

Empowerment and communication in São Paulo, Brazil: Participatory Video with
recycling cooperatives

by

Crystal Tremblay

MA, University of Victoria, 2007

BA, Concordia University, 2003

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Supervisory Committee

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Supervisory Committee

Dr. Jutta Gutberlet (Department of Geography)

Supervisor

Dr. Leslie King (Department of Geography)

Departmental Member

Dr. Budd Hall (School of Public Administration)

Outside Member

Abstract

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Dr. Jutta Gutberlet (Department of Geography)

Supervisor

Dr. Leslie King (Department of Geography)

Departmental Member

Dr. Budd Hall (School of Public Administration)

Outside Member

This research explores how Participatory Video (PV) can facilitate empowerment and strengthen dialogue and engagement for public policy with members of recycling cooperatives and government in the greater metropolitan region of São Paulo, Brazil. The research project provided opportunities for catadores/as ('recyclers') to explore PV as a way to shed light on their livelihood challenges, but also as an approach to celebrate, demonstrate and legitimize the value and significance of their work to local government and community. Working through a participatory approach, twenty-two leaders from eleven cooperatives were involved in all aspects of the video-making process, from script writing to filming, group editing and knowledge mobilization. The research took place during nine months of fieldwork located in four municipalities in the greater metropolitan region of São Paulo, Brazil using multiple ethnographic and participatory methods. The methodology for this research is action-oriented, and applies a participatory community-based multi-methods approach. The purpose of the videos was to relay the message that catadores/as perform a valuable service to society, and through the organization of cooperatives have the capacity to be further supported and integrated into waste management programs. The videos were used as a tool for communication with government and for community outreach.

This research is supported through the Participatory Sustainable Waste Management (PSWM) project, a six-year Canadian International Development Agency (CIDA) funded University Partnership project (2005-2011). The overall purpose of the participatory-based PSWM project was to increase the effectiveness, safety, and income generation of organized waste recycling in originally four and later six Brazilian municipalities in the metropolitan region of São Paulo: Santo

André, Diadema, Ribeirão Pires, São Bernardo do Campo, Mauá and some parts of the municipality of São Paulo. The capacity building activities and actions of the PSWM project have contributed to structure, organize and strengthen cooperative recycling enterprises and their members, for example, by setting up a pilot project on micro-credit and advancing the practice of solidarity economy through collective commercialization and networking of the recyclers in the region. In addition, the project has helped create a more inclusive culture amongst the local governments in this region, where many recyclers are now present in political meetings and decision making related to waste management. Unfortunately, this is not the case in all the municipalities and there are still barriers to participatory models in decision-making and a lack of political support.

Findings support the conclusion that PV can be a powerful methodological tool contributing to the process of individual, community and organizational empowerment and is significant for democratic governance and the increasingly popular notion of the knowledge democracy. This research also has policy relevance and practical application. The findings have the capacity to inform models of participatory governance, and improved democratic processes in addressing complex urban development challenges, in addition to advancing practices in government accountability and transparency.

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Dedication

I am grateful to the catadore/as in Brazil, and throughout the world, who are dedicating themselves to making this world a brighter, more equitable, passionate and healthier world for our children and grandchildren.

Chapter One: Introduction

1.0. Research rationale, contextual background and overview

This dissertation explores the methodology and praxis of Participatory Video (PV) as a communication and capacity building tool for empowerment and enhancing public policy dialogue. The research is rooted in the Participatory Action Research (PAR) driven *Participatory Sustainable Waste Management (PSWM)*¹ project, a Canadian International Development Agency (CIDA-AUCC) partnership between the University of Victoria (UVic) and the University of São Paulo (USP), in collaboration with recycling cooperatives, municipal governments, and non-governmental organizations in the Greater Metropolitan region of São Paulo, Brazil. The research was applied in such a way as to make the livelihoods and capacity of organized recyclers (also known as ‘catadore/as’) in São Paulo, Brazil visible to their governments, through improved access to, and participation in, public policy discussions.

Community-based and participatory strategies for planning and decision-making are increasingly being recognized as a critical component for sustainable development (Khasnabis & Motsch, 2008), and reflect worldwide shifts associated with the rise of civil society and calls for democracy, citizenship, human rights and environmental sustainability (Kindon & Elwood, 2009). Development has changed significantly since the 60s, when it was focused purely on the economic advancement of nations through the measurement of GDP. Development practices today focus on improving peoples’ lives and enhancing human potential, including the freedom to participate in the

¹ PSWM website: www.pswm.uvic.ca

political processes that affect their lives. Development therefore can be seen as a process that aims to provide opportunities for participation and empower those most marginalized to be active agents of their lives. From an epistemological perspective, this constitutes a radical paradigm shift in understanding the nature and process of knowledge creation. These approaches recognize the valuable knowledge and experience of the local community, revealing their assets, and providing them with opportunities to contribute to new knowledge and political action. Pain & Francis (2003) recognize that participatory approaches to research can illicit more relevant, morally aware and non-hierarchal practices.

Participatory Action Research (PAR), and tools such as Participatory Video (PV), provide an effective way to communicate and engage with communities (Flicker *et al.*, 2007), aim to produce empowering outcomes including increased community capacities, broader stakeholder participation in decision-making (Lennie, 2005) and promote social and environmental justice (Gutberlet, 2008; Cahill, 2007). PAR is a methodological collaborative approach for doing research with practitioners and community partners that can inform practice, programs, and policy (Small & Uttal, 2005), and seeks to achieve positive social change (Strand *et al.*, 2003). Participatory forms of development therefore, can be an important approach to sustainable development.

Cargo and Mercer (2008) define this approach broadly as “*systematic inquiry, with the collaboration of those affected by the issue being studied, for purposes of education and taking action or effecting change*” (p.327). With a focus on community-driven issue selection, collaboration in the research process, and action for solutions, PAR is well suited to identify and address environmental, health and social disparities through

advocacy for public policies that reduce these inequalities. The approach is designed to be context-specific, addressing local conditions and local knowledge, and producing situated, rich and layered accounts (Pain, 2004). PAR also encourages and enables the drawing of multiple connections between issues and processes at different scales. It is based on the belief that the oppressed and powerless can be empowered by helping them become aware their own resources, by increasing their problem solving capacity, and by becoming more self-reliant and less dependent (Arieli *et al.*, 2010). It is for these reasons that interest is growing rapidly for academic institutions, government agencies, and communities to collaborate and promote participation in local development (Dick, 2009; Minkler & Wallerstein, 2010). These approaches are increasingly being applied for political action. Through participatory public policy design and the application of citizen engagement to processes of governance, there are opportunities for approaching poverty reduction and promoting empowerment in development practices. These development alternatives are significantly vibrant in Latin America, and particularly in Brazil, where governments are embracing principles of the Solidarity Economy and providing space for participatory planning and policy. Marcos Arruda (2008), socio-economist at the Institute of Alternative Policies for the Southern Cone of Latin America (PACS) in Rio de Janeiro, and member of the Facilitation and Coordination Committee of the Alliance for a Responsible, Plural and Solidarity-based Economy (ALOE) defines the Solidarity Economy as “*a system of socio-economic relations centered on the human being, its need to evolve, develop and fulfill its potentials, its work, knowledge and creativity; planned and managed democratically; and aimed at generating satisfaction of its material and non-material needs, rights and aspirations, including the right to a dignified life, a healthy*

environment and enabling conditions for the fulfillment of one's potentials and qualities; well being and happiness" (p.16). These experiences provide valuable insight into how governments and communities in other parts of the world, namely the North, can approach more sustainable and equitable systems of development.

Communication strategies are central to community-based development endeavours because good communication allows people to gain new knowledge, challenge existing oppressive structures, and above all, gain control over their lives and thus overcome oppression (Melkote & Steeves, 2001). Communication aimed at empowering those that are excluded or marginalized and overcoming social and political barriers can help achieve participation. The use of video, guided by principles of community-based participatory research, has become an increasingly effective and creative tool for mobilizing, engaging, and linking communities and government, particularly within the context of development. The adage '*a picture speaks a thousand words*' takes on whole new meaning when applied to moving images to show a story. The blending of images, text and music can vividly portray the culture of a community, strengthening community ownership while disseminating information to a wide audience. Furthermore, video can be an important tool in changing negative perceptions of recyclers, by revealing their personal story and important social relationships in their community that are necessary for inclusive waste management structures.

This dissertation chronicles the process and outcomes of a community-based Participatory Video project with leaders of recycling cooperatives and municipal governments in the metropolitan region of São Paulo, Brazil. The research seeks to answer questions such as: How is Participatory Video an effective communication tool

for public policy? In which ways does it empower individuals, enhance leadership roles, and promote community and organizational capacity? How can using PV be effective for dialogue for more inclusive public policies? And in which ways can it promote spaces for citizen engagement? These questions were addressed using ethnographic and qualitative methods employed during nine months of fieldwork in Brazil in 2009 and 2010. The research relied on participant observation of the meetings, activities and events, in-depth individual interviews and focus groups with recyclers, government and local NGO's working in collaboration with the PSWM project, as well as numerous field visits to participating cooperatives and other member organizations (Appendix F for detailed list of site visits).

This introductory chapter provides the overall context of the PSWM project, presents some of the main socio-economic, political and environmental challenges and opportunities in waste management and the recycling sector. Following is a description of the research significance and structure of this dissertation.

1.1 The Participatory Sustainable Waste Management project

The Participatory Sustainable Waste Management (PSWM)² project is a Canadian International Development Agency (CIDA) – Association of Universities and Colleges of Canada (AUCC) funded collaborative program between the University of Victoria, Canada and the Faculty of Education at the University of São Paulo (USP), Brazil. Since 2005, recycling cooperatives, governments, NGO's and universities from several cities in the metropolitan region of São Paulo have been collaborating in this project. The main objective of the PSWM project is to build and strengthen the capacity of the

² PSWM Website: www.pswm.uvic.ca

recyclers and the governments towards inclusive waste management (Gutberlet, 2007). The project helps structure, organize and strengthen the waste management sector through supporting cooperative enterprises, micro-credit, collective commercialization, inclusive public policy and the practice of a solidarity economy. The long-term aim is to increase responsible consumption and reduce the generation of waste.

The project follows a participatory methodology and is governed by an organizing central committee composed of leaders from recycling cooperatives, academics, NGO leaders and representatives from municipal governments. Through this participatory approach, activities are planned, agendas are met and funding is allocated to a variety of capacity-building networking schemes. This bottom-up and participatory decision-making process has engendered mutual trust, respect and solidarity among the PSWM members, providing for significant human capacity development and strengthened cohesion between recycling groups and local governments. This dissertation research, and all extensions of research for that matter culminating from the PSWM programme, would have not had the support, dedication and impact without the years of planning and community building. It is in the spirit of this approach to development and the solidarity of the PSWM team that this research was made possible.

1.1.1 Research significance

This dissertation breaks new ground in research and understanding the process of individual, community and organizational empowerment through of use of Participatory Video, and how this process can enhance public engagement in local development, particularly in the context of inclusive waste management. This research

makes a significant contribution in three ways. First, through a description of Participatory Video methodology and praxis, this research adds to the growing, however limited, theoretical and empirical knowledge of PV. There are a number of points that have remained relatively unexplored within the fields of participatory theory, empowerment and Participatory Video. “*PV has the potential to reach across scales from internal to external empowerment, horizontal and vertical communication*” yet there has been little exploration of the links in practice between participatory processes and empowerment (Cleaver, 2001. p36). Through a critical lens, this work presents some of the ethical considerations in using PV, including representation, power and vulnerability, and strategies for creating an appropriate ethical environment through a participatory approach (Chapter three).

Second, through an evaluation of PV as a methodological development tool, this research will add to the understanding of the process of individual, community and organizational empowerment, and its significance for governance, social cohesion and the increasingly popular notion of the knowledge democracy (Chapter four).

Thirdly, this research also has policy relevance and practical application. Given the action oriented nature of this research, policy impacts and decision-making processes can be better understood which could contribute to advancing practices in government accountability, transparency and civic engagement (Chapter five).

The findings of this research have the capacity to inform models of participatory governance, and improved democratic processes in addressing complex urban development challenges. Since the conception of this research there have been significant policy changes in one of the focus municipalities as a result of the PAR

methodology, highlighting the success of this action-oriented development. These policy changes are highlighted in the results (Chapter five).

1.1.2 Research goals and questions

This research explores Participatory Video (PV) as a tool for community development that a) builds the *capacity* and *empowerment* of individuals and communities, and b) *enhances dialogue* between community and government.

Objectives:

By analysing the methodology of PV as a capacity-building tool I aim to:

- 1) Explore individual, community and organizational empowerment as a process and outcome of PV; and
- 2) Evaluate the use of PV as a communication tool for informing public policy.

1.1.3 Dissertation Organization

Chapter one provides the contextual background of this research, history and description of the PSWM project, and presents some of the main socio-economic, political and environmental challenges and opportunities in inclusive waste management and the recycling sector. This chapter also introduces some of the main concepts and theories explored in this dissertation.

Chapter two outlines the methodology applied in this research. It begins with a literature review of Participatory Action Research using video and the major concepts explored in this research. It presents the methodology and theoretical framework for the case study used in this research, and concludes with outlining the challenges confronting this research. This section also provides an important discourse on the

significance of creating and sustaining community-university partnerships and higher education engagement in research that has practical and policy driven outcomes.

Chapter three is a critical review of the use of Participatory Video for development, using the case study to highlight some of the often un-discussed debates and challenges of PV, particularly in addressing issues of power, vulnerability, ownership of knowledge, aspects of (non) participation and strategies for creating ethical spaces. I highlight the continuing importance of self-reflexivity; enabling people to identify issues of power and control that underlie social structures, demonstrated in much of the research on feminist and post-colonial theories. Despite some of the important critiques I mention in this chapter, participatory research, and PAR in particular, represent viable, vital alternatives to the exclusionary domains of traditional academic research.

Chapter four presents results from the research focusing on the first inquiry – the evaluation of PV as a tool for individual, community and organizational empowerment. It also reviews theories of Community-based Participatory Action Research (CBPAR), and knowledge democracy as central to expanding processes for participatory development and citizenship. The results reveal enhanced mobilization of this community and documents the strengthening of partnerships between recycling cooperatives and municipal governments in the metropolitan region of São Paulo.

Chapter five responds to the second research question, exploring the use of PV as a communication tool for informing public policy. Here, I explore the methodological and theoretical contributions of using PV for enhancing the representation of catadore/as and the potential for shifting power dynamics in spaces of politics. It also points to the growing organization (*and movement*) of recycling co-

operatives and associations as instrumental in improving the livelihoods of recyclers and key to expanding models of participatory sustainable waste management (PSWM). Key findings highlight: a) the importance of building strong partnerships between the government and the recyclers, b) the necessary expansion of environmental education programs valuing principles of PSWM, and c) the need for adequate public policies to support these initiatives. This chapter also draws attention to the relationship of power and knowledge that emerged through this process and reflects on the changing nature of citizen engagement in policy processes.

In chapter six I present some concluding discussions on the main findings of the research, and point to the future of participatory engagement and citizenship. I also reiterate the need for greater inclusivity in public policy design for waste management programs, and the benefits of working within models of solidarity economy and cooperation.

1.2 Solid waste generation and management trends

The prevailing consumption-oriented development model of western society is threatening environmental health almost everywhere. Never before has humanity generated so much refuse during production and generated so much garbage after consumption as now. According to a recent report on global waste trends, the situation is becoming increasingly urgent. 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). Today, these estimates have increased to about 3 billion residents generating 1.2 kg per person per day (1.3 billion tons per year), and if current trends continue by 2025 this will likely increase to 4.3 billion urban residents generating about 1.42 kg/capita/day of

Municipal Solid Waste (MSW) (2.2 billion tons per year). Other sources, such as the *World Watch Institute*³ and the *Organisation for Economic Co-operation and Development* (OECD) predict similar projections of the volume of municipal solid waste from today's 1.3 billion tons per year to 2.6 billion tons. MSW tends to be generated in much higher quantities in wealthier regions of the world, as well as different types of material waste generated (higher rates in inorganic materials). Members of the OECD⁴ for example, lead the world in MSW generation, at nearly 1.6 million tons per day. By contrast, sub-Saharan Africa produces less than one eighth as much, some 200,000 tons per day. Globally, solid waste management costs will soar from today's annual \$205.4 billion to about \$375.5 billion in 2025, and these costs are expected to be more extreme in low-income countries, in spite of producing less waste (Hoornweg & Bhada-Tata, 2012).

The impacts of solid waste on environmental and human health is of serious concern as the world leaps towards its urban future. Similar to rates of urbanization and increases in GDP, solid waste growth is fastest in China and other BRIC countries such as India and Brazil. As these trends continue, there is even more concern and urgency in finding alternative integrated solutions to the current cradle to grave production paradigm. Pollution such as solid waste, GHG emissions and ozone-depleting substances are unavoidable by-products of urbanization and increasing affluence. Waste management methods such as landfilling and incineration are still widespread and perpetuated, leading to the loss of valuable resources and the creation of new social, economic and environmental predicaments. These strategies are often siloed

³ World Watch Institute: <http://www.worldwatch.org/global-municipal-solid-waste-continues-grow-0>

⁴ OECD Waste Trends: <http://stats.oecd.org/Index.aspx?DataSetCode=WASTE>

from an engineering perspective, capturing only one facet of the problem with limited or no social dimensions (Gutberlet, 2011).

