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Dialogues of an Urban Population with the Presence of Solid Waste thrown in the Open Air

João Batista Alves ^a & Miguel Luiz Contani ^o

Abstract- Solid waste treatment is an everyday, complex, and challenging issue. For this reason, it becomes a permanent research theme and generates a specific vocabulary. This study aims to clarify how an urban community deals with the domestic, organic, and non-organic waste and other undesirable or unpleasant materials in landfills, sidewalks, and streets. The research is of analytical, bibliographical, and field type, with data collected through structured and semistructured questions, asked to people living around vacant land with large garbage dumps. The analyses are based on principles of environmental education. It becomes evident that the population copes with the phenomenon, although not adequately understanding the cycle of waste materials, their treatment, and their effects on the health. The lack of solution uses to be associated to the lack of punishment. On the other hand, the cultural habit of throwing garbage in the vicinity of the houses, is rooted in childhood. It can be inferred that "people look, but do not see" because of an automatic and embedded view of the landscape. This automation needs to be "shaken", for higher consciousness towards solution. A vocabulary with the potential of improving perception is generated.

Keywords: garbage. dialogue. environmental education. perception. vocabulary.

I. INTRODUCTION

The concept of garbage is controversial and, "from a semantic point of view", is considered everything that is " useless", " to be thrown away", "to get rid of". The meaning of garbage in different languages is that of an "unbearable substance" (WALDMAN, 2010, p. 17). In contemporary times, garbage is a prominent issue in urban territoriality, involving a whole infrastructure of support (collection and disposal) in view of the ever-increasing waste production. In a number of Third World cities, the government's "emblematic disregard" for the garbage dumps, which are areas of indiscriminate disposal, soon to be appropriated by "waves of poor immigrants" (WALDMAN, 2010, p. 17-18).

Attention is required to the fact that insufficient efforts in socio-educational programs are creating new territories, undesirable or segregated, tending to promote ecologically unequal exchange between regions and countries, as evidenced by their crowded cities. On the other hand, household waste deposits, which tend to be located further and further away in the urban space, have the potential to become a source of economic activity for the benefit of the poorest who collect items thrown away.

Despite the advance in the perception of solid waste as economic value, the unbalance factors in the urban environment need to be seriously appraised, especially in terms of consequences in the deterioration of living conditions, basically affecting the excluded groups, which tend to ignore the risks and vulnerabilities they become involved with. This means the landscape of the city and the levels of interaction it produces.

This study was carried out under the Doctoral Program in Environment and Development of the Federal University of Paraná - Brazil, and was presented as a research report during the 2017 Conference of the International Association for Dialogue Analysis (IADA), held at the University of Bologna - Italy, with theme "Dialogue, interaction and culture: multidisciplinary perspectives in the use of language in daily life." As a first result, the purpose of integrating environmental education and urban dialogues in the perspective of learning and social change was achieved.

The research has moved forward, and now the scope of solid waste in terms of its cycle, treatment, and health consequences, begins to be treated as a permanent scientific subject. The sparking problem began to incorporate this question: How would the city population rate the living with solid waste, and what meanings come out of this answer, that could be used in benefit of a process of environmental education?

The assumption that this research decision can contribute to enhance the understanding of dialogue as part of a wider educational action is added to the perception that a specific vocabulary will be formed. When treated as elements of language and sense production, these elements tend to enhance the competencies needed to find ways to teach and educate on urban themes in the field of environmental education.

Another assumption is that this assessment allows to understand the meaning of changes in space and time, as well as the ways of observing the old and modern dimensions, movable and immovable, living and non-living in the city space. It should also be stated that there is a cultural behavior in the act of burning solid

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waste in the vicinity of homes, with its roots linked to experiences in childhood times: what is natural for the father becomes natural for the son. Waste management today is a demand associated with territoriality.

The goal is to associate information about the way garbage in the city is viewed by the population, with dialogue, search in documents, field visits, in order to provide meaningful inputs for environmental education. The specific objectives are:

- To find indications offered by the statements and documents consulted about the waste disposal phenomenon and the knowledge associated with it.
- Describe each fact and its importance in the constitution of a vocabulary to be incorporated in dialogue.
- Analyze the potential alternatives regarding urban development and ways to improve learning strategies and persuasion.

