reveal the impact of these companies on the quality of life of the communities: “It damages people's quality of life, absolutely, it does not allow you to go out, it does not allow you to do anything. So how do you live without being able to go out to the patio? You don't want to go out shopping because the smell is unbearable” (E.3) They also allude to the impact on the mental health of those affected “people seem to decompensate psychologically” (E.4)

“It is a social problem that partly includes the others, but you see it reflected in the fact that those who suffer, that it is the community that suffers from bad odor problems, fly problems, who cannot be in the afternoon having tea or coffee outside, they cannot share with the family, because no one wants to go to Chillán Viejo at certain times, the children, the clothes, coming to work” (E.4).

But, in addition, the magnitude of the environmental impact produced by these projects has not been well evaluated - or assumed - either by the responsible business conglomerate or by the State entity, as it does not have a clear and decisive environmental policy as essential environmental issues. within the country case. We are in a territory in which odor leaks are mixed that are the tip of the iceberg of a larger problem:

“(…) Suddenly the neighbors say: in the morning we found the smell of becine and that has to do with the filtration or infiltration with the COPEC plant that is there. There is a COPEC collection plant, so no one has investigated how the water tables, if there could have been a leak, you have small companies that are also there, that have to do with established forestry industries and that, for example, make use of what They are the waters with wells that are not regularized (...)” (E.3).

There have also been explicit situations in which the company has generated a health emergency:

“In June, July, there was an emergency situation in the company, in which the chamber where they had the slurry sort of overflowed and it finally fell into an estuary in Cauquenes, which is here in the commune. So, there was a strong impact on the environment, because this river ran off with this pollution that was strong there from slurry. Obviously the smell that the contamination generated in the water, the turbidity of this water. So that episode was very strong, in fact the superintendency was aware again, it went to the Maxagro company, it passed on, of course, the corresponding sanctioning procedures and it had to proceed, and had to clean up the estuary, What do I know, in the commune” (E.1).

Regarding those responsible, both the authorities, as representatives of the public apparatus, and the companies are accused. There is, on the part of the community, a deep sense of abandonment:

“The industries that are located there are highly polluting and risky industries, and they must exist, there is nowhere to put them, they put them there, because there the neighbors have little capacity, and this is a criticism mainly of the municipality, they have little capacity to organization, they have little capacity and lack the tools to be able to complain” (E.1).

The criticism points, essentially, to the poor management of the authorities, their lack of interest and the lack of understanding of responsibilities in this regard. "Here are the authorities that have to order things, both of them, if I do not have the powers, well, I will Municipality to manage where there are more powers and so on, but not to say no, it is not my responsibility” (E.4).

“(…) There is no social interest in developing those types of areas that ultimately end up occupied by the industry, which is good that it exists, but by the industry that believes it can do what it wants, because the first complaint that the neighbors make is to the Municipality, and sometimes the Municipality does not have the mechanisms, nor professionals, to be able to present some type of project to the Regional Government, much less will it have professionals who specifically supervise something” (E.3).

It is also noted that the sociodemographic characteristics of the area make the authorities' apathy possible:

“There is a lack of empathy, there is a lack of empathy on the part of the authority (...) authorities, I mean communal authority, even the government authorities (...) In Chillán Viejo, there is a lack of interest, why? because it is mainly rural, it is mainly small-town, it has a very low educational situation regarding civic life, very low, the neighbors do not know where to turn when they have a problem, they do not know how to do it, nor how to activate the legal processes either they have no knowledge of it. (E.2).

We find ourselves, therefore, faced with an imbalance and a social inequality behind which the State does not reach "today, not everyone defends themselves as they want and how they can, and everyone, the same communities say, we are willing to die within of the stench” (Neighbor of the sector, Ñuble) Based on the above, our interviewees point out that this is exacerbated for reasons linked to partisan politics “(...) they are communities that are not large, there is no interest in developing those communities , they prefer to allocate funds and resources to the urban area, which is where they can attract the greatest number of votes” (E.3).

Contrast of the Social Representation of Odors Between the Relationship of Identity and Social Status

Regarding the influence of the social representation of odors and the impact it generates on the identity and social status of the surrounding communities, we can point out that this is a factor that weakens the self-perception of the subjects and their connection with others:

“People feel stigmatized. In general, in old Chillán, when you talk to these people, as they have been suffering for years, they already feel relegated and on top of that, they have a problem with them, like they feel that they are not considered as a person or as citizens of the community” (E.2).

Our interviewees indicate that they agree with a negative and unfavorable imaginary that is erected over the areas surrounding the companies, being transversal the perception of the place as an unwanted territory that is also extrapolated to its inhabitants, generating a stigma that permeates those who inhabit the territory. “They must think that the community is perhaps filthy, that they don't clean their houses or that they live full of flies, full of vectors, of smells” (E.1). This imaginary also has an impact on social contact, since people avoid approaching those spaces:

“I have heard people say, no, I don't go to my family, because I eat poop, the food they give me is poop. In the end I end up eating poop, regardless of the smell, it is just the smell, and it is from one side to the other, the smell that passes through makes an image form that bathes the community” (E.2).