The recovery of resources from the waste stream is an important waste management strategy, especially with the current waste generating trends. Through the re-use or re-valuing of recovered materials there is less demand on virgin resources, safeguarding important ecosystems and environmental health. *“Industrial ecology, life cycle analysis, material flow analysis, ecological footprint and other approaches and concepts have long ago already demonstrated the necessity and possibilities of reintegrating recyclable materials into production flows, reducing the waste of resources and thus sparing the environment”* (Gutberlet, 2011; p. Book chapter). Recycling also supports the ‘waste as a resource’ paradigm, as materials are repurposed into new products, again eliminating the need to exploit virgin resources. By definition, waste is seen as having no value, it is unwanted and therefore discarded – a one-way system. Alternatively, the idea of ‘waste as a resource’ unpacks the value inherent in that material as useful, to be transformed, re-purposed, and re-valued. Essentially, there is no ‘throwing away’. In an integrated waste management system, there is no question that waste is perceived as a resource.

1.3 Integrated and inclusive waste management

Increasing complexity, costs and coordination of waste management has necessitated multi-stakeholder involvement at every stage of the waste stream – calling for an integrated approach. This reflects the need to approach solid waste in a comprehensive manner with careful selection and sustained application of appropriate technology, working conditions, and establishment of a ‘social license’ between the

communities and designated waste management authorities (most commonly local government) (Hoorweg & Bhada-Tata, 2012). An integrated system considers how to prevent, recycle and manage solid waste in ways that most effectively protect human health and the environment.

Gutberlet (2010) goes on to describe a more socially ‘inclusive’ approach described as resource recovery with reuse and recycling practices that involve organized and empowered recycling co-ops supported by public policies, embedded in the solidarity economy and targeting social equity and environmental sustainability. This approach aims to tackle socio-economic vulnerability, reduce waste management costs, promote greater resource efficiency, build social cohesion and foster community – all of which requires an inter-secretarial and interdisciplinary urban planning and development approach.

1.3.1 Inclusive waste management policy in Brazil

On August 2nd, 2010 President Lula da Silva of Brazil approved the National Solid Waste Act, a new policy recognizing the formal inclusion of independent recyclers and waste collectors. This was a great victory for the estimated more than 800,000 people who have worked for years without formal organization and without the support of public authorities (MNCR). As President da Silva said, "*This law sanctions the social inclusion of workers, who for many years were forgotten and mistreated by the public power*"⁵. This law will assist in improving conditions for workers in their profession, and to increase recyclers' salaries to Brazil's minimum wage, approximately 250 USD

⁵ GAIA: <http://www.no-burn.org/brazil-sanctions-law-to-formalize-the-work-of-recyclers>

per month⁶. The new law also calls on mayors to form local cooperatives and not outsource this work to private companies.

Unfortunately, the law includes waste incineration, and although government officers have tried to explain that incineration will only be considered as a last resort, given the current strength of the incineration lobby, many are doubtful that the law will be implemented in this way. Waste incineration, a popular waste management strategy in Europe and North America, poses many significant social and environmental threats, not to mention the exorbitant costs in technology infrastructure. Waste-to energy incinerators not only undermine the livelihoods of catadores/as, but they perpetuate a consumptive culture that maintains high demands for natural resources and contributes to greenhouse gas emissions (Gutberlet, 2011). According to the Global Alliance of Waste Pickers, recycling provides ten times as many jobs per ton of waste as do incinerators and landfills.

Other significant policy supports for the recycling sector include the National Sanitation Law in 207 (11.445), where municipalities in Brazil were authorized, regardless of bidding, to contract recycling cooperatives to perform collection, processing and marketing of recyclable solid waste (IPEA, 2010).

1.3.2 Informal and organized recycling

Resource recovery and recycling from solid waste has gained considerable attention in sustainable development and resource management literature (Medina, 2000; Wilson *et al.*, 2006) particularly concerning the socio-economic opportunities and environmental benefits deriving from this activity. The expansion of urban centres and

⁶ Global Alliance for incinerator Alternatives (GAIA): <http://www.no-burn.org>

subsequent solid waste generation coupled with high unemployment and poverty has created a sub-culture of collectors, classifiers, buyers and traders of recyclable materials (Gutberlet, 2010). This economy provides an extremely important survival strategy for many of the urban poor throughout the world (Medina, 2000; Wilson et al., 2006; Gutberlet, 2012). According to the Global Alliance for Incinerator Alternatives (GAIA), “*recycling provides productive work for an estimated 1% of the population in developing countries (approximately 15 million people), in processes such as collection, recovery, sorting, grading, cleaning, baling, processing, and manufacturing into new products...even in developed countries, recycling provides 10 times as many jobs per ton of waste as do incinerators and landfills*”. Most of their work is considered informal and conducted by independent recyclers, subject to risks, accidents and exploitation. Those engaged often remain extremely socially and economically marginalized, face harassment, stigma, and dis-empowerment.

Despite providing a valuable contribution to society and the environment, this sector is most often not recognized by government and the larger community. In general, the attitude of the formal waste management sector to informal recycling is negative, regarding it as backyard, unhygienic, and generally incompatible with modern waste management systems (Wilson et al., 2006). This activity is often associated with risk, unhygienic environments, criminal activities, homelessness, unemployment, poverty, and backwardness. These views of recyclers as ‘backwards’ tend to perpetuate discrimination against the informal recycler and, in turn, often lead to exclusionary policies regarding this sector in solid waste management (Sembiring & Nitivattananon, 2010).

There has been a considerable amount of literature, and debate, on the integration of informal recycling into formal waste management systems (Wilson *et al.*, 2006; Luckin & Sharp, 2005; Adeyemi *et al.*, 2001). There are still major challenges in demonstrating the significant value inherent in this sector, and resistance in moving traditional policies of repression and neglect to one of positive engagement, support and integration with the formal system. In order for this shift to occur, governments and society need to recognize the social, economic and environmental benefits that result from working with this sector.

The organization of recyclers into groups, associations and cooperatives is an important mobilizing strategy and has been instrumental in improving the livelihoods of recyclers and in validating their work (Tremblay & Gutberlet, 2009). These cooperatives provide an important organizing structure, and have more capacity to form partnerships with government, and non-governmental sector, creating inclusive solutions to waste management. Cooperatives operate on principles of reciprocity and shared democratic decision-making, and are in themselves vehicles of community empowerment and collective agency. There are well-cited examples of recyclers forming social groups such as the Zabbaleen in Egypt, Pепенadores, Catroneros and Buscabotes in Mexico, Basuriegos, Cartoneros, Traperos and Chatarreros in Colombia, Chamberos in Ecuador, Buzos in Costa Rica and Cirujas in Argentina (Medina & Dows, 2000; Berthier, 2003). In Brazil, there are approximately 600,000 catadore/as (*recyclers*) (Medeiros & Macêdo, 2006) out of which 60,000 are organized in cooperatives and associations (World Conference of Waste Recyclers, 2008).

Slowly, governments are recognizing the potential of including this sector in formal waste management programs, which has led to developing more supportive policies, to stimulate and improve the working conditions of this sector (Wilson et al., 2006). Experiences such as in Londrina and Ribeirão Pires, Brazil, the local governments are working with recycling cooperatives in door to door pick up collection schemes where the recyclers are being remunerated for their work, have been supported with infrastructure and are actively engaged in decision-making processes (Gutblert, 2011). These experiences and ‘models’ of inclusive waste management have been successful at improving waste management services to residents, promoting community awareness surrounding issues of waste and consumption and ultimately improving the livelihoods of recyclers.

These groups are still very vulnerable and face both periods of support and government retreat, such as the case in Diadema, a municipality in the greater metropolitan region of Sao Paulo. In the past the Diadema ‘*Programa Vida Limpa*’ was supported with infrastructure and government remuneration, but it now operates with only a reduced number of participants and the door-to-door collection has shrunk, reflecting the vulnerability of these groups.

Recycling cooperatives continue to face many barriers. With limited or in some cases no support from local government, many recyclers are not remunerated for their time collecting and processing materials, and in many cases, working in a cooperative does not equal more income compared to working informally.

“Under certain circumstances informal recyclers can make more money on a daily basis than through organized recycling. For example, individuals that work on landfills, involve other family members or have established particular partnerships with small commerce and households can have higher earnings, due to longer work hours and often exposing themselves to greater risks. Often informal recyclers work seven

days a week and face unhealthy and unsafe working conditions, going through contaminated materials or competing with machines at landfills. Overall, independent recyclers face detrimental occupational health conditions. They don't have a support network and suffer more from low self-esteem. Deeply rooted societal prejudice confines the recyclers into an unrecognized mass of workers." (Gutberlet, 2012; p. 20).

Likewise, Wilson *et al* (2006) caution that there needs to be a recognition of the limited effectiveness of simply copying approaches to Municipal Solid Waste Management (MSWM) used in more economically developed countries as these are unlikely to be appropriate. There are a number of experiences and strategies that contribute to integration and inclusion of this sector. At the first World Conference of Wastepickers in 2008, grassroots organizations of recyclers from around the world (representing Asia, Africa, Europe, and Latin America) gathered in Bogotá, Colombia, to make a declaration to governments, support organizations, their own organizations, and to the public.

"Our commitment is to work for the social and economic inclusion of the waste-picker population, promote and strengthen their organizations, to help them move forward in the value chain, and link with the formal Solid Waste Management systems, which should give priority to waste-pickers and their organizations⁷."

Their declaration highlights that the organization of recyclers is essential in order for them to be recognized and included in solid waste management plans.

1.3.3 Livelihood of a catador/a: Socio-economic challenges

Catadores/as in Brazil, and throughout the world, represent one of the most disenfranchised and vulnerable parts of the population. This activity epitomizes the informal economy, characterised by small-scale, labor-intensive, largely unregulated

⁷ Global Alliance of Waste Pickers: <http://globalrec.org/mission/>

and unregistered, low-paid work, often completed by individuals or family groups.

This sector often faces severe social and economic exclusion, marginalization, disempowerment, and lack of citizenship/political voice in decision-making. This activity is widespread throughout urban areas of the developing world, and increasingly in developed economies (Tremblay, 2009), where the poor and marginalized depend on waste picking for their livelihood.

1.4 Conceptualising participation for development

Participation has been argued to be the active ingredient for development (Stiglitz, 2002). Since authentic development is driven from within through personal and social transformation, involving the people whose development is being promoted in every aspect of the process is necessary, and in essence the basic principles of PAR. Often citing the work of Paulo Freire (1970) on the ideals of critical pedagogy, the participatory development literature emphasises the process in which the right of marginalized communities to “*gain opportunities to reflect on the complex nature of oppression and negotiate their own well-being*” is crucial (Braden, 1999; p. 118). Freire’s work has inspired many to transform the educative relationship, by encouraging participants to build their own knowledge of reality, through thinking critically about forces and structures that shape their lives. His emphasis on the teacher-student approach as a reciprocal exchange of knowledge echoes the roots of PAR.

Important to this work, is the notion that the process and outcome of participation inspires some form of political or social transformation (Bronwen *et al.*, 2012). In the context of PAR, participation extends far beyond consultation (see

Arnstein's ladder of participation, 1969), and depends on communication that enables participants to become aware and empowered to make their own decisions. This involves engagement and action, "*going beyond inviting language and cultural inputs from communities...to engage critically with the communities to bring about transformative practice*" (Chiu, 2009; p.6).

1.5 Participatory Video as a process of transformation and social change

Applying PAR principles to video making, embraced in the practice of Participatory Video (PV), has become an increasingly popular form of action research across disciplines such as health research (Chavez *et al.*, 2004), and social geography (Gutberlet, 2009). This collaborative approach to research equitably involves community members and researchers as partners in all aspects of the research process (Israel *et al.*, 1998). PAR addresses locally identified issues, is community owned, and is used to promote social change.

PV embraces the opportunity for multiple authorships and the inclusion of diverse images and perspectives. This innovative medium can document and represent people, places and issues in innovative ways that aims to disrupt the power dynamics typical of researcher-community relationships. Video casts a wide net for community members to be involved in the intervention process, perhaps those who were traditionally excluded from more conventional approaches. The nature of this research enables participants to generate community-based solutions to their problems, and promotes dialogue within and outside the community.

1.6 Empowerment: what is it?

Empowerment can be defined in various ways and there has been much debate surrounding this concept, its definition, use and evaluation. It has been used frequently in the fields of health promotion (Laverack, 2004), social work and psychology (Adams, 2003; Chamberlain, 1997), nursing (Rodwell, 1999), education (Hagquist & Starrin, 1997) and development (Naryan, 2002). Given its wide use in various fields, it is not always clear how the concept is defined, used and what meaning people assign to it. Empowerment has been described as not only a characteristic of a person to be achieved, but also as a process, approach or method connected to desired goals such as knowledge, consciousness raising, autonomy, self-esteem or ability (Tengland, 2008).

In a literature review of the concept, Tangler (2008) describes three general goals: first, an increase in the control of the individual's (group's or community's) own health; second, that it should consist in, or lead to, an increase in the individual's ability to control her life; and third, that it should consist in, or lead to, an increase in the ability to change the world. The first two are most likely plausible and well-referenced throughout the literature, the third, I believe is quite vague. Hjorth (2003) describes it simply as people taking control of the development process, and means a tangible increase in social influence or political power through developing confidence in their own capacities (Wallerstein, 2006). It has been described as a process that fosters power in people for use in their own lives, their communities and in their society, by acting on issues they define as important (Page & Czuba, 1999). Empowerment is multi-dimensional, social, and a process. It is multi-dimensional in that it can occur at various levels (individual, community), and within various contexts (sociological,

psychological). Empowerment theory suggests that new competencies are possible and can be learned, and sees disenfranchised groups as both marginalized and lacking in social power, and as strong, capable agents of social change.

Despite its apparently universal appeal, the concept of empowerment has received much debate in terms of what it means, and how it is achieved. There is a growing body of literature dedicated to defining the concept and development agencies have begun to focus on the development of indicators for evaluating empowerment (Zimmerman, 2000; Tengland, 2008). Despite the considerable study on the role of empowerment in poverty reduction and development programs (Bennet, 2002) there have been limited evaluations that allow the contribution of empowerment to be measured. In some cases, 'participation' – while positive in meaning- can be vague (Agrawal, 2001). More problematic is that the banner of 'participation' has been waved over projects that were thinly or weakly participatory or, at worst, smokescreens for elite control (Crocker, 2007).

In order to understand the complexities of empowerment, it is important to understand the concept broadly and why and how it can be applied to specific programs. At the core of empowerment is the idea of power. Power has been described as 'influence' or 'control', often related to the ability to make others do what we want, regardless of their wishes or interest. Weber (1946) recognizes that power exists within the context of a relationship between people and things, and by implication, since power is created in relationships, power and power relationships can change. Page & Czuba (1999) identify two main features necessary for empowerment to be possible. First, that empowerment requires power to *change*, and second, that power can *expand* and be shared. Empowerment as a process of change then becomes a meaningful

concept, one that can be characterized by collaboration, sharing and mutuality. This aspect of power has been referred to as ‘relational’ (Lappe & DuBois, 1994), and ‘integrative’ (Kreisberg, 1992), meaning that gaining power actually strengthens the power of others rather than diminishing it.

Chapter Two: Research Methodology

2.0 Introduction

This chapter outlines the theoretical framework, methodology and methods utilized in this research, along with a description of the analysis, limitations and case study locations. It begins with a literature review of CBR, Participatory Video, and empowerment within the context of public participation in development. The theoretical underpinnings of this research are then described, with a focus on reflexivity and the research-participant relationship, followed by a brief description of the methodology. A detailed description of the methods and analysis will attempt to lay the foundation for the following chapters.

2.1 Theoretical framework

The theoretical foundation of this research is informed through a number of lenses including feminist and social theories (Ackerly *et al.*, 2006; Kindon, 2003; Cope, 2002), political ecology, social economy and community-based research (CBR). Transformative learning is also an important concept to informing my research that explores alternative development paradigms that foster empowerment, self-reliance and democratic governance. In an attempt to understand the complexity of political, social, environmental and economic themes that are embedded in this research, I explore and link concepts from within various theoretical disciplines. Social theory concepts contribute to understanding the relationships and networks identified within and beyond the structure of the cooperatives, and provide an avenue to highlight the social economy as a catalyst and opportunity for social cohesion and political activity. Further,

concepts from political ecology such as resource co-management, participatory waste models and the idea of ‘waste as a resource’ are central to understanding the dynamics, networking and relationships between the government and recycling cooperatives in creating inclusive waste programs such as the ones illustrated here. The ideas of ‘exclusion’ and ‘ownership’ in the management of waste resources also seeks to challenge programs that are exclusive of communities working in this sector. Additionally, I borrow themes from inclusive resource management to emphasize how cooperation and organization of recycling cooperatives can lead to adaptive co-management strategies that improve access and rights to waste resources.

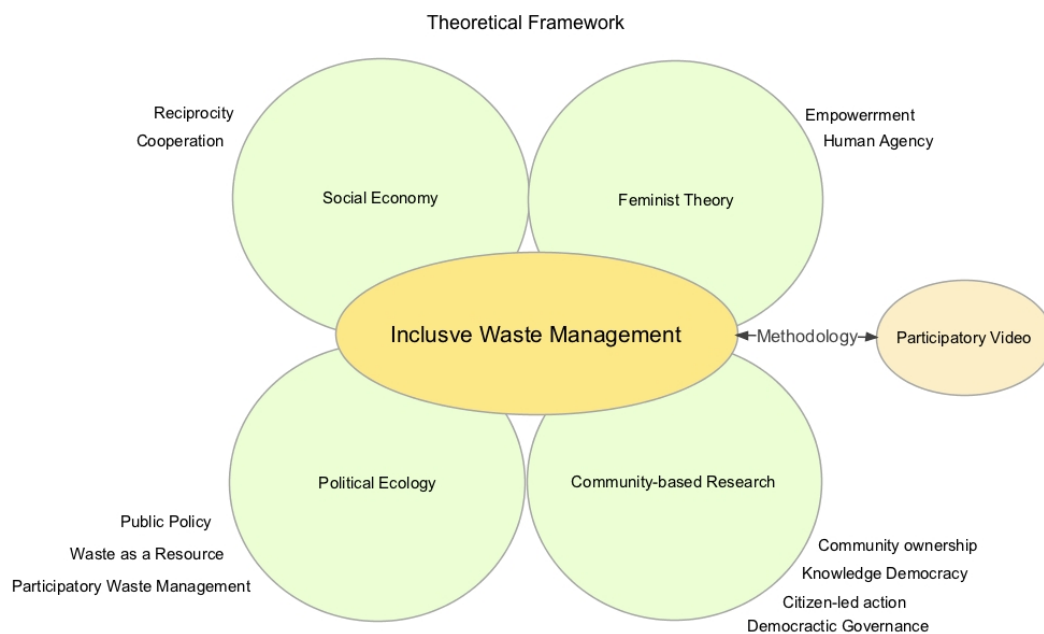


Figure 1. Theoretical Framework.