Data were collected in various circumstances, in the period of two years, by using questionnaires with structured and semi-structured questions, answered by people living around the most critical areas. Contacts with authorities and social organizations of the community have also been carried out.

The discussion begins with the characterization of solid waste in its multiple aspects, then the research data are presented and the verbal outputs in the composition of a vocabulary are illustrated.

II. Solid Waste and Territory

Among the great challenges of today's society with regards to the negative effects arising from the fast appropriation of the natural environment, in contemporary society, by a hegemonic system, which is based on the intense consumption of natural and artificial goods, is the problem of solid waste, as stated by Sauer; Seger (2012). Dorst (1973), Figueiredo (1994) and Waldman (2010), contend that the severity of the problem is at the same time based on the long-standing coexistence between human beings and waste. The generation of waste is an indiscernible content of the human history, spreading through the inhabited space and the landscape, since both integrate the process of transformation of natural resources (WALDMAN 2010, p. 11). In 2012, the World Bank produced a report on urban solid waste and mentioned:

Ten years ago, there were 2.9 billion urban residents who generated about 0.64 kg of MSW per person per day (0.68 billion tons per year). This report estimates that today these amounts have increased to about 3 billion residents generating 1.2 kg per person per day (1.3 billion tons per year). By 2025 this will likely increase to 4.3 billion urban residents generating about 1.42 kg/capita/day of municipal solid waste (2.2 billion tons per year). (WORLD BANK, 2012, p 101)

This information became available only from official data collected by governments on urban solid waste. Many communities live on the edge of dumps, toxic waste dumps and, in a countless number of cities, garbage is scattered on the streets, sidewalks and vacant land (wastelands). In this sense, the publication United Nations-Habitat (2006) reported on this same problem in several cities of the world, which is corroborated by authors such as: Joseph (2002); Bonfanti (2004); Reyes (2004); Chiemchaisri, et al. (2007); Yalan, L. et al. (2008); Abul, S. (2010); Bandara (2010); Jalii (2010); Fazzo, L; Santis, M; Mitis, F. et al. (2011); Mudzengerere, F. H.; Chigwenya, A. (2012); kubanza; Simatele (2019).

According to Veloso (2008, p.1954), waste is described, both as something unpleasant and something feared, because it carries the remains, the unwanted leftover of the production process and because it is "associated with the elimination of pathogenic microorganisms conveyed by the body fluids and waste as well as the disposal of atomic, radioactive and industrial pollutant residues". The author adds that the remains began to cause fear to man "from the moment they were associated with their physical and psychic suffering" (VELOSO, 2008, p.1954).

Jacobi (2012, p.31) indicates that to "reflect on urban solid waste, it is necessary to take into account spatial, environmental, health, social, cultural and institutional aspects". Waldman (2010) explains that, in different cultural contexts, there are different ways of perceiving waste and its management. Garbage, for example, can be seen and perceived as economic source as Kligerman (2000, p.100) proclaims, when associating increased knowledge about garbage with an increase in environmental awareness. The term garbage is then requalified with the designation solid waste, not as a degradation problem, but understood as "[...] ' objects' with added economic value, because they enable (and stimulate) reuse in the production process itself".

In the same sense, Figueiredo (1994) argues that the current treatment given to the issue of waste differs in the various societies of the world, so that the policies adopted are tied to regional characteristics and peculiarities, cultural factors, and perception of reality by each people. However, despite this advance in the perception of garbage endowed with economic value, in modern society, it is a factor of unbalance in the urban environment and "a factor of even greater deterioration of the living conditions of excluded groups, largely unprotected and ignoring the ills of cohabitation with junk", because they occupy the peripheries, precisely where the garbage is normally brought. (WALDMAN, 2010, p. 62). Rodrigues (1988) highlights the problem of garbage in contemporaneity, as responsible for the emergence of new undesirable or segregated territories; that is, areas where the most diverse types of waste are left, promoting ecologically unequal exchange, which occurs between regions, countries, federative units. It can occur even in a city, "as is the case with household waste dumps, which must always be situated further away and which have helped the survival of the poorest who collect the remains." (RODRIGUES, 1988, p. 79).