Some associated experiences are also presented, in which they point out that living in a territory adjacent to these companies raises insecurities and influences an avoidant predisposition to contact with others.

“I talked to people from Llollinco, and they told me, for me it is complicated because, I arrive in Chillán to a relative's house and I have to change clothes, because my clothes are soggy. At that level, they don't even tell me that their clothes are worn out, they tell me that they are worn out. Girls, especially teenagers who are at an age where they want to be pretty. People feel dirty, they feel that they are not in a position to present themselves to authority because they are in trouble” (E.4).

Consequently, the interviewees suggest that in the sector there is a strong restriction of local social capital “I have heard from all the people that when they have invited people, they have felt uncomfortable, because on one occasion they invited them to a barbecue in 3 houses, and they had to go in, because the smell of pork that came was horrible, more from the pig than from the plant” (E.4).

The discourse of the interviewees is strongly fueled by the feeling of impossibility of generating improvement mechanisms, since there is a deep distrust towards a possible solution, which leads to expectations regarding companies being to eradicate them from the place, although they are aware of a unfair struggle, because they consider that “they will never be able to move it, it will always be part of them, that is what they always say, that they will not be able to remove it, they cannot remove it” (E.4).

A stigmatized imaginary also emerges from the discourse, which determines and conditions their lives “that they are going to die with the plant and that no one does anything” (E.4). In this way, they say they live encapsulated within a space that generates fewer possibilities of improving their quality of life or reaching a certain level of urban development “they blame that as a result of this whole situation, the majority of their project does not work, that they do not have paving and an endless number of situations that correspond to urbanization and development of the lands of the communities (...) and this mainly involves pollution problems” (E. 3).

As the environmental violation of this territory gradually increases, a space is being configured that becomes a receptacle for all urban waste, which means that the residents who experience this negative connotation as a reality, since it is assumed which is a stigmatized territory, but it is also considered that the problems to which this stigmatization is due are situations to which they are exposed in their daily lives by living in a certain territory:

“It happens many times that, in fact, the trucks that arrive throw away the bags, they throw things away on the way, they fall through the air. Then the road gets dirty, and it happens a lot, that in reality the road is dirty, it certainly looks contaminated and you see many jotes on the road too, searching in the garbage for scavenging birds. I imagine there is a prejudice like with respect to the sector” (E.5).

This translates into real damage in that the undesirability of the place has led to a decrease in the price of the land. “They have lost the capital gain because no one is going to want to live next to the landfill, no one is going to want to live next to a pork plant, That's a reality” (E.3). What has directly impacted the family economy, because “there is a loss, in fact, the people of Llollinco are selling for whatever comes, a little more than the tax valuation” (E.3). Likewise, we can observe that there has been It is a symbolic abandonment of the territory, people have chosen self-marginalization, living in total abandonment within the territory, because in this context, the possibility of building community, and even coexistence, are nullified by the material conditions of existence of those who They live in a violated territory.

Discussion of the results

Four types of impacts stand out: physical health, mental health, quality of life and social stigma. Each of these aspects has a specific description of how it affects the residents of Ñuble. In addition, the aspects evaluated include oversight, sanctioning capacity and civic education. The general perception is that oversight is insufficient, sanctioning capacity is limited, and civic education is scarce.

Table N° 1 Perception of the odor problem in Ñuble

Type of Interviewee	Identified problem	Featured comments
Municipal Official Ñuble	Lack of clear and effective regulations	“There is no specific regulation for odors; “Existing laws are insufficient.”
Ñuble Social Director	Inefficiency in law enforcement	“The laws are vague and not properly applied”
Neighbor of the Ñuble sector	Lack of action and information on the part of the authorities	“They don't know who to turn to or how to do it”

Source: Own elaboration

Table N° 2 Impact on health and quality of life

Impact Type	Description	Example provided
Physical health	Nausea, dizziness, headaches, eye and nose irritation	“There are smells that make you nauseous...”
Mental health	Psychological decompensation	“People become psychologically decompensated...”
Quality of life	Limitation of outdoor activities, decrease in family visits	“They can't go out to the patio...”
social stigma	Feeling of dirt and stigmatization for living near plants	“The clothes are like pig poop.”

Source: Own elaboration

Table N°3. Public policy effectiveness:

Evaluated Aspect	Description	Featured comment
Supervision	Insufficient, few auditors available	“There is not enough oversight...”
Sanctioning capacity	Limited, only the Superintendency of the Environment can sanction	“The Municipality cannot sanction...”
civic education	Scarce, the population does not know who to turn to	“Lack of civic education among those affected...”