Figure 1 illustrates the complimentary theories that have come to situate and advise my understanding of Participatory Video as a tool for social and political change within the recycling communities. This research is also housed within community-based

approaches, and inspired by knowledge democracy, where the knowledge of the community is valued and drives social and political change for outcomes such as enhancing democratic governance, and citizenship.

2.1.1 Feminist theories

Action research challenges entrenched and sometimes invisible power arrangements and mechanisms that are enacted in everyday relationships, organizational and economic structures, and cultural and institutional practices (Reason & Bradbury, 2008). Likewise, feminist theories prompt questions of power dynamics and relationships that might otherwise be missed or misread and, as a result, have an important role to play in any action research with transformative intentions (Frisby *et al.*, 2009). Feminist critiques of conventional research have had a major influence on Participatory Research (PR) since the 1980s, with feminist principles including reciprocity and critical questioning of who benefits from research outcomes (Kendon, 2005). Feminist theories share the social change goals of action research by focusing on power manifestations resulting in gender inequalities that are often taken for granted and seen as ‘normal or natural’. Both these perspectives have in common their theoretical assumptions, values, goals, and means, namely the participatory nature of the process, its critical stance towards social power structures, its democratic worldview, and its commitment to achieving social change through a combination of generation of knowledge and action (Krumer-Nevo, 2009).

According to Langan & Morton (2009) Feminist Participatory Action Research (FPAR) blends participatory action research and critical feminist theory by advocating that women must be involved in all stages of the research process including identifying

the problems to be explored, carrying out the research, and interpreting and acting upon the results. Conceptually, this approach enables an understanding of women's multiple perspectives, while confronting the underlying assumptions researchers bring into the research process (Reid *et al.*, 2006). Feminist theories can be used as tools in action research to question how gender inequalities are built into all aspects of life including, for example, the organization of marriage and families, work and the economy, education, law, government policies, religion, recreation, culture, literature, medicine, science and forces of globalization (Lorber, 2005).

As Hearn (2004) notes that "*it is difficult to avoid the fact that in most societies men are structurally and interpersonally dominant in most spheres of life*" (p.51). The United Nations illustrated this when they estimated that women do two-thirds of the world's work, receive 10 percent of the world's income, and own one percent of the world's property (Lorber, 2005). In feminist geography, action research has proven effective in highlighting women's labour, needs and rights and taking political action (Kindon, 2005). Although feminist action research is typically concerned with issues that matter to women, Maguire (2001) adds that action research should be equally concerned about how gender shapes men's lives since men, women, and those who do not identify with either male/female category, are gendered beings. Gender expectations and socializations also impact men and boys, and a transformative approach, as pointed out by Frisby *et al.* (2009), would help them see how gender influences their actions and those around them.

Feminist theories concerning power – or more so where the power lies in space of democracy and governance - have been instrumental in understanding inequities and access to policy-making within my research.

2.1.2 Social theory and human agency

Humanism is not itself a social theory, as described by Flowerdew & Martin (2005), but rather a “*diverse set of ideas which have in common an emphasis on the humanity of individuals*” (p.25). It recognizes that people are capable of “*being creative (or destructive), reflective (or not), and, above all, are moral beings*” (p.25), with lived experiences. Buttimar (1999) suggests the best mode of observation for a humanistic approach is one of empathetic ‘insidedness’, a position where the researcher tries to be open to place and understand it more deeply. Here, an authentic “*understanding is sought through a concept of shared knowledge, or interpersonal knowing*”, requiring interest, empathy, and heartfelt concern (Rodaway 2006, p. 266). As an example of my approach, I intend to capture the lived experiences and perceptions of the participants through dialogue in a research process of partnership rather than adopting the traditional hierarchy of knowledge. In this way, I was able to break out of my own preconceptions and of that in the research literature, and seek to understand the experiences of the participants, as they perceived it.

Through an inductive approach (Rodaway 2006), I searched for consistencies and shared themes from the participant’s experiences. In so doing, I shared my interpretations with the participants during the research to refine and develop an authentic understanding. This process reduces the distortion of research interpretation and translation, hence I often used participants’ own words and cultural lingo to describe their experience and tie together common themes. The attempt to profile the socio-cultural demography of the population for example was largely drawn from participant’s dialogue of their understanding and experience of where they place

themselves and others within the structure and process of the activity. This research interaction essentially became a mutually creative process of “*translating text and distilling the essential geographic themes within a coherent conceptual framework*” (Rodaway 2006, p. 267). My findings are rooted in the exploration and interpretation of my experience in conducting and synthesizing the conversations and observations I made.

2.1.3 Political ecology

Political ecology is a conceptual framework that lends a useful understanding of this topic. Essentially, political ecology is the study of the relationship between political, economic and social factors within environmental issues and changes. This theory makes important arguments by deconstructing power relations and building an innovative approach towards solid waste reduction and adequate treatment. The concept captures “*highly politicized environments, where global economic structures, unequal power relations and fractious cultures are embedded in the dynamics of environmental problems associated with solid waste*” (Myers, 2005; p. 15). With today’s challenge of *waste to energy* in waste incineration plants the environmental and social justice perspectives have regained importance, particularly in the South-North context (Gutberlet, 2011). Hawkins (2006) writes that waste “*isn’t a fixed category of things; it is an effect of classification and relations...waste [is] a social text that discloses the logic or illogic of a culture*” (p.2). From a political ecologists perspective the relationship between waste and culture cannot be separated from political-economic change, and power relations, that these things are intrinsically intertwined.

2.1.4 Social and solidarity economy

The Social Economy addresses socio-economic justice issues and solidarity, providing an avenue to examine opportunities for social integration and economic development. Within the social economy, there are various forms of organization and structure, such as cooperatives, social enterprise, charities, and non-governmental organizations. This research is embedded in theories of social and solidarity economy by providing successful examples of alternative economic models, centered on reciprocity and cooperation while providing a constructive alternative to the hegemonic dominance of the growth oriented economic discourse. With the creation of a federal secretariat and a national council on solidarity economy, in 2003, Brazil is facilitating new spaces for specific public policy design and building alternative development approaches within the solidarity economy (Singer, 2003). Organized recycling conducted through cooperatives, associations, community groups or social enterprises is a form of solidarity economy. These types of workers' organizations generate income and also provide social and human development benefits to its members (Gutberlet, 2012).

2.1.5 Community-based Research

Widely referenced throughout the literature, the Kellogg Foundation⁸ defines Community-based Research (CBR) as a collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. It begins with a research topic of importance to the community with the aim of combining knowledge and action for social change to

⁸ Kellogg Foundation: <http://www.wkkf.org>

improve community health and eliminate disparities. Strand *et al.* (2003) also provides a useful definition in seeing CBR as “...seek[ing] to democratize knowledge creation by validating multiple sources of knowledge and promoting the use of multiple methods of discovery and dissemination. The goal of CBR is social action (broadly defined) for the purpose of achieving social change and social justice” (p.5). The Centre for Community Based Research (CCBR)⁹ adds to this description by describing CBR as *community situated* (begins with a research topic of practical relevance to the community and is carried out in community settings), *collaborative* (community members and researchers equitably share control of the research agenda through active and reciprocal involvement in the research design, implementation and dissemination), and *action-oriented* (the process and results are useful to community members in making positive social change and to promote social equity). The primary goals of CBPR are to (1) engage in reciprocal research that is mutually beneficial to researchers and communities, (2) develop culturally competent and appropriate methods, (3) clarify expectations and roles of community members and researchers and (4) honour research product as much as process (Shiu-Thornton, 2003). Rather than simply producing research results, often practitioners are highly interested in the process of community collaboration and the long-term development outcomes.

Koch *et al.* (2002) describe this process methodologically as people involved present their construction of reality, and are challenged by other realities. Their work has observed this dialectic as participants shift their understandings to make sense of their situations. This shift, they argue, has the potential to enhance the lives of all involved. Coenen & Khonraad (2003) describe this methodology as a joint learning

⁹ http://www.communitybasedresearch.ca/Page/View/CBR_definition.html

process of researchers and researched, and in their work focus on the relationship between them, particularly on the principles of reciprocity. They refer to Giddens' structuration theory in helping to understand this relationship. In line with his viewpoint of "*human activity as bound up both with interpretation and power*", he places "*researchers not above but among people as special actors and not outside the way in which they understand social reality*" (p. 440). The importance that researched parties are to be treated as competent and equal actors stems from what Giddens has called the 'dual hermeneutic' problem, in which the researcher interprets a reality already interpreted by the competent actors in the interpreted reality – with the risk of 'missing the essence'. Another reason why the researched parties should be treated as equal is inspired by Habermas's (1984) theory of communicative action, in which actors seek to reach common understanding and to coordinate actions by reasoned argument, consensus, and cooperation rather than strategic action strictly in pursuit of their own goals.

2.2 Methodology of a Participatory Video project

Methodology is defined as "*a theory and analysis of how research should proceed*" (Harding, 1987, p.2), or the "*study, the explanation, and the justification of methods, and not the methods themselves*" (Kaplan, 1964, p.18). The methodology adopted in this research project is *action-oriented*, applying a *participatory community-based* (Kidd & Kral, 2005) *multi-methods* approach (McKendrick, 1999). The research is highly qualitative in nature, relying on the subjective lived experiences of the participants.

2.2.1 Ethics

This research was approved for ethics involving research with human subjects through the University of Victoria's ethics board. According to their guidelines, the research presented no ethical issues, as it did not put participants at risk or subject them to emotional stress. I obtained written or verbal consent from all informants (Appendix A). Informants also received a written summary of the purpose, methods and intended use of the research (Appendix J).

2.2.2 The PV process

As part of a research project titled "*Resource Recovery: A socio-economic and environmental paradigm: An engaging and educational capacity building production on inclusive waste management initiatives*", funded through the International Development Research Council of Canada a weeklong train-the-trainers Participatory Video (PV) workshop was conducted in April 2008 with members from recycling cooperatives in six neighbouring municipalities in the metropolitan region of São Paulo, Brazil and one government representative. The workshop was facilitated by Jutta Gutberlet (Director of the PSWM project) and myself. A total of twenty-two catadores/as, members of the PSWM project, representing 11 different cooperatives in 5 different municipalities in the metropolitan region of São Paulo participated in this activity. It is through the trust and networks built since 2005 between the groups and the PSWM project committee that enabled the success of this PV project. The PV workshop idea had been conceived during regular meetings with the leaders and the PSWM project committee over the previous year.

The goal of the project was to build the capacity of recyclers from cooperatives in Brazil and Canada in multi-media technology as a strategy to improve community-

networking opportunities, stimulate awareness and education of recycling programs, and in the process contribute to their personal empowerment and growth. The project also presented an opportunity to capture the process of action-oriented research in these selected communities in Brazil and Canada, offering a timely ‘snap shot’ of social change and community development in waste management. In doing so, we filmed the process of the PV project and produced ‘*PV Practitioners Toolkit*’¹⁰, a 12-minute video for practitioners working in community development.

The PV workshop included teaching the basic skills on how to conceptualize a story, shoot footage, record audio, and edit material, and included developing major themes to be addressed/included in the videos. Since the cooperatives spanned such a geographically large area, and political sphere in the metropolitan region, the group decided to create four smaller groups. The following themes were considered to be the most important challenges to the livelihoods and well being of the recyclers, and in most cases became the central message of the videos.

Theme	Description
<i>1. Occupational health</i>	Sanitation and prevention of non-communicable diseases and illnesses caused by occupational health risks was considered a serious livelihood threat and one to be included in the videos. Improved recycling and collection of solid waste methods contribute to the cleanliness of urban areas as well as contribute to a reduction in the amount of pollution that enters the local water supply through incorrect disposal of solid waste.
<i>2. Validation and recognition of service</i>	Catadore/as often face severe stigmatization and discrimination of their work, despite serving a valuable contribution to society. The creation and strengthening of recycling cooperatives improves the quality of life of informal recyclers, legitimize the activity, and provides a much-needed voice within public policy and society. Valuing their work through increased government

	support for remuneration and infrastructure to improve their livelihoods was a strong message they wanted to convey.
3. <i>Environmental sustainability and education</i>	The adoption of consumption-oriented lifestyles globally has resulted in the generation of a growing amount of non-biodegradable product packaging, and as a result the amount of waste generated daily is on the rise. In Brazil (and elsewhere) highly valued materials, such as cardboard and aluminum, are widely recycled by the informal sector. Through public education programs the amount of material disposed of through a separate collection mechanism for recycling is increasing. Highlighting the importance of community support for the collection program, and the implications of waste on environmental and human health was evident in each video.
4. <i>Private sector development and added value products</i>	Some of the groups wanted to showcase the benefits of new co-operatives and recycling associations as well as provide information on the possibilities for economic development through the use of micro-loans. Through these means, an enabling environment for entrepreneurship is possible, and can provide innovation for value-added products (e.g. Cooperpires).
5. <i>Gender equality</i>	The PSWM project has a strong focus on women, particularly since the number of women working in the informal recycling sector is growing. They participate in informal recycling because it provides them with a flexible way to contribute to their family's income, often while taking care of children. Although gender wasn't particularly a major theme in the videos, it was evident that gender was an important component in the workshop.

Table 1. Themes from Focus Groups

2.2.3 Monitoring and evaluation of the PV workshop

This workshop followed an integrated monitoring and evaluation framework. Evaluation forms were administered prior and post multi-media training to evaluate strengths and weaknesses of the program; and follow-up communication with the trainees provided ongoing indicators for program success. The evaluation included: a) successes and limitations of the PV workshop, b) transformational insights (human

development, empowerment), c) political insights (working alongside public policy makers), and d) overall methodology. The results of the monitoring and evaluation are currently in progress in a forthcoming article ‘PV a powerful tool for social change’ by Gutberlet & Tremblay (2013).

2.2.4 Viewing of the footage

Participatory video is an iterative process whereby community members use video to document innovations and ideas, or to focus on issues that affect their environment or their community. Viewing the footage is an important aspect of the PV process where participants can review what they and others have filmed. This viewing of the material as the project progresses lies at the heart of the participatory video process. It achieves several positive outcomes at the same time – it opens up local communication channels, promotes dialogue and discussion, and sets in motion a dynamic exchange of ideas on ways to solve problems. In addition to viewing selected clips from each group’s work, complete copies of all the raw footage were distributed.

2.2.5 Co-editing the videos

During the final day of the workshop we had a post-production group editing session where a selection of footage was uploaded to a computer and as a group we went through the process of ‘making a video’. This included how to: log and capture selected clips, compressing video, adding titles, script, music and voice-over and how to piece together the desired story. Co-editing of the videos proved to be a logistically challenging, however invaluable, process in this project. Since the groups decided that a 12-15 minute video was the ideal timeframe for various communication functions, we

had to be stringent in choosing the best, most suitable clips. Considering there was over 100 hours of footage, organizing the video clips was a prime focus. In order to achieve this the groups used timesheets (Appendix G) to highlight the video clips (with exact times) they wanted to include in the final video. The video footage was then uploaded on the server in the Department of Geography at the University of Victoria, in Canada. In addition to the groups' footage, there were over 70 hours of footage from documenting the entire PV process¹¹, and the interviews at the Gramacho landfill in Rio de Janeiro, for an additional documentary we produced '*Beyond Gramacho*'¹² at the same time. The groups were each given up to 8 DVDs and a camera, each marked with their group name and a number of the disk corresponding to the timesheet to describe the activity. The timesheet was an important tool to help the groups plan for the scene and encouraged a 'shoot to edit' procedure, which was an important element of PV in the training. The entire co-editing process for the four videos took approximately 12 months to complete.

Once the footage was uploaded to the server, I used Final Cut Pro editing software to edit together the four videos guided by the group's timesheets, and complimented with 'b-roll' (complimentary footage, typically of the an activity, or location to demonstrate) to produce the final products. The videos ranged from between 10-15 minutes, agreed to be the most effective timeframe for using the videos as educational and policy tools.

¹¹ The video 'Participatory Video Practitioners Toolkit', a documentation of the process of PV in Brazil and Canada can be viewed on the CBRL website at www.cbri.uvic.ca

¹² The video 'Beyond Gramacho' can be found on the CBRL website at www.cbri.uvic.ca

2.2.6 Viewing the final videos

There were various opportunities throughout this research for participant feedback and collaboration. Once the final four videos were completed I held focus group sessions with each group to go over the videos, and make changes. This was an important component since it was the first time the groups had seen the final product and could reflect as a group, and decide which clips would be included or not.

2.3 Research Methods

A multi-methods approach was applied in this research including journaling, focus groups, interviews and a questionnaire.

2.3.1 Journaling

Through journaling in a personal log, I recorded comments and reflections relating to the practice, dialogue and gestures of the interviews, and seminars. These observations were recorded throughout the research process, and provided support for data analysis, interpretation and for reflexivity.