The issue of pollution and its socioenvironmental consequences is one of the most debated, as it involves a complex chain of cause-andeffect events. Figueiredo (1994) mentions, among the aggravating factors, the increasing participation of the artificialization of materials and toxic loads in garbage. Waldman (2010) warns that such problems occur and get intensified because these residues aggregate several substances that will potentiate the impacts of both in the population and in the natural environment. Among them, the author highlights: paints, varnishes, pesticides, herbicides, repellents, pharmaceuticals, brake and transmission fluids, cosmetics and beauty products, batteries, cleaning products, thermometers, aerosol bottles, fluorescent lamps, etc.

Although in Brazil it represents only 1% of the household solid waste – (world average), this amount is within a vast volume of debris, aggravated by the longterm impacts they can cause. In addition, such residues change into substances that are contained in the released gases and percolated slurry. Beside dioxin and plutonium, slurry makes up the "three most dangerous substances produced by man" (WALDMAN, 2010, p.107).

Special attention should be paid to dioxins which, added to another substance with enormous harmful potential, furans, in addition to their toxic potential, involve enormous costs for the problems caused by them, and it is estimated that the cost of production, in reals, per ton of dioxins and furans reaches the house of the trillion. This is the commitment, in terms of costs, resulting from the problems caused by dioxins and furans (BOLOGNESI, 2012). These and other related aspects determine the constant concern with the risks of uncontrollable waste production.

Environmental impacts caused by solid waste have continuously increased by "product artificialization". This expression refers to the presence of slow absorption substances, most often chemicals, little or nothing acquainted by the population. They are materials that continue for a long time without degrading, as is the case with plastics, new polymers (polyethylene polyvinyl chloride, polypropylene, etc.) and radioactive elements such as plutonium, among others. The same is the case with heavy metals such as copper, mercury and lead accumulated in production chains, later absorbed by plants and animals.

III. METHODOLOGY

Data were collected in the city of Fazenda Rio Grande (FRG), Metropolitan Region of Curitiba-PR. The municipality is located in an urban area of 42.55 km² and 78.05 km² of rural area, totaling 120.60 km². The altitude of the city is 910m, with average temperature ranging from 12.60 C to 23.20 C, humid subtropical climate, mesothermal, cool summers and winters with frequent frosts. The average relative humidity is 82%. (COMEC, 2006). According to the Administration of Fazenda Rio Grande (2011), the municipal human development index (HDI-M), 0.763; classification of the municipality in Paraná, 112; national classification of the municipality, 1,503.

According to IBGE – Brazilian Institute of Geography and Statistics (2010), the population is 81,675 inhabitants. As for garbage collection, there is no information from this source. The Department of Environment reported that the approximate daily average collection is 44.5 t/day, making a generation of 0.545 kg/inhabitant/day, which corresponds to an average well below those collected by the country, state of Paraná and city of Curitiba.

In order to check the causes of so much garbage on the streets, as well as the relationships that settled between society and waste, interviews were conducted from a questionnaire with semi-structured and open questions, in a total of 47 questions. Conducted in a dialogued way, they covered several aspects, from the interviewee's profile, living in Fazenda Rio Grande, quality of life, the issue of vectors, diseases, and the problem of garbage. For initial interpretation of the data, the category analysis was *applied, according* to Campenhoud and Quivy (2011)

A first set of questions was raised in order to verify whether the interviewees perceived the existence of any risk and/or danger near their homes, without addressing the theme of waste. The most common answers, and a minority that knew how to give some answer, was regarding public safety conditions, such as the incidence of robberies, thefts, delinquency, among other occurrences of crime. Very few people remembered to mention the nearby waste, deposited on land, streets, and sidewalks of the city.

The next question was designed to know if the interviewees had garbage as a problem in the city, and 72.7% said yes, 26.5% said no and 0.8% said they did not know. Regarding the mobilization of the population to solve the problem, 59.1% think that there is no mobilization of the population to solve the problem, 34.1% said there is mobilization and 6.8% did not know how to respond. In another question 90.9% find it unacceptable to throw garbage on the street, however when asked if they had already thrown garbage on the street, 50% said yes; another 50% answered no. On the other hand, 95.5% said they saw several people throw

garbage at stake. They blame all people for the situation, except themselves. They refer the reason for the situation to: lack of consciousness 15.2%; more than one reason cited 10.6%, there is no trash 9.8%; people laziness or disregard 9.1%; cultural question 4.5%; negligence or carelessness 3.8%; lack of hygiene 3%; lack of commitment 2.3%, and other responses and do not know, add up to 23.5%.