Source: Own elaboration

Table N°4 Geographic distribution of the impact

Geographic Area	Level of Affection	Featured comment
Old Chillan	High	“The entire commune of Chillán Viejo is affected...”
Nebuco	Moderate	“The residents of Nebuco have filed complaints...”
Llollinco	High	“The community of the Llollinco sector is affected...”

Source: Own elaboration

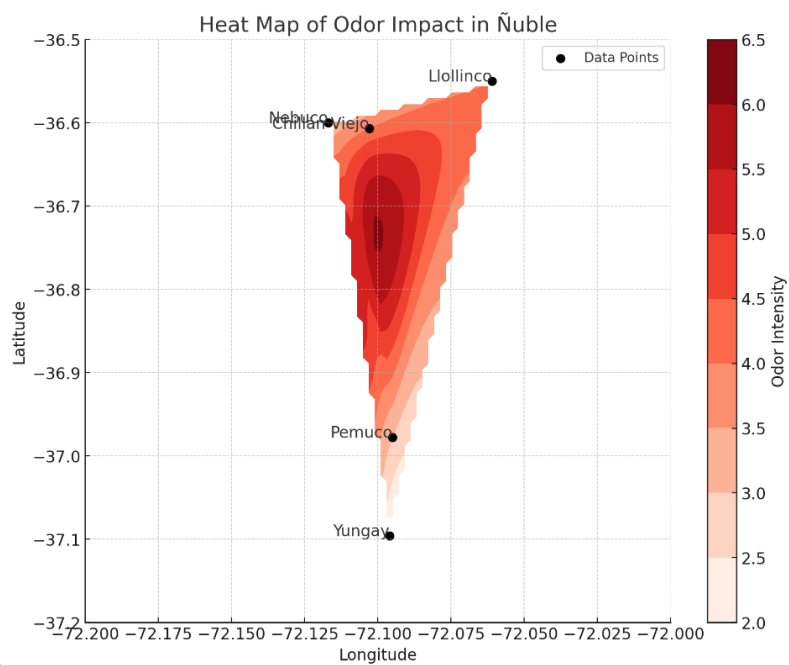


Figure 4. Affection distribution map

Source: Own elaboration

The most affected areas (with the highest intensity of odors) are found in Chillán Viejo and Lollinco, while other areas such as Yungay and Pemuco show moderate intensity.

CONCLUSION

When comparing the background of the case with the work in the field, a series of elements emerge that allow us to outline a possible answer to the question that guides this research process. Firstly, we find subjects who are part of a complex framework that delimits the conditions of possibility of their movements: a city that changes, that tends to expand towards the peripheries, where the market and private actors have a fundamental role. On the other hand, a rurality whose productive matrix becomes industrial and there is a significant concentration of land in the hands of large, highly polluting industries. Both territories have as communicating vessels a public policy that seems to operate less by presence than by omission, with the advance of the city of Chillán Viejo towards a sacrifice zone being a contingency that makes visible the ineffectiveness of a State that for 40 years It has not managed to consolidate itself as a powerful actor regarding important issues – such as, in this specific case, a relevant environmental policy.

It is interesting to note that, in these conditions, which we could call structural, subjects tend to trace routes, in some cases, erratic, in others consistent with a form of organization of society that excessively privileges industries to the detriment of the quality of life of the inhabitants of the territory, precisely in places where life in rural areas tends to become unviable due to the absence of opportunities or the difficulty of access to some services. Paradoxically, in the face of the abandonment of the various public organizations, Corporate Social Responsibility policies only provide a momentary relief for the community, but do not attack the underlying problem, nor provide a solution to poor control and poor oversight by companies. and public organizations.

Participatory spaces do not include all local actors and public policy tends to reinforce these tendencies. However, these violations impact the ways of life of these people: we then find ourselves with a rural inhabitant whose way of facing the city tends to be reticent, distrustful; because the State has abandoned it and does not find means to achieve integration into its environment. Ergo, the call is to the Chilean State who should establish its country guidelines around environmental policies in accordance with the environmental problems faced in the regions, in the country and in the world in general. Having a critical vision regarding the national environmental problem is necessary to understand that the search for solutions must always consider various aspects and these must go into direct consideration with the demands of the territories, having direct communication with those affected, but at the base. of a national discussion about how Chile should face supplying its resources in a sustainable way, but in an optimal and efficient way according to citizen demands and requirements.

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Entrevistas

E1 Encargada de medio ambiente. Entrevista 15 de noviembre 2022

E2 Dirigente Social. 28 de noviembre 2022

E3 Dirigente Social. Coordinadora ambiental de Ñuble. 28 de noviembre 2022

E4 Vecinos del sector, 20 de noviembre 2022 (Reunión con los vecinos del sector).

E5 Funcionaria Municipal (Entrevista 15 de diciembre de 2022)

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