2.3.2 Focus groups

Three focus group sessions were conducted with leaders of cooperatives and their municipal governments in the metropolitan region of São Paulo. Although four videos were created with the original four groups in the PV project representing four regions in São Paulo (Figure 2), we decided to choose three municipalities to apply the research; Maua, Riberao Pires and Diadema. The focus group sessions were

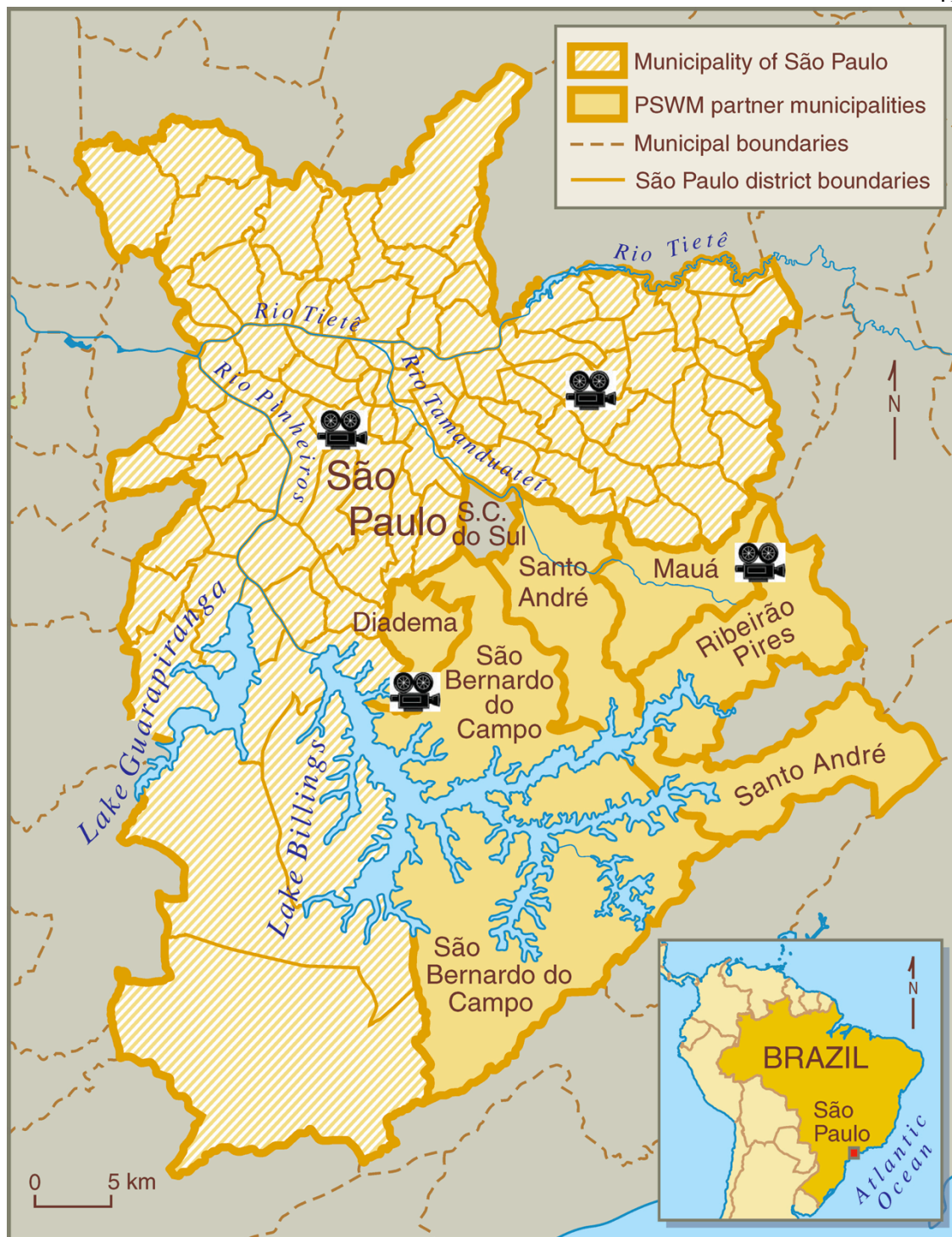
transcribed and analysed across groups for recurrent themes and issues. Group interactions enabled the discussion and identification of issues that probably would not have come out in individual interviews or participant observation. The focus group process proved to be an observable context in which the power struggles and social structure of *catadore/as* were analyzed. The leaders presented the videos and then engaged in participant led discussions concerning their primary challenges and opportunities concerning inclusive waste management policies in their respective municipalities. The focus groups included:

- ***Catadores/as:*** Nine leaders from four cooperatives in three municipalities participated in the focus groups and in-depth interviews. These leaders represented their original groups from the PV project.
- ***Government:*** Nine government representatives were involved in this research representing three municipalities. In Diadema, this included the Mayor, an official in community development and another in economic development; in Riberao Pires, two government officials working in social development and waste management; and in Maua, four government officials representing economic development and planning.

The focus group sessions were transcribed and analysed across groups for recurrent themes and issues. Group interactions enabled the discussion and identification of issues that probably would not have come out in individual interviews or participant observation. The focus group process proved to be an observable context in which the power struggles and social structure of *catadore/as* were reproduced.

2.3.3 Interviews

In-depth interviews were conducted with the leaders of the cooperatives following the focus group discussions to gain insight into their experiences, and in which ways the videos and discussion provided a tool for power, strength and self-confidence (Appendix G: photos). This qualitative research was designed to understand the participants 'lived experience' from their point of view. The interviews were video taped, and transcribed verbatim in Portuguese and later translated into English. The leader of the Movimento Nacional dos Catadores de Materiais Recicláveis (MNCR) was interviewed on a separate occasion in São Paulo. This interview provided valuable information on the evolution of the recycling movement in Brazil, leadership, the network and a broader outlook on federal policies supporting this sector.



- Group 1 - Diadema/Sao Bernardo do Campos
- Group 2 - Riberao Pires/Maua
- Group 3 - Sao Paulo zone Leste
- Group 4 - Sao Paulo zone Ouest e Sud

Figure 2. Site map of research area in the metropolitan region of São Paulo, Brazil.

2.3.4 Questionnaire

A questionnaire was developed collectively with the recyclers during the research planning (Appendix D). The questionnaire was intended to gather general feedback when viewed at various seminars and other public viewing opportunities (Appendix I). In total, there were 50 questionnaires distributed at these screening and 36 returned completed. The questionnaire asked the following questions: 1) What have you learned from this video? 2) Do you think this video is an effective tool for communication? Why? 3) Do you think this video can help strengthen the dialogue between the collectors and the government? How? 4) Does this video change your perception of the social and economic importance of selective collection? How? 5) What are the three most significant aspects of this video?

Out of the 36 returned questionnaires, only 1 represented government from the municipality of São Paulo, the remaining were catadores/as. Given the small sample size of the questionnaire, however interesting the responses, I have not included this analysis in the results section. The results sections (Chapter 4 and 5) focus heavily on the subjective experiences of the catadore/as and I felt the survey responses did not fit within this discussion. The major themes that came out of the public viewing in relation to ‘what was learned’ included: 1) enhanced pride to be a catadore/as, 2) the need for greater environmental education, 3) enhanced perception of this community, and 4) the need for government support.

2.4 Analysis

Analysis of this research is qualitative in nature, relying on the quality and breadth of narrative interviews and my own observations. Through qualitative analysis of the narrative material, principal ideas and themes emerged.

2.4.1 Transcribing and theme coding

The focus groups and interviews were video-taped to document and help analyze the process of communication and negotiation, and to better understand dialogue and conflicts that emerged. The focus groups and subsequent interviews were then transcribed in Portuguese, translated into English and theme coded to highlight extremes and commonalities within the data. In order to reserve the original verbatim of the data, all the material was translated following the transcriptions. Two research assistants, both native to São Paulo, Brazil, were hired over the period of a year to help transcribe and translate the material.

The relation between variables and patterns in the data was constructed through content analysis. *Content analysis is a widely used qualitative research technique.* This form of analysis requires a determination of the underlying meanings of what was said, referred to as a form of open-coding (Charmaz, 2006). Coding is a process whereby data is broken down into component parts, examined, analyzed and categorized into concepts. Qualitative content analysis goes beyond merely counting words to examining language intensely for the purpose of classifying large amounts of text into an efficient number of categories that represent similar meanings. Hsieh & Shannon (2005) define qualitative content analysis as a research method for the

subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns. For each interview and for the focus groups, significant passages were outlined and thematic elements extracted and categorized.

2.5 Limitations

There were limitations in this research including time, challenges with group editing and language.

2.5.1 Time limitations

Participatory Video work is extremely time intensive. Within a participatory nature, the training, production, editing, feedback and planning for methodology and research design is as much part of the process of the inquiry as the end results. The time commitment is both the strength and challenge of this collaborative decision-making process. The time required to complete the video editing took just under 2 years. This included the production of a participatory video guide, a short documentary on the benefits of participatory development and four group videos that were used for focus groups discussions with representative governments.

Another difficulty was the *lag in time* between the video production and planning for the seminars using the videos as tools is that many of the situations had changed, and there were many new updates that were not included in the final video. In order to compensate for these changes and include the feedbacks and suggestions of the participants, small feedback sessions were held with 2 groups at a time. This prevented an important reflection at the time of the PV process, to use the videos immediately after producing them would be more powerful, to keep the momentum going.

2.5.2 Challenges of group editing

The largest hurdle was editing of the videos in Canada without the direct collaboration of the groups in Brazil. Although I had the requested clips highlighted to include, the videos were produced with numerous variables in mind including thematic, the quality of visual/sound, and the representation of all catadore/as. Despite significant attempts to include all the participant voices and have the editing process as participatory as possible, there were obvious barriers to this.

2.5.3 Language barriers

There were some language barriers in this research however after spending 9 months in Brazil, I developed a basic understanding and could effectively undertake this research with confidence. During the fieldwork a member of the executive committee that was fluent in both languages and was able to support me with any clarifications always accompanied me. The post-production phase of editing was also extremely beneficial in expanding my capacity in the language. For the transcribing and translation of the research I hired 2 assistants from São Paulo. This was done over 8 months following the fieldwork.

2.9. Summary

This methodology-based discussion reveals how embracing the principles of CBPR can enhance community development by creating a bottom-up approach to decision-making and appropriate public policies while providing participants with a voice on important issues that impact their lives. A review of the literature has shown

clear arguments that this research approach illicit an understanding of the complexities of individual experiences and offers an opportunity to make meaning of important events or decisions in their lives.

Chapter Three: Critical reflections from the field: situating PV

3.0 Introduction

This chapter discusses the methodological and theoretical opportunities and critical reflections of a Participatory Video (PV) project conducted over two years with recycling cooperatives in the Greater Metropolitan Region of São Paulo, Brazil. This project was supported through the capacity-building efforts of the '*Participatory Sustainable Waste Management project (PSWM)*,' a *Canadian International Development Agency (CIDA)* partnership program between the University of Victoria, Canada and the University of São Paulo, Brazil (2005-2011). The overall purpose of the project was to increase the effectiveness, safety, and income generation of organized waste recycling by strengthening the organizational structure and opening up new opportunities for dialogue and action between recyclers and the government.

This chapter defines and critically reviews some of the often un-discussed debates and challenges of PV, particularly in addressing issues of power, vulnerability, ownership of knowledge, aspects of (non)participation and strategies for creating ethical spaces. I begin by framing PAR within the lenses of feminist and post-colonial theory as a methodological approach to development.

3.1 Literature Review: CBPAR for equitable development

The following literature review explores the theoretical underpinnings of Community-based Participatory Action Research (CBPAR) as an increasingly successful approach to alternative and equitable development. This section also provides a definition and history for Participatory Video (PV), frames it's use as a tool

within CBPAR and outlines key research opportunities in its application.

Empowerment, and the measurement of empowerment as an outcome of participatory processes will also be discussed. Key concepts that appear throughout this dissertation will be introduced.

3.1.1 Community-based Participatory Action Research (CBPAR)

Widely referenced throughout the literature, the Kellogg Foundation¹³ understands Community-based Research (CBR) as a collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. It begins with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community well being and eliminate disparities. Strand *et al.*, (2003) also provide a useful definition in seeing CBR as “...seek[ing] to democratize knowledge creation by validating multiple sources of knowledge and promoting the use of multiple methods of discovery and dissemination...The goal of CBR is social action (broadly defined) for the purpose of achieving social change and social justice” (p.5). The Centre for Community Based Research (CCBR)¹⁴ adds to this description by defining CBR as *community situated* (begins with a research topic of practical relevance to the community and is carried out in community settings), *collaborative* (community members and researchers equitably share control of the research agenda through active and reciprocal involvement in the research design, implementation and dissemination), and *action-oriented* (the process and results are useful to community members in

¹³ Kellogg Foundation: <http://www.wkkf.org>

¹⁴ http://www.communitybasedresearch.ca/Page/View/CBR_definition.html

making positive social change and to promote social equity). The primary goals of CBPR are to (1) engage in reciprocal research that is mutually beneficial to researchers and communities, (2) develop culturally competent and appropriate methods, (3) clarify expectations and roles of community members and researchers and (4) honour research product as much as process (Shiu-Thornton, 2003). Rather than simply producing research results, often practitioners are most interested in the process of community collaboration and the long-term development outcomes.

Koch *et al.*, (2002) describe this process methodologically as people involved present their construction of reality, and are challenged by other realities. Their work has observed this dialectic as participants shift their understandings to make sense of their situations. This shift, they argue, has the potential to enhance the lives of all involved. Coenen & Khonraad (2003) also describe this methodology as a joint learning process of researchers and researched, and in their work focus on the relationship between them, particularly on the principles of reciprocity. They refer to Giddens' (1984) structuration theory in helping to understand this relationship. In line with his viewpoint of "*human activity as bound up both with interpretation and power*", he places "*researchers not above but among people as special actors and not outside the way in which they understand social reality*" (p. 440). The importance that researched parties are to be treated as competent and equal actors stems from what Giddens has called the 'dual hermeneutic' problem, in which the researcher interprets a reality already interpreted by the competent actors in the interpreted reality – with the risk of '*missing the essence*'. Another reason why the researched parties be treated as equal is inspired by Habermas's (1984) theory of communicative action, in which actors seek to

reach common understanding and to coordinate actions by reasoned argument, consensus, and cooperation rather than strategic action strictly in pursuit of their own goals.

3.1.2 CBR: Engaging in research that matters

Community engagement is not typically a high priority for most academics, however the approach is becoming widely valued through the successful evidence of creating strong and mutually beneficial university-community partnerships (Hall *et al.*, 2009; Buys & Bursnell, 2007). There is also increasing interest in CBR from scholars asking how they can engage in research that both has value to local communities and legitimacy within the academic arena (Cancian, 1993). In a recent report on community-university funding and partnerships in Canada, Hall *et al.* (2009) reveal “*an impressive array of impactful knowledge creation and mobilization through community university research partnerships in virtually every sphere of public activity to improve social, economic, health, and environmental conditions*” (p.5). They stress for an interdisciplinary research approach and policy development that addresses interconnected social, economic and environmental challenges, which, they argue, is fundamental for sustainable development. In Israel *et al.*,’s (1998) review of CBR, they summarize the approach as enriching the research process and outcomes, as a community development strategy, and as an opportunity to improve community-university partnerships.

This approach differs from traditional research methods in that instead of creating knowledge for the advancement of a field, it is an iterative process, integrating a cyclical process of reflection and action as a primary goal. Small and Uttal (2005) argue that “*although sociologists and applied developmental scientists often study*

social problems—and even create visions of social change and propose solutions—there is typically little encouragement for them to actually apply the knowledge they generate to real-world settings, even when the data originally came from real-world settings” (p. 937). Feminist action research scholars in sociology and geography have also used an array of CBR methods to integrate knowledge and action to promote the political, social, and economic status of women and marginalized populations (DeVault, 1999; Gutberlet, 2008). There are in fact a wide variety of CBR practices supported by several academic traditions: academic or scientific knowledge put at the service of community needs; joint university and community partnerships in the identification of research problems and development of methods and applications; research that is generated in community settings without formal academic links at all; academic research under the full leadership and control of community or non-university groups; joint research, which conceived as part of organizing, mobilizing or social advocacy or action (Hall, 2008).

From a university perspective, CBR is a collaborative enterprise between researchers and community members which seeks to democratize knowledge creation by validating multiple sources of knowledge and promoting the use of multiple methods of discovery and dissemination (Strand *et al.*, 2003). This interest grows not only from a desire by scholars to conduct research that has greater applicability and responsiveness to pressing social and economic issues but also results from external pressures from funders, university administrators, and taxpayers for institutions of higher education to become more accountable to the needs of local communities (Lerner & Simon, 1998). Indeed, as Harkavy (2006) argues, the goal of universities should be to contribute significantly to developing and sustaining democratic schools,

communities and societies and by effectively educating students to be democratic, and constructive citizens. When “*universities give very high priority to actively solving strategic, real world problems in their local community, a much greater likelihood exists that they will significantly advance citizenship, social justice and the public good*” (p.33).

Moseley (2007), coming from a practitioner and academic perspective, argues for greater collaboration between community and universities. From a feminist geography position, Moseley (2007) stresses the importance of positioning oneself as a researcher and to adopt a reflexive approach when working collaboratively in CBR. Recognizing that knowledge is situated, and that our views are context bound and partial rather than detached and universal is an important aspect in understanding this collaboration “*because academics inherently analyze these relationships from their own vantage point, making it all the more important to uncover the perspectives of those partnering with academics*” (p.335).

Increasingly, universities and civil society are engaging in CBR with the goal of producing policy outcomes that are applicable and effective for local community development (Hall *et al.*, 2009), often having the skills, resources and community partnerships to undertake this type of effective and meaningful research collaboration with government.