The interviewees were asked to express their opinions about why so much garbage is generated in the current circumstance experienced in FRG, and the ratio of size volume. 30.3% of the interviewees could not answer, while 22.7% gave generalized, superficial answers as in the phrase – lack of whimsy or lack of collection. Those who gave answers in a more accurate sense, composed the following percentage: largest population, 12.9%; more than one reason, 7.6%; consumerism and lack of recycling, both with 9% of the answers; lots of packaging, 3.8% and lots of purchase, 2.3%. The other answers that totaled 2.4% were: lack of responsibility, too much disposable and waste.

People have been asked how they felt when they saw the garbage strewn across the streets. Even in possible contradiction with their own acts, 20.5% of the interviewees answered poor hygiene, and attributed the terms bad/ugly/dislike. Also highlighted was the 13.5% who considered indignation and discomfort, and 12.1 said they felt sad and distressed.

The interviewees were asked what they thought of the vacant lots in the city. The answers and their respective percentages, were: presence of residues and scrublands, 24.2% (figure 1); need for cleaning and care, 18.2%; sense of denial in general, 15.9% and, despite one of the lowest percentages, it is noteworthy that 6.1% remembered that these places turned into shelter for delinquents and drug users. In this sense, we also tried to understand whether people remembered what kind of waste was disposed in the wastelands, and in this regard, the highlight of the answers by percentages, was: furniture, 18.4%; household waste 18.0%; rubble 16.5%; miscellaneous, 12.4%.



Source: João Batista Alves

Figure 1: Area contaminated with different types of garbage and burning of remains

On the problems that wasteland with garbage could bring to the population, the answers highlighted with their respective percentages were: 44.7% cited more than one problem; diseases/health, 24.2%; vectors, 12.9%. Also, important to add the 2.3% who mentioned the presence of drug users in these lands.

When asked about who is to blame for the garbage on the land: 43.2% attribute it to the neighbors, 22% to the population in general, 10.6% cited more than one problem, besides blaming people from outside and the waste pickers (*carrinheiros*), who when collecting garbage, tear the bags, throw on the streets or land what they are not interested in. For some of the interviewees, the electronic waste found on the land and even on the streets is, in some part, discarding stolen

products. They remove what is of interest in the appliances, and the carcasses with remains of nonusable materials are disposed. There is also disposal of this type of material by small repair shops.

When asked about the reasons why the waste was deposited there, the main arguments (higher percentages), for each of the garbage typifications established by the research, were: lack of awareness and responsibility 28.7%; sloppiness/carelessness [...], 19.8%; have no place to place or collect, ranging from 16.9 to 31.1% of the answers. The mention of laziness with 16.8% is also highlighted.

In the matter of plant materials, loggers from pruning branches, trees and grass, the public manager, through the concessionaire that operates in garbage collection, does not have enough staff to meet the city's demand. Complaints due to the lack of collection of this type of waste, even if requested, are widespread. Also, no waste is collected such as polystyrene parts, furniture, and household appliances such as sofas, mattresses, etc. Therefore, a stalemate occurs between the community, the public manager and the garbage collection concessionaire, and everyone loses. According to 50% of respondents, the responsibility for cleaning the land with waste is the owners, 16.7% the city and, only 3%, the neighborhood, which are those who deposit garbage.

Despite being aware that garbage on the land can cause a number of problems for residents to avoid themselves, blaming the rest of the population for the problem, and 89.4% say they believe it is possible to solve the problem of waste in FRG, 67.4% said they have done nothing so far to participate in solving such a problem. However, 32.6% said they had already done something, but the actions they did were only to solve the immediate problems that were causing them discomfort, with little reference to actions that would go to the heart of the problem. The actions come from a minority and are only reactive.

In this regard, two other questions were launched. First, why they haven't done anything so far and, second, what would motivate them to do something. For the first question, 32.6% said they had taken some action, among them, complaints, contact with owner, cleaned the site on their own, etc. 12.1% do not feel responsible; 12.1% generalized responses, out of context (other); 6.8% the problem has not yet troubled them; 4.5% are afraid of conflicts with neighbors or owners; 3% said they have no one to turn to; 2.3% think they have nothing to do and 0.8% said, for both situations, for convenience and for not having had the opportunity. Finally, 25% said they would not answer the question.