3.1.3 Participation for development

No single discipline is responsible for the development of Participatory Action Research (PAR), evolving from earlier traditions of Action Research (Lewin, 1946),

and Paulo Friere's development philosophies (1970). In addition to Friere and others in Latin America (including Carlos Rodrigues Brandão, Boaventura de Souza Santos and João Francisco da Silva), educators around the world at this time began to practice alternative methodologies of enquiry, which linked knowledge production to learning and social transformation¹⁵ (Hall & Tandon, 2013). These methodologies derived from the practice of action research, popular education, social mobilization and community organization.

Freire, a Brazilian educator-philosopher, provided the central organizing framework during the 1970's for people-centric development interventions that are still highly influential today. His ideas concerning people's participation became popular in the late 1960's when revolutionary social movements arose in Latin American countries, around the same time when a new model of development between developed and developing countries was being sought. The rise of locally driven development as opposed to those designed by outside experts, and the importance of involving people in the development practice became influential. Freire's work focused primarily on the pedagogy of liberation, grounded in the belief that people are meant to be free from any form of material, social, and psychological oppression (Thomas, 1994). The central concept of Freire's theory of '*liberation is conscientization*', is a process in which individuals, as knowing subjects, achieve a deepening awareness of the socio-cultural reality which shapes their lives and of their capacity to transform their reality (Freire, 1970). This process, in essence, allows people to become active agents in examining their environments and questioning the structures that lead to their oppression, through

¹⁵ UNESCO Chair in CBR and Social Responsibility in Higher Education: <http://unescochair-cbrsr.org>

critical reflection. He proposed that people are able to free themselves from oppression if they can critically reflect on the existing structures of their oppression.

According to Reason and Bradbury (2001), participation is the defining characteristic of action research, based on a view of the world that consists “*not of things but of relationships which we co-author*” (p. 9). Action research involves a particular kind of interpersonal relationship that blurs boundaries between traditional roles of researchers and the researched (Arieli *et al.*, 2009). Consistent with action research literature is the idea that enabling the community to play the role of co-researchers would empower them and lead to better research richly imbued with local knowledge (Baldwin, 2001; Hall, 2001). The goal of PAR researchers is not just to describe or analyse social reality, but to change it (Kindon & Elwood, 2009).

3.2 Empowerment through participation

With increasing recognition that large-scale, top-down approaches to development result in failure, academics and practitioners have sought solutions to the ‘development impasse’ (Simon, 1997) or ‘anti-development’ (Escobar, 1995) through bottom-up, participatory and community-based approaches that involve participants in their own development programs (Tendler, 1997; Sharp *et al.*, 2003; Khasnabis & Motsch, 2008). The concept of empowerment as part of this decentralized decision-making approach has become widely accepted (Hjorth, 2003; Narayan, 2005; Perkins & Zimmerman, 1995), and has become in many cases a goal of the development process (Sharp *et al.*, 2003). Thus, changing the ways in which planning and development are executed involves the empowerment of those it hopes to serve. It is assumed that

through this shift local citizens are capable of collective action that can result in such significant development outcomes as improvements in quality of life, protection of resources, and the reduction in social exclusion and inequality (Gutberlet, 2009). Empowerment can be defined in various ways, but it is essentially people taking control of the development process (Hjorth 2003), and means a tangible increase in social influence or political power through developing confidence in their own capacities (Wallerstein, 2006). It has been described as a process that fosters power in people for use in their own lives, their communities and in their society, by acting on issues they define as important (Page & Czuba, 1999).

Despite its apparently universal appeal, the concept has received much debate in terms of what it means, and how it is achieved. There is a growing body of literature dedicated to defining the concept and development agencies have begun to focus on the development of indicators for evaluating empowerment (Zimmerman 2000). Despite the considerable study on the role of empowerment in poverty reduction and development programs (Bennet, 2002) there have been limited evaluations that allow the contribution of empowerment to be measured. In some cases, 'participation' – while positive in meaning- can be vague (Agrawal, 2001). More problematic is that the banner of 'participation' has been waved over projects that were thinly or weakly participatory or, at worst, smokescreens for elite control (Crocker, 2007).

In order to understand the complexities of empowerment, it is important to understand the concept broadly and why and how it can be applied to specific programs. At the core of empowerment is the idea of power. Power has been described as 'influence' or 'control', often related to the ability to make others do what we want, regardless of their wishes or interest. Weber (1946) recognizes that power exists within

the context of a relationship between people and things, and by implication, since power is created in relationships, power and power relationships can change. Page & Czuba (1999) identify two main features necessary for empowerment to be possible. First, that empowerment requires power to *change*, and second, that power can *expand* and be shared. Empowerment as a process of change then becomes a meaningful concept, one that can be characterized by collaboration, sharing and mutuality. This aspect of power has been referred to as ‘relational’ (Lappe & DuBois, 1994), and ‘integrative’ (Kreisberg, 1992), meaning that gaining power actually strengthens the power of others rather than diminishing it.

Empowerment is multi-dimensional, social, and a process. It is multi-dimensional in that it can occur at various levels (individual, community), and within various contexts (sociological, psychological). It is, in essence, a social process, since it occurs in relationship to others and that it is similar to a path or journey, one that develops at its unique path. Empowerment theory suggests that new competencies are possible and can be learned, and sees disenfranchised groups as both marginalized and lacking in social power, and as strong, capable agents of social change.

Participatory approaches to development aim to produce empowering outcomes including increased community capacities, broader stakeholder participation in decision-making (Lennie 2005) and promoting social justice (Gutberlet 2008). There is substantial literature reinforcing theories of empowerment through participation, particularly as an approach to address inequalities and exclusion (Belsky 2006, Sreberny 2006, Itzhaky and York 2000). In a study by Tremblay & Gutberlet (2011), women leaders of recycling cooperatives in São Paulo revealed that through their participation in a PAR development programme they experienced specific moments of

empowerment and disempowerment. Applying a temporal diagramming technique, these women were able to identify target indicators of personal empowerment, civic engagement and citizenship building throughout their years participating in the project. Temporal diagramming is the method drawing, writing or using symbols on a written timeline to record experiences, and ideas. The method of diagramming is often used in developing world contexts, through drawing on the ground from locally available materials, and often in community settings.

PAR approaches provide a platform to reduce and circumvent existing power relations typical of development research, and provide a voice for marginalized populations by facilitating their involvement in development programs. Through this process of power redistribution, opportunities emerge to build participants capacity to transform their lives and thus provide a means to facilitate empowerment. Some definitions claim that individual empowerment can lead to a new found awareness, respect for, and desire to empower others (Williams et al 1995, McWhirter 1991).

3.3 PAR as a tool for post-colonial inquiry

In addressing the impact of post-colonial perspectives on research methodology and ethics, PAR emerged in the 1970s in response to western perceptions concerning ‘top-down’ development that was being pursued without adequate knowledge about and consultation with local communities (Campbell, 2002). Although debatable, Chambers (1994) argues that participatory research represents a paradigm shift “*which combines empiricism, the examination of diversity, improvisation and personal responsibility in a manner which embraces and affirms multiple realities and local diversity*” (p.1449). Post-colonial theories reject established ways of seeing by

destabilizing discourses that position those in the North as advanced and those in the South as backward and primitive, as well as provides a lens through which to examine underlying issues of power and the structural and historical institutions that benefited from colonization. Post-colonial theory focuses attention not only on race but also on how it interacts with class and gender in interlocking forms of oppression (Getty, 2010). This theory equally shares the goal of action research in recovering oppressed voices through the agency of non-Western people to reconstruct both history and knowledge production (Frisby *et al.*, 2009).

As pointed out by Getty (2010), many traditional research studies of Indigenous people that have been conducted by Western academics have examined their lives from a colonial perspective rather than recognizing their Indigenous worldviews, or ways of viewing life and the world around them. PAR is widely used with ethnic minority groups and indigenous populations, as it values local culture and traditions of communities, while deconstructing the “power-over” relationship typical of colonialist doctrines. Cargo & Mercer (2008) highlight the use of PAR in the growing self-determination and sovereignty movement of American Indians, indigenous Australians, the Maori people of New Zealand, and Canada’s First Nations, Metis and Inuit peoples.

The relationship between knowledge and power is an important component of participatory and action-oriented research and indeed in post-colonial theory. By engaging in the PAR process, community members enter what Stoeker (2009) calls the ‘*power-knowledge loop*’. By participating they learn the process of knowledge production and by acting on knowledge they produce power that in turn informs their knowledge production. And this process, Stoeker (2009) argues, transforms the existing oppressive social relations of knowledge production.

3.4 Critical Participatory Action Research

Pain & Francis (2003) highlight a main area of critical literature on the use of PAR. The critique describes the way participatory approaches have sometimes been adopted only in name, to undertake extractive, hierarchical and damaging ‘quick and dirty’ research, or to present an illusion of consultation, which stifles dissent (Chambers 1997).

The term participation itself has various definitions and is represented in different ways in the literature. Probably one of the most influential critiques of participation in participatory philosophy and community development is Arnstein’s (1969) ‘ladder of participation’. She defines participation as “*the redistribution of power that enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future ... It is the strategy by which they can induce significant social reform which enables them to share in the benefits of the affluent society*” (p. 216). Arnstein’s model has eight stages that delineate types of participation. This model suggests a hierarchal view from the bottom-up, delegitimizing peripheral participation and promoting full participation as the ideal goal to be achieved. Similar hierarchal theories of participation include Mikkelsen’s (1995) framework, ranging from voluntary contribution without taking part in decision-making to involvement in the development process; and Pretty’s (1995) range from *manipulative participation* through to *self-mobilisation*, in which ‘*people participate by taking initiatives independently of external institutions to change systems*’ (p. 1252). Pretty (1995) argues that low levels of participation (such as sensitizing, informing or consulting) are superficial and have no real impact on people’s

lives. White *et al.* (1994), on the other hand, describes genuine participation as cooperation – based on partnership and delegation of power and, finally, as community member control, meaning empowerment.

Hayward *et al.* (2004) challenge the assumptions of these hierarchal theories of participation and suggests that the choice not to participate can actually be viewed as an act of empowerment and does not necessarily equate to social exclusion. They argue that assessing social inclusion by levels of participation may be misleading and may not account for community members who have made the rational choice not to participate. Other cautions of applying this methodology, as highlighted by Hayward *et al.* (2004), are the commitments and constraints experienced by community members. Their research revealed that constant demands for community participation and engagement in consultation processes can result in ‘consultation fatigue’ that may deter community members from participating in future projects.

Arieli *et al.* (2009) describe further difficulties of participation in what they refer to as the ‘paradox of participation’, defined as a “*situation in which action researchers, acting to actualize participatory and democratic values, unintentionally impose participatory methods upon partners who are either unwilling or unable to act as researchers*” (p.275). This, they argue, can undermine relationships, and reinforces the gaps in power and resources that the action research was meant to address. Further dangers, as highlighted by Hall (2001), emerge when using concepts like ‘participatory’ that can mask the influence of power relations on what people think, see, hear, and do. In some cases relatively powerless groups may echo the voices of the powerful, either as a conscious way of appearing to comply with the more powerful parties’ wishes or as a result of the internalization of dominant views and values (Arieli *et al.*, 2009). Arieli

et al. (2009) illustrate how engaging in a process of systematic reflection can avoid falling into this paradox. They suggest that the level of participation ought to be freely and openly negotiated between action researchers and community members. Likewise, they recommend creating situations in which doubt about or dissatisfaction with the relationship, embedded gaps in power and cultural differences becomes discussable. Another common critique of participatory approaches is when it becomes adopted only in name, in what Chambers (1997) describes as “quick and dirty”, often to under-take extractive, hierarchical and damaging research, or to present an illusion of consultation.

Milne (2012), cautions that some accounts of PAR, such as Participatory Video (PV), can create and reproduce a ‘paternalistic’ standpoint, “*which takes for granted that the people who participate in PV are socially excluded, powerless, and vulnerable, and that through their participation they will somehow become empowered and find their voice*” (p. 257).

Participation can be an important tool as ‘the means for development’ but also, as suggested by Shortall (2004), equally important as ‘an end in itself’. Building leadership or public speaking skills, or strengthening networks for example can be positive outcomes for participants by simply being part of the development project processes, whether or not the development objectives were actually met. Participation in this context is the goal of development, with the potential to develop the strengths and capabilities of a community to address their own issues (Hayward *et al.*, 2004). “*Viewing participation as both a means and end in both theory and practice therefore takes account of the complex, multifaceted nature of participation, and its potential to be both beneficial and detrimental to communities*” (Hayward *et al.*, 2004; p. 104). There is clearly a gap between theories of participation and practice in the literature,

revealing that participation is not always the panacea to complex social problems.

Rather, participation viewed as a fluid and contested process with varying outcomes is more realistic. In terms of evaluating the contested scientific rigor of PAR, Sarason (2003) recommends that the primary focus be on process rather than outcome, with replicability being an important criterion.

Until recently, PAR practices have been largely accepted as an unproblematic good, with limited critical analysis of its theoretical rigour. Cooke and Kothari's (2001) book *Participation: The New Tyranny*, is one of few well-cited critiques of participatory processes in development. They question and provide examples of participants questioning of the process, refusal to participate, or withdrawal of consent of the final research produced.

3.5 Historical use of Participatory Video and visual-based methods

With the increased interest and accessibility of new forms of technology, participatory visual methods of research have flourished. One of the most historically cited cases of using video for social change and community development took place on Fogo Island in Newfoundland, Canada in the 1960's, later to become known as the Fogo Process. Having been dependent on the fishing industry for over 300 years, and at the time going through an economic slump, over 60% of the men had to go on welfare. Initiated by Donald Snowdon from the Memorial University of Newfoundland and filmmaker Colin Low, video was used to assist communities in coming to terms with some of their problems. It was intended to help the community realize that they had problems in common and to move towards building cooperation and development. Low decided to show the films to the people of Fogo and thirty-five separate screenings

were held with the total number of viewers reaching 3,000. It was realized that people were not comfortable discussing issues with each other face-to-face. Instead, they were quite comfortable explaining their individual views on film and having those opinions played back to other community members. By viewing the films, the islanders started to realize that all the communities were experiencing the same problems; they became more aware of these problems and what needed to be done to solve them. After some discussion, it was decided that the Premier and his cabinet should view the films. This was phenomenal since it allowed fishermen to talk to cabinet ministers for the first time. It was also successful: the Minister of Fisheries, Aiden Maloney, asked to be able to respond to the commentaries. The government point-of-view was filmed through him and shown back to the communities. This brought about a two-way flow of knowledge between community members and decision makers. From this point things began to happen on their own. The films simply helped contribute to an island-wide sense of community and assisted people in looking for alternatives to resettlement. The Fogo project became an internationally acclaimed prototype using media to promote dialogue and social change and was later used by various communities around the world (Quarry, 1994).

PV also owes its roots to the field of visual sociology (Barndt, 2008), visual anthropology, popular education (Clover et al., 2013) and communications. Weber (2008) describes images as encouraging embodied knowledge, in which people learn through their senses and respond to images through their embodied experience. She goes on to describe the process as “*bypassing the purely intellectual, leading to a more authentic and complete glimpse of what a particular experience is like or what people think and feel*” (p. 46). Using visual and arts-based methods in research helps to

connect to a deeper place in the human spirit, one that is accessible far beyond the usual academic language, and one that embraces principles of ecologies of knowledge.

Packard (2008) argues that employing participatory visual methods can democratize the research relationship through the process of mutual discovery and refinement of the research agenda. Throughout the years, researchers have employed a variety of visual techniques and tools to enhance participation in development. *Participatory diagramming* for example has proven to be effective at including people normally excluded from research, and able to overcome some barriers to participation of culture, literacy or disability (Pain, 2004). *Participatory mapping* is a method also growing in popularity. This method has been used in combination with Geographic Information System technology in mapping resources, needs and rights (Stocks, 2003). *Photo-voice* used by McIntyre (2003) and others combines photography with women's accounts of their lives and communities, providing a powerful reflection of their world. Gutberlet (2008) has observed that through *action video*, participants are able to see and hear each other after the research is completed, promoting a new way of reflection, "*and the possibility of transforming reality with making it visible, and with posing questions that point towards problems and solutions*" (p.660). Pratt and Kirby (2003) observe in their research how nurses raise political issues through *theatre*. While there are some differences between the various methods, the goal remains the same – to provide a 'tool of empowerment enabling those with little money, power or status to communicate' (Packard, 2008). The

Participatory Video (PV) has been defined by Johansson *et al.* (1999) as "*a scriptless video process, directed by a group of grassroots people, moving forwarding iterative cycles of shooting-reviewing. This process aims at creating video narratives*

that communicate what those who participate in the process really want to communicate, in a way that they think is appropriate” (p.35). What makes video so intriguing and unique is that it “*captures life, reframes it, and positions it*” (Tolman & Pittman, 2001; p. 67). As Sturken and Cartwright (2001) also point out ‘the meanings of each image are multiple, created each time it is viewed’, giving PV a dynamic, representational form highly unique to each viewer at any particular time. Empowerment through PV’ is described by Chambers (2006) to be a ‘*frontier opportunity and challenge*’, in that there is a lot to be discovered theoretically and much to be imagined, pragmatically.

The versatility of Participatory Video is one of its strongest assets and has been applied both in research and in community development programmes. It has proven to be successful to processes of public consultation, advocacy and knowledge sharing within and between communities (Lunch & Lunch, 2006; McEwan, 2006). In a project involving youth, Garthwaite (2000) has identified several benefits of using PV including; the opportunity to learn new technical skills, the opportunity to develop creativity and artistic skills, communication skills and team work skills; it can challenge power dynamics such as through interviewing community authorities and being behind the camera; it’s fun and creative; the opportunity to develop a sense of self-esteem, pride, confidence and spirit in presenting themselves to the outside world for the individual and the community; and it is a lasting product at the end which can be viewed at other points in the future and shared with others.

Although there is much positive documentation about the application of PV there has been limited literature and critical analysis of the evaluation and methodology of this innovative and dynamic tool. Using video as an avenue to civic engagement is not

new. What is relatively new is the ease at which video and media technology is available – to learn digital production and communication skills – that at one time were out of reach. Another remarkable change is the speed in which videos are disseminated, even through the use of cell phones, videos can reach a global audience in seconds. Applying these skills to the processes of democracy is a powerful tool to engage and has yet to be fully explored. The recently published *‘Handbook of Participatory Video’* (Milne *et al.*, 2012) presents a number of international experiences using PV and reflects on a number of critical reflections, including those related to representation, power, ownership and ethics. I weave some of these thoughtful critiques into my own experience using PV.

3.6 Reflections: A critique of Community-based PV

The following sections bring together some of my own observations collaborating in this research, and from the literature, that aim to provide both a fruitful discussion and understanding of my own position, reflexivity and ethics as an emerging CBR practitioner using visual, arts-based methods.

3.6.1 The role of the researcher in the participatory process

A defining element of doing qualitative research is being conscious of the impact of ones own subjectivities on the research process – referred to as ‘reflexivity’. Although definitions abound, this concept recognizes the “*intricate relationship between researched and researcher and to critically reflect on the methods they choose, the roles they play, and the power relationships they create in research settings*” (Yang, 2012; p. 100). There has been some discussion and unity on embracing both the

practitioners and participants reflections in the research process, rather than the predominate discourse on practitioner-centered reflections. This is consistent with Freire's pedagogy, envisioned as active and reciprocal, so that every participant also teaches and is an active agent in shaping project and knowledge creation processes. This is important in understanding power-sharing and the mutual dynamics between project partners. I recognize that the researcher is never fully removed from the research process, nor do I think that the practitioner imparts some sort of power to their participants or control change. I do believe however that the approach taken by practitioners is vital to good practice and that transparency in the research process is key. Practitioners, no matter how well intentioned, typically have agendas that are different from the communities (e.g. monitoring and evaluation of processes), and these *need* to be developed openly with the community.

Despite a general lack of methodological discourse on practitioner's agency in PAR, practitioners need to be "*aware of their power-over the group and their own agency with eyes wide open to the necessary negotiations to prevent the re-enforcement of existing power struggles to the detriment of the group*" (Aggat, 2007; p. 26). During my fieldwork, I was transparent in both the research process and my own evaluation of the use of PV as a tool, and the overall evaluation of the project. The participants were also actively involved in the evaluation and monitoring of the PV project. Drawing largely from theory and praxis on empowerment and communication, I proposed an evaluation design to the group, with some open-ended questions that I would use following the focus groups with government, to reflect on the experience of power and participation. The planning workshop with the group was an opportunity to present

these ideas, adapt new suggestions, and be transparent in my observations and inquiry of the research process.

During the project, I used a field journal to record my thoughts, observations, questions, and ideas relating to process, structures and dynamics between myself and the group and communication and relationships between the recyclers and the government during focus groups. There was often a very strong sense of consensus and unanimity within the group, and I believe this to be the result of years of working within a participatory framework in the PSWM project.

Yang (2012), adapted from Lunch and Lunch (2006), raises important features of PV that relate specifically to reflexivity. The first, is that it challenges the binary division between filmmakers and film subjects, and urges the latter to make films about themselves and ‘*to see*’ themselves through the film – both as filmmakers and as film subjects. Thus, here, reflexivity is inherent and embedded in the process of PV. This reflexivity challenges traditional practitioner-subject research relationships, by allowing them both to see together – as equal in the research process, destabilizing the power relationship. Participant reflexivity was evident in the PV project that I facilitated. The focus groups prior to the actual filming created a space where the participants reflected on their lives, their challenges, and their dreams. The process of using the video helped to stimulate these discussions, and to document what was important in their lives.

Likewise, when the research participants showed their films to the government and other audiences, they saw themselves as the researcher/filmmaker and therefore can create an authentic authority in discussing their agendas. Weber (2008) discusses the use of visuals as a tool to reflexivity, in the facilitation for encouraging a certain transparency in the research design. These forms of creative expressions help to reveal

certain aspects of ourselves, while at the same time, enable us to step back and look at ourselves from a new perspective. This, Weber (2008) argues, increases the potential that we will better understand our own subjectivity, “*leading to humbler and more nuanced knowledge claims*” (p.46).

I felt a strong collective process of reflexivity through the co-discovery of the community’s stories, their dreams and in working collaboratively to make change. My own process of self-inquiry, and subjectivity was in constant play as I saw through their eyes the world they wanted to create. The participatory, and often arts-based, methods used in the PSWM project (we used diagramming, mapping, photo-voice) all contributed to this natural ease of using collaborative video and story telling.

As a researcher, embracing participatory and action-base methodologies, it became very clear that I was acting as a facilitator, or bridge in the process of PV. Having been trained as a videographer, I was able to impart some basic video skills that were useful in the field; in terms of the content of the films, this was entirely a product of the community’s knowledge and visions. The design of the research program was done collaboratively, along with the video editing and decisions regarding the government focus groups.

3.6.2 Shared authorship – balancing process and product

The goal of the project was to build the capacity of the recyclers to utilize digital media for social change, and part of this was having community partners learn videography skills – many of whom had never held a video camera before. The authorship and control of the video making process was largely defined by the participants themselves. Through a collaborative approach, and consistent with the

principles of participatory research, the participants dictated the selected storylines, edits and direction of the use of the product. PV, therefore, shifts the focus of the authorship to the participants – who are at the centre stage of production.

Shared authorship, however optimal in its approach, has its challenges in its execution. The contested balance between obtaining high quality video (i.e. clear sound and stable images) and the process-goal of the project was at times difficult to navigate. The risk of the video project becoming product-led has been shown to actually facilitate disempowerment (White, 2003), and it was therefore important to constantly reflect on this balance. The video project was both created to explore participant's life experiences and build capacity and strength between the groups, as well as for advocacy, where the quality is of more importance, to draw attention from outside viewers. PV is a balance between the integrity of the process, in which a space of self-inquiry can be embraced, and the final product, which aims to deliver the life experiences to policy makers or viewers in a convincing way.

This negotiation became clear in the editing room, sifting through over 100 hours of video footage, finding a balance between quality of product and the participant-led ownership process. Visualizing the product as a process and not only an outcome was an important part of the process, and one that every PV project should embrace.

3.6.3 Knowledge ownership

A common concern in CBR methodologies is the intellectual property rights of community knowledge, particularly in the dissemination of results. Mistry & Beradi (2011) raise particular caution about the appropriation of indigenous knowledge by foreign researchers which, when published is then made inaccessible to these

communities through intellectual property protection. There are a number of ways these concerns can be addressed, both from the perspective of the PSWM project, and examples from the literature. From my own perspective, there was a clear dialogue and mutual understanding prior to commencement, that all the PV footage and final videos would remain the property of the participants. The process of evaluating the use of the videos (my PhD research) as action tools for empowerment and policy change was also participatory in nature, so in essence, the community was also the researcher. The participants co-created the research design in the types of questions that would be asked in the policy dialogues, as well as the questions that I, as the researcher, would be asking them, in order to understand their experience relating to power and *empowerment*. The entire process was transparent, with no hidden agendas, and the transcriptions were given back to the participants. What wasn't participatory was my own analysis of the policy dialogues and in-depth interviews relating to communication and empowerment during the policy-deliberation process. This entailed a reflective and lengthy process of cyclical analysis and reflection of the literature, and theories, and how my results fit in and contributed to these larger discussions. During the 2 years of post-production, analysis and dissertation writing, I was still very much involved and connected to the participants of the PSWM project, and emailed with many of them during this stage for updates, or if clarification was needed.

Louis (2007), in a CBR study with Indigenous communities, highlights the differences between research done within an Indigenous context using Western methodologies and research done using Indigenous methodologies, which integrates Indigenous voices. Guaranteeing open access through a Creative Commons License is

an approach that Louis (2007) used for the release and insurance of research deliverables.

3.6.4 Towards greater inclusivity in PV

The very nature of PV embraces and stimulates collaborative participation and collective story-telling. There still can, however subtle, be an exclusive nature to the process. Only one person holds the camera at a time, and at that moment, it is their perspective, story, and reflection. It is important, I believe, to be conscious of this during production, in making sure every person has an opportunity to be involved in all '*positions*' of the production (i.e. filming, interviewing, editing) to ensure each person has an opportunity to 'capture' their reality. In an ideal environment, each person would have the possibility to experience these different positions, to truly be a part of this creative process. The collective editing phase is also critical, however challenging, in creating the real story. Here, it is important to include all voices in the community in creating the story, and the vision, and how this is put together. This is where, and potentially sooner, the community decides which clips are the most powerful and effective and relying information. This is also another space that creates a reflective self-inquiry, in watching the combination of voices and images come together – and sharing in a tangible product.

3.6.5 Representation and power

Political empowerment is central to deliberative governance. Empowering individuals generally means increasing their capacity to participate in, and share responsibility for, public affairs. One challenge for participatory governance is to

address the problem of inclusion (who can participate) and to what extent individuals may develop deliberative skills and capabilities. The new participatory instruments that have spread throughout the world (Smith, 2009) often challenge these traditional participatory procedures. PV has a unique capacity to include multiple representations, challenge power dynamics and to create new possibilities for social relationships to emerge. Although perhaps only few ‘delegates’ from the community might participate in a policy dialogue or decision-making process, the voices of the entire community can be heard, and this has a powerful impact in terms of representation.

3.6.5.1 Participatory interview process: where is the power?

There have been examples where high levels of participatory influence can have benefits on the level of both process and product. In a PV case study of Metis in Canada, for example, where community participants manned the camera in an important yet informal interview with a politician in their community, the *“relaxed and inspired session became meaningful in a way that was very immediate and close to home”*...and which *“most likely this would not have been the case had the interview been more formalized, or if a university-based researcher, had been the only one in the room asking the questions”* (Evans *et al.*, 2009; p.103). In my experience, the participatory process, in which the participants led the focus group, had both positive and critical power dynamics at play. I can provide an example from my experience with facilitating one of the focus group sessions with Armando, and the Secretary of Environment where the nature of the participatory interview process interplayed with the very aspects of power dynamics we were aiming to dismantle. In this interview Armando facilitated the dialogue, where I was a silent observer, and instead of

answering to him, the government official would often respond to me, look in my direction or request a gesture of validation when he finished speaking. In conducting research of power-balance in PAR, it became obvious that this interview, however respectful and seemingly comfortable for Armando, was still maintaining elements of power-over. At the time, I had made some notes about this, and only later during further analysis of the meeting was I able to reflect on how my presence, as an international foreigner, impacted the research space. I should note that it is my own subjective reflection of the body language within the focus group session that I think it important, if not relevant, to the research outcomes. It could very well be that the nature of the interview, which was led by Armando, and accompanied by myself and another member of the PSWM project, was unique. I should also note that the relationship between the government representative and Armando was well established and supportive through previous meetings and collaborations.

I can't help but critically reflect on what the research process and dialogue would be without the presence of an academic 'outsider'? In all research, and particularly international development, I think it is critical to reflect on the influence of academics in spaces of community-government relations, also, an area that has well deserved attention.

3.6.6 Ethics in the field

Kobayashi (2001) highlights the need for more critical qualitative methods within the context of action-oriented research. She stresses the need to be highly sensitive and reflective to the impact of the research on the participants. There are specific ethical concerns when working collaboratively with communities; mainly issues of informed

consent, confidentiality, privacy and access (Thomas & O’kane, 1998; Ackerman *et al.*, 2003). Using video in particular can be ‘intrusive’ and lack confidentiality of the people involved. Ethical considerations of peering into the lives and exposing raw emotions, is the consequence and responsibility of the researcher who may be changing the lives of her subjects in significant ways.

The International Visual Sociology Association 2013 Annual Conference brought together a number of perspectives on the ethical considerations of PV worth mentioning. Chris High, at the Open University in the UK, highlights that *“participatory video lies at the intersection of a number of different professional practices. It can be applied in very different contexts and often involves stakeholders with divergent expectations of ethical behaviour. PV therefore provides a challenging context for making satisfactory ethical judgements that can be explained or defended to those taking part in the process as well as to other interested parties.”* The conference highlighted a number of practical ethics for PV procedures and approaches. Some of these included: confidentiality, the capacity to give consent, the power dynamics in a group context, withdrawal of consent and the intersection of research ethics, media rights and social norms about the ownership, privacy and the sharing of images. In thinking about the ethics of using PV *“it is critical to reflect on to what extent there is conflict between ethical traditions within research practice and the traditions of research that have arisen beyond the academy?”* This question can inform critical reflection and debate on a myriad of PAR and community-based research practices that are challenging traditional knowledge productions within and outside the academy. This is an exciting time and space to be exploring the intellectual and epistemological rigour of how knowledge is valued and applied. This applies to different ways of

thinking through and assessing PV ethics, whether formal evaluation, peer review, applications to ethics committees, or the publication of standards or codes of practice.

Further exploration needs to be done on the critical exposure of PAR. What happens, for example, when the academic is faced with the ‘publish or perish’ conundrum, as Milne (2012) highlights, when the community she is engaged in resists the publication of their results? How do CBR academics navigate the pressures of publishing, while maintaining the integrity and intellectual rights of the community? If a community refuses or resists publication and/or dissemination of research results, who ‘owns’ the rights to this collaborative work?

Milne (2012) raises important critical reflections in relation to power in the use of PV’s. She highlights that it is most often not the community writing the funding application and driving the research process, and to this extent “*are often the recipients of the intent of a research or project*” (p.259). Most often those who are ‘powerless’ are, in most cases, often unable to gain an audience with those with power, such as government. She stresses, therefore, the process of making a PV does not in itself change the status quo in relation to who has the power. If there is to be a shift in power dynamics, and it is quite possible that there is, it is not merely from the process of the video itself but from the discussions, interactions and processes that subsequently occur.

Kindon & Elwood (2009) point to some additional internal challenges such as when ethics review boards do not understand the kind of research involved or demand a burdensome process that is incompatible with the locally driven timeframe for action. Other potential areas of conflict in PAR include “*academics’ attitudes and behaviours within the research process, the differences in social and economic status between*

participating researchers, types and avenues for publication, attribution of authorship, and involvement or otherwise in longer-term action-oriented outcomes” (ibid, p.22). Stoeker (1999) has raised concerns about whether academics are, in fact, appropriate to undertake participatory forms of research because they can inhibit local ownership and reinforce unequal power relations through their need to satisfy their own institutional agendas and requirements.

3.6.7 Monitoring and Evaluation

Over the last few decades there have been numerous PV projects used for action research. Often there is limited monitoring and evaluation undertaken in the process of using PV as a tool, and the evaluation of the tool in various settings and over time. It is difficult to know the exact impacts of the project since the effects are rarely immediate. In fact, most of the impacts and outcomes are so dynamic, subtle and occur over lengthy periods of time, and often in combination with other action-oriented initiatives and movements that it is difficult to fully grasp the ‘*whole picture*’. Having a rigorous and multi-year monitoring and evaluation program embedded in the community, with members being aware of multiple, and perhaps unanticipated, outcomes would be highly recommended to truly reveal the immediate and long-term successes and challenges of the project.

3.7 Discussion

The complexity of participatory action research is increasingly clear from the literature. There will likely continue to be questions and debates about power, reflexivity and the creation and validity of knowledge within this exciting field of

inquiry. This underlines the continuing importance of self-reflexivity; enabling people to identify issues of power and control that underlie social structures, demonstrated in much of the research on feminist and post-colonial theories. Despite some of the important critiques mentioned in this paper, participatory research, and PV in particular, represent viable, vital alternatives to the exclusionary domains of traditional academic research.

As new forms of participatory and action-oriented research are identified and critically examined, so will evolve underlying and new theories of the creation of knowledge, ways of knowing and, in essence, through this process - the empowerment of people and communities towards a more democratic and just society.

Although my research touched on the inclusion of the audience in the impact of the PV, this is an area of inquiry that needs further consideration. As new technologies and media become more widespread and interactive, there is huge opportunity to extend the participatory action to the audience, to develop engagement and community cohesion.

Chapter Four: Re-framing community knowledge: Participatory Video as a tool for empowerment in the Metropolitan region of São Paulo, Brazil

“This participatory video was very important for all leadership and those leaders who emerged, it was super important. If we could afford to do another workshop, another way for us to keep the practice of using the tool would be great, because this tool is very important to our growth here, at least for the ABC, I saw [growth] increased considerably”.

- *Interview with Monica, October 13th, 2010, Diadema, Brazil*

4.0 Introduction

Increasing global challenges (including social, economic and environmental factors) have prompted efforts to find alternative development strategies built on participation and citizenship. There is growing evidence in the literature suggesting that numerous resources, strengths and skills exist within communities that can be engaged in addressing some of these complex challenges and in promoting people’s well-being (Burby, 2003; Israel *et al.*, 2001; Goodman *et al.*, 1998). Among these resources is the intellectual transformation of knowledge creation, which over the last forty years has, as Hall (2005) describes, ‘*come in from the cold*’. Such contemporary understanding of knowledge interwoven with participatory approaches to community development have the capacity, as stated in the UNESCO (2009) brief, “*to co-create knowledge, mobilize it to inform practice and policy, and enhance the social, economic and environmental conditions of people, communities, nations, and the world*” (p.1). Additionally, international development programs have also slowly moved from centralized top-down forms of planning to bottom-up and community-based strategies (Tendler, 1997; Khasnabis & Motsch, 2008) in order to make community development more inclusive, and in many ways more locally adapted. It is assumed that through this

shift from top-down to bottom-up approaches, local citizens have the opportunity to collectively take action that can result in significant development outcomes such as improvements in quality of life, protection of resources, and the reduction in social exclusion and inequality (Chambers, 1997).