For the second question about what would encourage them to do something in the future, the answers were: 22% if they felt uncomfortable by the presence of garbage; 16.7% would not motivate them; 14.4% gave generalized responses; 12.1% said they felt uncomfortable without specifying; 11.4% for a more organized and clean city; 6.1% for the presence of vectors; 5.3% by the presence of delinquents; 4.5% for better quality of life; 3% as an educational measure and 4.5% did not respond. From the answers given, the action, in general, would only come if people felt uncomfortable about aspects that would directly impact them.

Those who answered that there would be solutions to the problems of garbage in the city (89.4%), were asked to suggest the measures that should be taken. The answers, with their respective percentages were punitive measures (fine), 25.4%; education/ awareness, 12.4%; improve the services of collection and distribution of garbage cans, 10.7%, and cleaning of lots, 10.2%. This confirms the fact that, for common sense, punitive measures are the most effective to prevent transgressions of laws and social norms. However, some of the interviewees are already beginning to realize that socio-educational practices and citizen awareness campaigns are also appropriate solutions. Rodrigues (1998) mentions, for example, the importance and positive effects of selective collection campaigns as an option to solve some of the problems related to garbage.

It is believed, however, that the issue of education will take on greater weight in the future of the process, judging by the positioning of the interviewees when asked to describe the garbage cycle in the slightest: it was expected that at least they would describe that the waste originated in the purchases of products and services that are consumed, are collected, transported and deposited in dumps and landfills (the latter very familiar to all in FRG, because the municipality hosts one of them, most people see it as a dump). However, 78.6% could not describe the minimum cycle and 21.4% were able to make only partial reference without tying to the conclusions.

In FRG, the process of collecting household waste was done twice a week in all neighborhoods and, from 2012, it became three times a week, in almost all neighborhoods. Selective collection is done once a week, and 81.1% said they make separation; 13.6% no; 5.3% sometimes do the separation. However, the data and discussions conducted so far show flaws in this process. Selective collection also leaves much to be desired, complaints about this practice were generalized during the interviews. It was found on site, during the fieldwork, that such failures exist and were admitted even by the city mayor during the interview he granted for this research. In reality, it seems more like "a makebelieve" in separation and collection than properly a cultivated and well-installed habit. The separation was questioned, and 57.6% said it was recycled from the unrecycled; 21.2% dry from the wet and 6.1% make separation into fractions, ranging from 3 to 4. As already mentioned, 13.6% do not; other answers and did not answer 0.8% for each one.

According to the interviewees, they produce daily, on average, 0.9kg of waste/day. Then, a question arises: if the city records an average collection of 0.54kg/inhabitant/day, and they cite an average of 0.9, where is the difference going? People may have overestimated their garbage production, but one fact that can be inferred is that part of that difference is going to sidewalks, streets, vacant land, and riverbanks. Within the process of garbage separation, another concern was the destination of toxic waste such as batteries, and fluorescent lamps. Due to its characteristic, this type of waste has both environmental importance, due to the propensity to produce contaminations in the population that can be directly and indirectly affected by this type of waste, as the labor, because it affects workers who collect garbage, and waste pickers. In this question, 37.1% said that this type of garbage went to the ordinary garbage, 38.6% said it went to recycled waste, 2.3% direct to waste pickers, 5.3% gave evasive responses that were classified as others, and 0.8% did not respond.

When trying to investigate with the association of FRG waste pickers, where all selective waste should be sent, it was found that only a small part of these residues are actually received by the association, and under the conditions cited by the interviewees - inside milk cartons or other containers. However, the volume is not so large, which means that it is either going to the common garbage in larger quantity than was reported, or is going to stop on the vacant land or city streets, inside the boxes, and was not detected by the survey, because no milk boxes were opened to check the contents.

There is also a type of waste that has environmental importance, especially because of the impact it can produce by the pollution of water resources: it is the cooking oil used. According to 26.5% of respondents, used oil is passed on to other people to make soap; 21.2% throw in the sink and go to the common sewer, 16.7% throw in the land, 15.9% make soap at home, 7.6% use little and do not spare, 6.8% give other destinations, 3.8% throw in the common garbage and 1.5% did not know how to answer. As observed, 37.9% still do not give a correct destination for this type of residue, which denotes the need for educational actions - another item to be included in the campaigns that, because they are being diffusely conveyed by the media, have not had the necessary effects.