The expression of conventional (*i.e top-down*) developmental ideals and methods of implementing them no longer enjoy universal acceptance and legitimacy (Gawor, 2008). A growing number of people at the local level are seeking the attainment of their aspirations for better living standards outside the state, seeking alternative agendas with different aims and objectives. Community-based Participatory Action Research (CBPAR) is increasingly being recognized and adopted as an innovative, effective and timely approach to build strong partnerships with communities (Flicker *et al.*, 2007) that aims to produce empowering outcomes including increased community capacities, broader stakeholder participation in decision-making (Lennie, 2005) and promoting social and environmental justice (Gutberlet, 2008a; Cahill, 2007). CBPAR is a methodological collaborative approach for doing research with practitioners and community partners that can inform practice, programs, community development, and policy while contributing to the scientific knowledge base (Small & Uttal, 2005), and seeks to achieve positive social change (Strand *et al.*, 2003). CBPAR combines methods of inquiry with “*community capacity-building strategies to bridge the gap between knowledge produced through research and what is practiced in communities*” (AHRQ, 2004). With a focus on community-driven issue selection, collaboration in the research process, and action for solutions, CBPAR is well suited to identify and address environmental, health and social disparities through advocacy for public policies that diminish these inequalities. It is

for these reasons that interest is growing rapidly for academic institutions, government agencies, and civil society to form these partnerships and create bottom-up solutions.

Inspired by CBPAR, and the ideas of knowledge democracy, the present study describes and articulates the outcomes of a Participatory Video (PV) research project, which was developed in the context of the *Participatory Sustainable Waste Management* (PSWM) program. The PSWM project, funded by the Canadian International Development Research Agency (CIDA), was a six-year partnership between the University of Victoria, in Canada and the University of São Paulo, in Brazil between 2005-2011. The PV project aimed to empower and build political capacity with leaders of recycling cooperatives and government in the metropolitan region of São Paulo. The videos were presented to municipal government representatives during focus group meetings in the municipalities of Diadema, Mauá, and Riberão Pires in the fall of 2010. The focus groups were facilitated by the leaders of the cooperatives, who co-produced the videos, supported by the executive committee¹⁶ of the PSWM project. These focus groups were video taped and analyzed to evaluate the use of the videos as a tool for empowering the leaders and enhancing dialogue and communication with the government. Although the themes of the videos varied between the groups the ultimate message was the same throughout; to be recognized as providing a valuable service and to be remunerated and supported for their work *as environmental agents*. Following the focus groups, the leaders were interviewed to reflect on the various elements of individual, organizational and

¹⁶ The PSWM Committee included representatives from the participating cooperatives, local NGO's, government, and project directors from UVic and USP.

community empowerment – highlighted in the following results section.

The project followed a participatory approach, engaging participants at every stage of the process. The idea of using the videos for *action* and *education* surfaced following the PV workshop in 2008, and eventually through the entire co-editing process, which took over one year to complete. The methodology to use and evaluate the videos as action tools was developed during group workshops with the entire PSWM project committee. Focus group and interview questions were developed based on the groups most pressing needs and challenges and then followed months of organizing meetings with government representatives and showcasing the videos at various events.

4.1 Understanding empowerment

Empowerment can be defined in various ways, but it is essentially people taking control of the development process (Hjorth 2003; Rappaport, 1987), and means a tangible increase in social influence or political power through developing confidence in their own capacities (Wallerstein, 2006). Individual, community and organizational empowerment is increasingly being recognized as an outcome of Community-based Participatory Action Research (Minkler *et al.*, 2001), and an important component for building social cohesion¹⁷. By engaging participants and researchers in all aspects of the project (including developing goals and methods, data collection/analysis, and implementation of results), power relations that typically enhance social exclusion are reduced (Perrons & Skyers, 2008), mutual involvement, change and personal growth

¹⁷ Social cohesion can be defined as the interactions among members of society, characterized by a set of attitudes and norms that includes trust, a sense of belonging and the willingness to participate and help, as well as their behavioral manifestations (Chan et al. 2006).

are promoted (Kidd & Krall, 2005), and as a result ownership of the project and data is enabled. The approach is collective, reflective and is undertaken to improve a situation, often where government programs and/or policies are inefficient or unsustainable. It can offer a vehicle to enhance citizenship opportunities, collective action and community empowerment through meaningful participation. It is assumed that through this shift local citizens are capable of collective action that can result in such significant development outcomes as improvements in quality of life, protection of resources, and the reduction in social exclusion and inequality (Gutberlet, 2008b).

The concept is often used to characterize approaches based on social mobilization, and stems from the recognition that effective social movements and interventions require empowerment-related processes and outcomes (Perkins & Zimmerman, 1995). Bennett (2002) describes this process as ‘mobilization empowerment’, which builds on the skills, information and linkages needed for livelihood empowerment. *“Mobilization empowerment can lead to new self understanding, solidarity and capacity for collective action”* (p.23). A key element in most social mobilization approaches is helping poor and socially excluded individuals realize the power they gain from collective action. These mobilization approaches often operate from below, creating voice and demand for change among socially excluded citizens.

4.2.1. Empowerment through CBPAR: towards a ‘knowledge democracy’

Historically, Community-based Participatory Action Research (CBPAR) has its roots in action research (Reason & Bradbury, 2006), participatory methodologies (Green et al., 1995; Israel et al., 1998; Minkler & Wallerstein, 2003) and community

development (Hall, 2005). Highly influenced by the work of Paulo Friere (1970), the participatory research tradition is aligned within social movement and development theory. In his book, *'Pedagogy of the Oppressed'*, Friere outlines the important knowledge of oppressed peoples and that through developing their skills of critical social analysis, they can become agents in changing their social situations. Friere's critical pedagogy of the student-teacher dynamic encourages participants to build their own knowledge of reality, through critically reflecting on the processes that shape their lives. His emphasis on the approach is very much in line with PAR's interactions between participants and practitioners.

Participatory Action Research (PAR), as described by Wallerstein & Duran (2003) is not so much a set of methods as it is a set of underlying beliefs and principles about the ways in which research ought to be conducted. These principles are grounded in a philosophy that embraces collaboration, participation and social justice over notions of objectivity and the idea that science is apolitical (Hall, 1993). PAR has as its basic premise the notion that research needs to involve both practical power-sharing in the practice of research, and a commitment to some form of epistemological power-sharing that enables the research community to influence the framing of the research context and questions (Evans et al., 2009). In addition, PAR has an *action-oriented* component or goal as both part of the process and outcome. It is described by Koch *et al.* (2002) as an "*inquiry that seeks a focused effort to create the knowledge that is necessary for people to take action to improve the quality of their lives*" (p.110), which includes the development, implementation and evaluation of plans derived by participants. Stringer (1996) proposes that PAR should be democratic, equitable, liberating and life enhancing, enabling the expression of people's full human potential.

Building on contributions from research on collective action, social capital and social movements, Mason & Beard (2008), identify a series of variables that are theorized to affect a community's capacity to alleviate poverty. Their research concludes that only the community with the strongest capacity for community-level collective action is capable of planning independent of the state, and thus in a position to take steps toward addressing poverty's structural causes.

Empowerment theory suggests that new competencies are possible and can be learned, and sees disenfranchised groups as both marginalized and lacking in social power, and as strong, capable agents of social change. Empowerment and participation are closely inter-related (Laverack, 2001). Within the social policy context these two notions are indivisible; empowering people means promoting opportunities for their participation, while participation requires empowering people to enable them to exercise this human right (Sidorenko, 2006). Narayan (2005) defines empowerment as the expansion of assets and capabilities of poor people to participate in, negotiate with, influence, control and hold accountable institutions that affect their lives. Both these definitions highlight that empowerment refers to the actors' ability to make choices; the transformation of those choices into actions, and that there is a process of change. Smulovitz and Walton (2003) recognize this process as exercising 'agency' with a reasonable prospect of this having an influence on development outcomes.

Many studies have revealed the empowering outcomes of engaging in Community-based Participatory Research. Koch *et al.*, (2002) for example, describe how the process of participation can build capacity, enhance a sense of belonging, involvement and empowerment of those involved. "*Group reflection leads to a reconstruction of the meaning the situation holds for the individual and therefore to an*

understanding and sense of clarity of what might be possible” (114). Castelloe *et al.*, (2002) describe the process of capacity building as strengthening what groups of people are capable of collectively doing and being. Through this building, participants develop skills, gain strength and confidence and share a powerful role in creating change.

Encouraging participants to ‘set the agenda’ also facilitates empowerment (Stringer, 1996), thus it is important for participants to collaborate throughout the entire research process (Tremblay & Gutberlet, 2009). Koch *et al.*, (2002) in their PAR clinical studies, learnt that it was important to foster ownership of the project and encourage participants to initiate the research agenda and subsequent action. Breda *et al.*, (1997) also concur that participants will be inclined to own the project if they have equal share of the power. Stringer (1996) discusses the various constructions of meaning held by individuals in the process and aim of PAR, and how the individual life experience is in a continuous process of negotiation. He continues by explaining how meanings are not fixed, but rather emerge during conversations as participants make sense of the own experiences. This reflection, he notes, stimulates self-awareness and in the process enables participants to find a voice on issues that are important to them. The publications of Servaes’ (1999, 2000) also argue that initiatives for development must begin with grass-roots communities and organizations. He highlights that in this development process, the main actors are people that break out of submission to a hierarchical structure to establish their own independent system of communication and organization (Servaes, 1999; p.158). In this way, a democratic structure of development services is built from the local level within a framework of support by government and other agencies.

Rabinovitch (2004) however, claims that participation alone is insufficient to illicit empowering outcomes, and that it is through engagement that individuals interweave responsibility and action and a degree of control that is not included in participation. She continues by stating that in order for community change to be productive individuals must not only play a role in designing solutions but implementing them as well. It is here that community members recognize that they are capable of being ongoing agents of change. Stewart & Bhagwanjee (1999), in a CBPAR study with physically handicapped individuals, also noticed that the process unlocked the inherent potential for self-reliance and self-confidence. It is through this participation process that knowledge and critical awareness are generated among stakeholders, which then enables them to act and fundamentally shift the balance of power and control over decision-making.

Empowerment, at all levels, is central to the popular new discourse on ‘knowledge democracy’, often cited within the literature of engaged scholarship (Boyer, 1996), civic engagement, and community-based research (Flicker and Savan, 2006). ‘t Veld (2010), and others (Gaventa, 2005; Bivens; 2011; Hall *et al.*, 2013) describe knowledge democracy as embracing the diverse representation and co-creation of knowledge, as opposed to exclusive forms of a ‘*knowledge economy*’; still very much the status quo. In this way, subjects not only recognize their capacity and agency to engage and create action, but are undeniably sources of knowledge creation in society. Supporting structures and policies to enable these spaces have enormous potential for personal, and collective transformation that can have long lasting impacts for sustainable development.

4.2.2 Agents of change: PV as a tool for empowerment

There are numerous benefits to using Participatory Video (PV) for community development. It builds the capacity of individuals and communities with the potential to empower, strengthen and engage in new and creative ways. It is fun, creative and easily accessible, encouraging new ways of self-expression and identity. The process provides opportunity to strengthen community cohesion, and gives voice to those who may not be traditionally open to those communication spaces. PV challenges existing power structures and is a powerful tool for social action, promoting opportunities for positive and constructive dialogue and awareness building. The possibilities that video offers when used as part of a participatory process are particularly in tune with the principles of PAR: local people choose their own shots, edit them together and have a collective voice in deciding to whom and where the finished product should be shown. This process encourages the participants and audience to identify what is needed to create change and can be a valuable trigger for discussion. Sloman (2011) describes this process as a form of ‘escapism’ by providing an active way for the audience and community to become involved in the issues and form a sense of ownership. Community ownership of the research is of key importance in CBR practices.

The impacts of PV can have both significant short-term and long-lasting impacts for a community and other communities exposed. It is a snapshot in time of a particular context as well as a dynamic tool that can be applied to numerous platforms and audiences, encouraging new forms of information, dialogue and reflection. The very nature of video represents a much more complex representational form than other more traditional forms of print media. For one, digital video has become increasingly widespread and more accessible throughout the world. Video also has different

consequences in terms of how communities construct images and stories of themselves, and how these representations are understood by different audiences. This form of media can potentially have widespread, immediate and powerful impact on how a community is perceived and understood by both the community members and outsiders (Evans *et al.*, 2009).

Despite the considerable study on the role of empowerment in poverty reduction and development programs (Bennet, 2002) there have been limited evaluations that allow the contribution of empowerment to be measured. In some cases, ‘participation’ – while positive in meaning- can be vague (Agrawal, 2001). More problematic is that the banner of ‘participation’ has been waved over projects that were thinly or weakly participatory or, at worse, smokescreens for elite control (Crocker, 2007). It is therefore crucial, that communities be active agents in the development process, and fully cognitive of the power-over structures that interplay these spaces of politics.

The following section provides a brief contextual background of the PSWM project, in which the PV research is situated, a brief description of the methodology and outlines the major research results.

4.3 The study: A Participatory Video project for Participatory Sustainable Waste Management (PSWM)

The Participatory Sustainable Waste Management (PSWM)¹⁸ project is a Canadian International Development Agency (CIDA) – Association of Universities and Colleges of Canada (AUCC) funded collaborative program between the University of Victoria, Canada and the Faculty of Education at the University of São Paulo (USP), Brazil.

¹⁸ PSWM Website: www.pswm.uvic.ca

Since 2005, recycling cooperatives, governments, NGO's and universities from several districts in the metropolitan region of São Paulo have been collaborating in this project. The main objective of the PSWM project is to build and strengthen the capacity of the recyclers and the governments towards inclusive waste management (Gutberlet, 2008a). The project helps structure, organize and strengthen the waste management sector through supporting cooperative enterprises, micro-credit, collective commercialization, inclusive public policy and the practice of a solidarity economy. The long-term aim is to increase responsible consumption and reduce the generation of waste, while at the same recognizing the valuable service recycling cooperatives provide in inclusive and integrated waste management systems.

The PSWM project follows a participatory-based methodology and is governed by an organizing central committee composed of leaders from recycling cooperatives, academics, NGO leaders and representatives from municipal governments. Through this participatory approach, activities are planned, agendas are met and funding is allocated to a variety of capacity-building networking schemes. This bottom-up and participatory decision-making process has engendered mutual trust, respect and solidarity among the PSWM members, providing for significant human capacity developments and strengthened cohesion between recycling groups and local governments.

This research, and all extensions of research culminating from the PSWM programme, would not have had the support, dedication and impact without the years of planning and building social capital – a critical component of Community-University partnerships and CBPAR. The participants of this research had already been working together in a participatory process for over five years, and already shared a strong

collective sense of unity and identity, evidenced during any one of their meetings and workshops. Thanks to an already strengthened sense of collective agency (Gutberlet, 2008c), participants were able to share a collective success of collaborating on this Participatory Video project.

4.3.1 Situating the research: the empowerment narrative

This research is informed and situated within two main areas of literature. First, the social theory discourse related to the participation-empowerment loop, and second, the literature related to the use of digital media and communication technology for social change. For the purpose of this study, I look at empowerment through different levels of analysis and practice – for example individual, organizational and community levels. Empowerment is recognised as a difficult thing to measure and often what is actually measured are proxies of empowerment (Narayan, 2005; p15) and are often context specific (Oakley and Clayton, 2000). This research does not aim to necessarily measure these levels of empowerment – but rather to explore how and in which ways PV can contribute to these constructs of empowerment – an area that lacks theoretical and practical analysis in the literature.

Brazilian participants were not acquainted with the term ‘empowerment’ or in Portuguese ‘*empoderamento*’, and rather they used the term ‘leadership’ when referring to the actions or characteristics of empowerment. In order to fully explore the concept and interpretations of these concepts, we held a focus group discussion around the notion of empowerment prior to the research. By exploring the various levels of empowerment, and its proxies or characteristics, participants were already engaged in a self-critical and reflective process of inquiry about themselves, and their community.

This process was also an integral component of the action-research, and guaranteed the transparency of the research goals. The use of open-ended indicators has been an emerging method since the late 1990's (See Oakley and Clayton 2000) and this was the approach the research eventually took to determine change in relation to empowerment.

4.4 Research Results

The following discussions highlight the research results in the context of empowerment theory and PV methodology.

4.4.1 Individual Empowerment – building critical self-reflection

“The video showing our experience demonstrates “our ownership” when speaking in the committee, speaking of our lives... the collectors are making their own experiences through video. Through comments, type documentary, it is the reality of each of the collectors.” (Eduardo, President of the National Recyclers Movement, São Paulo, November 2010).

Individual empowerment can be described as a process where individuals experience a transition of more control or *power* over their lives, enabling them to discover new insights and abilities to contribute their personal knowledge, energy and talent to society (Israel *et al.*, 1994). Empowerment is similar to other constructs, such as self-esteem in its emphasis on the development of a positive self-concept, but goes on to include an element of recognizing human agency for positive change. Israel *et al.*, (1994) also describe individual empowerment “*as the development of a critical understanding of the social and political contexts, and the cultivation of both individual and collective resources and skills for social action*” (p.152). Some common characteristics of individual empowerment include: enhanced self-confidence, efficacy

(belief in shared group responsibilities), motivation, leadership, and critical reflection (self revelatory) (Zimmerman, 2000). Tengelnd (2008) goes beyond to include individual empowerment as the *“ability to control’, deciding and acting, but also (importantly) having the opportunity, to (causally) influence, change, bring about, or end, processes and states of affairs, for example through physical manipulation (e.g., ploughing), communication (e.g., arguing for), or political influence (e.g., voting)...for increased opportunity to constitute increased control, the individual also has to have some awareness of it”* (p. 83).

It has been shown that through group interactions, individuals can be accepted as equals, can express feelings and aspirations and learn about themselves and their environment (Sadan, 2004). The results from the focus groups and in-depth interviews revealed a number of ‘empowering characteristics’ as a result of the process and outcomes of the PV project. These include enhanced self-confidence, esteem and efficacy, new knowledge and skills, and developing a sense of critical reflection.