As another essential item regarding the relationships established between the population and waste disposed in inappropriate places, we sought to know how the parents of the interviewees dealt with the waste. The purpose was to create a condition of rescuing, through the report, the learning process that the interviewee went through since his childhood. The guiding principle is that in children, much of what is learned stays for life, and their own educational process mirrors how the educational process of parents was. In the form, the deal with household waste can reflect cultural aspects, installed from habits acquired in the past. This type of relationship is visible among the data already commented on as the occurrence of waste fires throughout the city - 1,264 points were observed (Figure 2). Throwing cooking oil in the sink or use it to produce soap, are practices that come from traditional habits and customs, especially from people who came from the countryside.

According to 23.1% of the interviewees, the garbage, in their homes of origin, was spread throughout the backyards; 20.7% remember their parents' habit of burning the waste; 11.8% buried; 14.2% sent it to the common collection; 9.5% used the waste with organic fertilizer; 4.7% gave other destinations; 1.8% sent it to selective collection and 14.2% did not. Two curiosities stand out:1) most of the reports that the garbage was scattered, burned, or buried, was from people from the countryside; 2) those who answered that they destined garbage for the common collection were residents who, in childhood, already lived in the city. Those who said that selective collection was already done, had spent their childhood in Curitiba, where selective collection was a practice that was carried out since 1989.



Source: Alves

Figure 2: Burning garbage in a place that should be a sidewalk

This situation can be understood from the statement of Linton (1981), that throughout society, on average, individuals are passive in receiving and fixing the culture instituted, which they experience and transmit to their descendants without many changes. This author argues that the physical structure together with instinctive behavior are biologically inherited, while the behavior one learns is partly socially inherited (theory of unconditioned and conditioned reflexes). Martins (2009) refers to the way Piaget handled this issue, seeing it as a servomechanism, a homeostatic ring endowed with feedback. In the cognitive act, the responsiveness being fundamental, Piaget called it a competence that provides an uninterrupted sequence of learning. This competence was called the "process factor", present in the act of learning.

IV. DISCUSSION OF RESULTS

The data collected were obtained by a set of spontaneous manifestations, involving elements of an objective and subjective nature, integrated to this point, that it becomes difficult, sometimes, to separate one dimension from the other. The mapping obtained means a multiplicity of conclusions to be linked to environmental education.

From the data collected, it can be inferred that the population perceives the discomfort caused by solid waste improperly disposed, in general. However, it does not feel responsible for the state in which these open spaces are located, nor does it know in depth the causes and consequences of solid waste being deposited there. Recognizes that the city has problems with waste; superficially recognizes that the garbage scattered throughout the city, especially that deposited in the vacant land (wastelands), bring problems motivated by disease-causing vectors. On the other hand, it recognizes only on the other the blame for the problem, and exempts itself from responsibility.

There is a culture of throwing garbage on the sidewalks, streets, and wastelands of the city and, in everyday life, people live with this process, because they react timidly in the search for solutions. Such solutions are purely reactive in nature. The cultural habit may have a contribution of the learning process with the parents of the majority of respondents who lived in the rural area and/or small towns with the characteristics, whose size was to throw garbage around the residences, often burning and/or burying it. There is evidence of a habit acquired in this process. The interviewees demonstrated no being fully aware of the problem, given 1) not knowing how to specify what types of disease can be transmitted, the relationship between the distance from the garbage focus and these problems; 2) not understanding in the minimum cycle of garbage, as well as the potential contribution of garbage burning to aggravate such problems. Another issue was also the correlation between these garbage focuses and psychological diseases, such as anxiety and depression. Also, few correlated the problem with overconsumption.

With the improved understanding of the phenomenon, there is the possibility of playing an active role in the action of making it more favorable. The knowledge generated will be recorded and must return in a relevant way, to continue to be expanded, and so that it can be used without loss or rewind. The records need to be found and must be found which is relevant. The attitude of understanding meanings is therefore fundamental. The representation stage is the melting point for information to process itself as a generator of knowledge and thus be transformed. The conviction is towards developing methodologies of access and analysis, as well as knowing how to identify and size them when they are already part of a document.

The risks for public health related to the issue of garbage are the consequence of a number of factors that interact with each other and encompass environmental, occupational and consumer aspects. The illustration contained in Figure 3 was obtained from a quantification of incidence in the speech of the informants of the research and in the conceptual foundation offered by the authors mentioned. The image shows the cloud format of words, in which the ones with the highest incidence have the highest proportion within the drawing. A condition of contact with a typical vocabulary for the representation of knowledge is produced. Rescuing each term and thinking about the fit given to it in the set of observations, is a factor of perception.



Source: Own elaboration Figure 3: Solid waste treatment vocabulary The fundamental association between garbage and problem is evidenced. A care to be taken is to avoid exclusive blame to garbage when it is already deposited, or to adopt avoidant postures in the discussion. Garbage is inevitable and is generated daily, at all times in every human operation; result in leftovers to be discarded, also constantly. For this reason, what should be sought is to adopt a "permanent research posture" in order to refine perceptions and conclusions in order to, in whatever the local, "find ways to isolate factors causing *psychosocio-environmental problems* (...), make comparations, establish inferences about the alignment of social statements and the conditions for a differentiated urbanization. (ALVES, 2017, p.99)

Most of them are far from being able to understand and dimension the fact that part of all these problems stems from the industrial model that imposes a programmed obsolescence process for the items produced self-sustaining from an unbreakable cycle of production and consumption. They refer to the solution of the problems, to the end of the production chain, which is the treatment and final disposal of waste, forgetting that actions must take place in the context of rethinking the economic model, balancing consumption, reusing products for another purpose, after fulfilling their main function; recycle what really can no longer be used.

In this direction, Linton (1981) stressed that, under normal conditions and in all societies, ordinary individuals are unaware of what members of their own group establish in terms of interests and judgments. In this sense it ends up following the established cultural patterns, its meanings and dimensions. Berger and Luckmann (1991, p. 56) point out that everyday life "is dominated by the pragmatic motive recipe knowledge, that is, knowledge limited to pragmatic competence in routine performances, occupies a prominent place in the social stock of knowledge." That is, people only retain what interests them in everyday life, which is part of their daily lives and that provides them with ways to solve their common problems, not having an interest in going beyond them. Such a proposition may explain why there is a lack of interest and deeper knowledge of the various issues raised on the issue of solid waste and the risks involved.

On the issue of risks and vulnerabilities, it is clear that the entire FRG population is at risk, which may be caused by the presence of vectors, as well as waste burning that occur continuously. The low-income population is certainly the most vulnerable because it has fewer resources to claim their rights, fight for their maintenance and acquire resources to treat possible diseases that come to contract, and prevent them in the future.

In this whole scenario, there is an incompleteness in the urbanization process, which does

not yet have basic sanitation services consistent with what would be expected for a healthy city. It is also worth inferring the existence of a marked gap from the point of view of socio-educational practices, both involving the population itself and public managers, especially when it comes to Environmental Education.

V. Conclusion

The starting point of this study was to stimulate a form of dialogue, to investigate how the expression about the panorama that is formed in the city with the presence of garbage spread over a large number of places, and the impact caused, in the evaluation of each participant, on life in the urban space in which it resides. An approach was configured regarding the recognition of the fact that it is inescapable to live with solid waste. From a relationship point of view, it was recognized that tolerance with this fact became a complex condition, because it was marked by contradiction: the informant himself integrates the environment in these conditions, and is forced to a type of recognition that is not able to accept.

What ends up happening is an automation, also not always identified, produced by routine and habit, in which only the critical dimension remains. The landscape is the usual, the malaise is routine, not always verbalized, and that will not be broken without an external process. From this arises the condition of thinking about approaching the phenomenon as a representation of knowledge. The characterization of each item of the vocabulary raised and the proportion in which it is mentioned in the set of verbalizations can inspire projects aimed at the organization of controlled vocabulary.

In the research decision stage, it is important to think about what vocabulary will be generated, as one of the objectives. There is a set of meanings extracted from revelation that configure a process of organization of knowledge, and at the same time of environmental education. What is sought to be proved here is the possibility of data still in the research phase feeding reflections on ways to achieve an approach of representation of knowledge.

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