4.4.2 Enhanced self-confidence, esteem and efficacy

Self-confidence, self-esteem and self-efficacy are all well cited in the empowerment literature (Itzhaky & York, 2002; Zimmerman, 2000; Tengelnd, 2008; Kroeker, 1995). Self esteem can be described as an *attitude* towards’ oneself, and how one values oneself as an individual; self-confidence as a *belief* about ones capacity to handle situations and tasks in life, and self efficacy as the beliefs an individual holds regarding his or her power to affect situations – influencing both the power to face challenges and the choices that will be made (Zimmerman, 2000).

Vilma, from the *Vida Limpa*¹⁹ program in Diadema, expressed that the PV project produced feelings of pride, for her accomplishments and for the groups. She expresses in the quote below during a focus group discussion, that the video project has increased her attitude about herself, her motivation and confidence as a recycler and in recognizing her power and to *'fight and defend a work that is beautiful and important'*.

"I feel, flattered, very happy, sometimes I am at some place and they show this DVD, these images, I keep saying: " I filmed this part'. So Secretary [directing her words to Ricardo] that video there, we, the collectors, did it with the help of the Brazil-Canada project. And I learned a lot, and it's another motivation to be taking it to the population and saying that it was the collectors who filmed it... I would like to say that today I am proud to be a catadora. Very much so, today I defend it with my heart, I learned to fight, to fight not only for the money, but to defend a work that is beautiful and the importance of our work to the world and to the future generations that will come. Not only for the moment we are living. " (Vilma, Catadora, Vida Limpa, Diadema, Dec 1st, 2010).

PV provides an affective vehicle for enhancing self-confidence and when combined with action and advocacy efforts can lead to situations where there is an increase in control over quality of life. At one of the public screenings for example, we noticed one of the recyclers, Renato, that had been featured in the videos, being patted on the back by a colleague from a different cooperative. Feelings of pride and ownership in the finished product indicate that the process may have met the end of 'empowering' the participants. Feelings of ownership are thought to be a sign that the participants felt that the agenda was their own and feel committed to it (Wilcox, 1994). Crucial also to engendering an overall sense of personal or psychological empowerment is that the

¹⁹ The 'Vida Limpa' (Clean Life) program was initiated in 2002, as a partnership between 'Pacto Ambiental', a network of recycling cooperatives, and the Diadema government to collect door-door recycling materials.

participants' goals were met (Diener & Diener, 2005). This is echoed in educational theory literature, (see Ashman & Conway, 1997), in which feedback from friends and family can feed into positive feelings about oneself and the group. Lord (1993) notes that as people gain in self-confidence, they often seek more avenues for participation and that their involvement in community activity can in turn enhance their self-confidence and sense of personal control. This self-fueling cycle of learning can be the most powerful realization of ones own capacity for change.

Coinciding with this project, the PSWM participants, members of the REDE ABC²⁰ and the Movimento Nacional dos Catadores de Materiais Recicláveis (MNCR) were actively working together to support a campaign against a proposal for a waste incinerator in São Bernardo do Campo (SBC) and elsewhere in Brazil and globally²¹. This threat to the collective selection programs was not only felt in SBC but in all the participants, a unifying threat to dismantle one by one the programs they have fought for years to support. It was obvious that this mobilization, and unifying collective agenda, played a role in strengthening the bond between the various communities involved in this project.

4.4.3 Knowledge and leadership skills

“This participatory video was very important for all leadership and those emerging, it was super important. If we could afford to do another workshop, another way for us to keep the practice of using the tool would be great, because this tool is very important to our growth here, at least for the ABC I we saw growth increase considerably.” (Monica, catadora from Diadema)

²⁰ REDE ABC is the network of recycling cooperatives in the metropolitan region of São Paulo.

²¹ Global Alliance for Incinerator Alternatives (GAIA): <http://www.no-burn.org>

Common suggestions for enabling empowerment are ‘awareness/consciousness’ raising and skills development, which Tengland (2008) describes as instances of knowledge – however, he elaborates that empowerment can only be constituted if the knowledge gained is sufficient for increased control over quality-of-life determinants. For example, an increase in the degree of consciousness about a situation is often sufficient, argues Tengland (2008), for empowerment – as it is a prerequisite for having control over the situation. Likewise, developing skills important for improving quality of life (e.g. professional or work related knowledge, communication skills etc), are also contributors of empowerment. Monica expressed an increase in motivation and leadership in using video as a tool for making change: *“It has motivated me, now I try to record all the places I go, take pictures, if I'm able to record on the camera, I record, because I know that it serves as a tool for me, so in that sense, everywhere we go I look for opportunities to record and then this serves as a tool to present to the group and even for others...I found that it's really important that we record it, and when we went to sit with the mayor, the fact that we showed him a video that was made by recyclers, made all the difference in the level of discussion we had with him. Before, I did not care for it - photography, film records - it had no importance. Now I see the importance. I think that has changed accordingly.”*

Similarly, this process enabled Armando to construct new knowledge, leadership skills and a realization of his potential: *“I rediscovered myself particularly as a leader, and thank God I was lucky enough, on the issue of solid waste in Maua it's not just the opinion of our worth, it is the question of commitment to the project because if they do not have commitment then who does? We are committed to the project with the*

cooperative, especially with the city...it cannot fall into empty talk. So without any doubt it gave me new skills, I did not realize my potential, honestly, I did not realize it.”

A central tenant in Knowledge Democracy is valuing all forms of knowledge and all realities and in harnessing the powerful agency of individual realization that ‘their knowledge counts’. Monica expresses this idea through the use of video as a unique tool in knowledge representation. *“I think the advantage for example is when we shoot a group of recyclers, and the group speaks for itself, they speak of their reality. I think it helps others who do not see that reality to understand. It is the recycler who is speaking, so I think that makes it easier.”* Penha, from Maua, also expresses the benefits of using video to show their reality: *“I think a part of that video shows the day-to-day difficulties of a catadore, and without the aid of the video it would be almost impossible to understand. So I think the video helps in this function, to feel what is happening in the day-to-day of a recycler.”* Participatory Video offers a tangible tool and ‘best practice’ model in both the pursuit of representing knowledge, often excluded or under-represented in decision-making, and in feeling a connection to that community, in a way that is led and represented by the community.

4.4.4 Critical self-reflection

While the action component may focus on achieving a direct benefit to the participant, Stringer (1999) highlights that it is also the learning generated from the action–reflection cycle that provides the critical data of action research. This process of self-reflection occurred at various times throughout the PV phases. The collaborative discussions during workshops (drawing, mapping exercises to create the themes) enabled the groups to discuss common struggles, future objectives and their realities

while contributing to a collective knowledge that they could build on. This was reinforced during the filming stage, and when they interviewed each other, having to prepare what to say and the intended outcome of their message, bringing lots of tacit knowledge to a conscious level. Armando reflects on his critical self knowing during this process: *“I may know better as a human being, too, because you become a tougher person, but without a doubt this has made me more mature, more controlled, you know? I became less explosive, more understanding...and without a doubt, this gave me great opportunities also to my self-knowing, and I did not know I would rise, to live.”* High et al. (2007) notes that this participatory and self-reflective process elicits much more than we know, on an intellectual and spiritual level, liberating positive energy and having a strong empowering effect. *“Using critical reflection in PAR aims to create a double-loop learning in a ‘dynamic process where the learners constantly critically revisit their actions to adjust their behaviour and thoughts”* (Buchy & Ahmed, 2007, p. 361). This critical reflection aspect of PAR was evident in our study in the production phase but also during the participatory editing, in which participants were also engaged as collaborative researchers in analyzing their own footage, as well as in providing greater insight into the research process.

4.4.5 Organizational Empowerment

“Yes, I think it is very clear to see the empowerment, it is the ability of the small, the exploited, especially the scavengers, who are exploited by scrap dealers, and without any doubt in this issue of self-organization. We do not expect things to fall from the sky, it's obvious that we are still a little seed right? The thing is gradually built? But I think there was a breakthrough, there was a major advance.” (Armando, catador, Maua)

“The videos help to show catadores their achievements...to show how to improve their lives through organization” (Eduardo, MNCR)

Empowering organizations are democratically managed, in which members share information and power, utilize cooperative decision-making processes, and are involved in the design, implementation, and control of efforts towards mutually defined goals (Israel et al., 1994). This process in turn empowers the members of the organization and provides the link between organizational and individual empowerment. Hence, empowerment at the organizational level, integrates processes that enable individuals to increase their control within the organization, and the organization to influence policies and decisions in the larger community.

It is the level of organizational capacity of the cooperatives that will inevitably lead to greater mobilization and political efficacy. Building the organizational capacity of the recycling cooperatives was a major goal of the PSWM project and a significant outcome of this PV process. The PV project enabled the cooperatives to collaborate, particularly ones within the same municipality, share a common voice through the videos and build their capacity to engage in policy development. Monica, leader of Pacto Ambiental – a network of cooperatives in Diadema, shared that she felt this tool enabled the Mayor to really understand their reality. *“Because when we sat down with the mayor to present our video, and we ended up leading the entire meeting to speak of everything we did, so I felt empowered by that video we showed him, to speak of our reality, to show in fact how we work, who we are, so I felt empowered...I think this video has opened the door of the Mayor of Diadema for us, the day after we sat with him at this level to show him what we do, he started to look differently at us here in Diadema”.* What is unique here in the deliberation process is that the catadore/as are the ones asking the questions and leading the discussions, not the researchers. They are

truly the experts here and in control of the research action. Ricardo, a government official in Diadema, also noted this important shift in power dynamics. *“What’s cool here and in other places I visited (Bogota, Buenos Aires) is that the collectors are the ones who speak, receive us, are prepared, and represent...it is important to think about this consciousness”*.

There are short and long-term impacts of PV, particularly on its impact on public policy, a usual lengthy process. In the short term (during and straight after the project) one of the most significant outcomes was a strong sense of community among the recycling cooperatives, an experience of empowerment and strength as a group to improve their livelihoods. Indeed, during the final evaluation of the 6-year PSWM program in 2011, the PV project was noted by the recyclers as a significant highlight within the overall project.

In addition to strengthening the organization network of the coops within the project the video provided tools and vision for groups not yet organized, outside of the project. Eduardo, president of the MNCR, noted that the videos were *“cool to show other groups what is possible”* in selective collection programs. He continues by stressing the importance of catadores *“seeing and recognizing themselves as providing an environmental service”*.

4.4.6 Community Empowerment

“Without a doubt in my opinion is to have an influence. That's what I always say in my group, much of it is the objectives of the entire community, all members and cooperating partners, pickers and scavengers, now we come together, united by a focus on the idea, and maintain the principles of cooperative solidarity economy, popular participation, this whole thing, I believe we will, we will make very sure, very sure. Very well.” (Armando, catador, Maua)

Although many definitions abound, community is defined here as “*a locale or domain that is characterized by the following elements: (1) membership-a sense of identity and belonging; (2) common symbol systems-similar language, rituals, and ceremonies; (3) shared values and norms; (4) mutual influence-community members have influence and are influenced by each another; (5) shared needs and commitment to meeting them; and (6) shared emotional connection-members share common history, experiences, and mutual support*” (Israel, 1997). In the context of this study, community is recognized both as the community of recyclers, as well as the communities in which the cooperatives are situated.

Community empowerment has been understood by exploring a shared ‘sense of community’, and through the creation of social capital – collective benefits derived from cooperation. Individuals and organizations within an empowered community provide support for each other, address conflicts, and gain increased influence and control over the quality of life in their community (Israel et al., 1994). “*Similar to an empowered organization, an empowered community has the ability to influence decisions in the larger social system...hence, empowerment at the community level*” (Israel et al., 1994; p. 152). Community level empowerment, argued by Israel et al., (1994), also builds into organizational and individual empowerment, in that it is a multi-level concept, where change at one level will be associated with change at another.

PV is well placed to enable community empowerment at an operational level. Although difficult to measure, in essence, empowerment at the community level translates into those members of the community making positive societal change and

improving their conditions, while building on social assets. Monica, a catadora from Diadema, explains how the videos helped to enable the community to feel stronger: “*in Vila Popular, we looked back at the DVD video, and the people (said): “Gee, how cool, that we did this”, then the group was very happy to be there in that video and they felt stronger, because we saw all the groups, so we all felt stronger.*” Here, Monica expresses that the process of seeing and showing the videos strengthened the identity and voice of the recycling community. Having a tangible product such as the video that represents the entire community can be a unique community empowerment tool. Likewise, for Eduardo, President of the National Recyclers Movement in São Paulo, this video was important for empowerment at the community and individual levels. “*There were many people who were happy, who wept with emotion through the video, through this dynamic...several cooperatives that are already organized and those that are not organized for them was “very good” [...] It helps a lot to collaborate because sometimes people have some difficulty reading, and through video and image, they see the reality... the person enters in the video... and the dynamic that what we're doing is really cool, the dynamics involve everyone, no one stands outside*”. Eduardo raises an important theme within the goal of *inclusivity* in knowledge democracy, whereby the recycling community can all be engaged, represented and celebrated at all levels of capacity. The video *process* and outcome created a unifying space for the community to come together, a tangible tool for dialogue, action and solidarity.

The PV videos proved to be influential in making positive change in the community from a grass-roots level, in which a participatory structure of communication is central. These creative community-media outlets “*permit local communities to question the ideologies which depreciate them, select the information*

which is truly important for them, and project more positive images of themselves”

(Servaes, 1999: p.84). In this way, communities have the opportunity to influence policy in a broader and more collective way. Monica, for example, shared that a supportive political space was enabled through this project that had real community impact on policy, and furthermore that she was influential in that process. *“Particularly here in Diadema I believe I have [influence]. I can speak for our community...we recently had a meeting with the mayor and I gave a status report that was the program of selective collection and it had a few things that were not legal and he [the Mayor] has totally changed. I gave arguments to him, I gave the documents to which was the focus of the problem and we solved it.”* The videos were an impetus, a tool, or avenue to create space, opportunity and enhanced leadership for Monica, and others, to make important change in their lives and the collective benefit of their community.

4.5 Summary and discussion

Studies have often focused on the participatory mechanisms (Peterson & Reid, 2003) and measurement of individual level empowerment. However limited attention has been focussed on the processes and outcomes for communities (Peterson & Zimmerman, 2004). Investigating short and long-term outcomes of CBPAR are important to advance this research process as a credible approach and can also provide practitioners the opportunity to more effectively plan for future research with communities that is rooted in community.

Participatory Action Research strives to transform and inspire communities into agents of change through engagement and realizing their agency. This chapter highlights how Participatory Video provides a creative, and accessible tool for harnessing individual, organizational and community empowerment. Furthermore, the paper draws on theories of Knowledge Democracy as central to the praxis of PAR in embracing diverse, and often under-represented, forms of knowledge. PV is well aligned within this arena to provide a practical tool to document, represent and act in the co-creation of knowledge with communities not traditionally invited into political spaces of deliberation.

Some of the major outcomes of using PV as a tool for empowerment and central to expanding processes for participatory development and knowledge democracy include:

- 1.0 Strengthened relationships among the cooperatives, providing a more unified voice and collective action for social movements relating to waste incineration and models based on PSWM;
- 2.0 Increased catadore/as sense of civic engagement through active participation in waste management planning;
- 3.0 Enhanced self-confidence, esteem and efficacy, new knowledge and skills, and developing a sense of critical reflection, all critical elements in realizing ones potential to make change;
- 4.0 A tangible tool and 'best practice' model in both the pursuit of representing knowledge, often excluded or under-represented in decision-making, and in feeling a connection to that community, in a way that is led by the community;
- 5.0 Capacity development for organizational capacity of the cooperatives, inevitably leading to greater mobilization and political efficacy; and

6.0 Positive change in the community from a grass-roots level, in which a participatory structure of communication was central.

It is important to note here, that the outcomes of this project, and using PV in general, are just as important as the process. For it is within the process of self-inquiry and critical thinking that real change happens. Once this occurs, and is still occurring, barriers for action in making change at all levels are set in motion. Developing tools for leadership and avenues for collective mobilization has the potential to capture and nurture valuable knowledge often on the periphery, and which can have powerful impacts when brought into centre stage.

Chapter Five: Participatory Video: a methodological tool for enhancing public policy dialogue and community engagement for inclusive waste management

“Our commitment to advocate for improved laws and public policies so that their formulation effectively involves wastepicker organizations. Waste pickers should become actors in decision-making, searching for improved common conditions, and for capacity building activities and knowledge for the recognition and professionalization of their work.”

*- Global declaration at the first World Conference of Wastepickers
Bogota, Columbia, March 2008*

5.0. Introduction: PV for social action

Participatory Action Research (PAR), and visual methodologies such as Participatory Video (PV), offer innovative vehicle for marginalized groups to engage in public policy discussions and take action concerning social issues that impact their lives. PV provides individuals and communities the opportunity to play a leading role in researching and developing ways to create awareness, reflect on their own practices and take action. Increasingly, PAR is becoming the default methodology in a number of contexts, and especially in deconstructing traditional research relationships between academics and marginalized communities (Evans *et al.*, 2009). PV is a key tool, under the guidance of PAR, in combining process and action in ways that provide avenues for communities to both engage in critical self-analysis and political action. In this way, participants are equal partners alongside government authorities to provide a collaborative approach to problem solving (Stringer, 1996). In their article ‘*Community-based Participatory Research as a tool for policy change*’ Peterson *et al.*, (2006) document that this approach can “*produce credible research, build community capacity, and help bring about contributions to policy changes*” (p.352). Enabling

community members to identify issues in need of investigation, collaborating in the conduct of the research, and translating research-based findings into action, and advocacy for policy level change have been important components of the environmental and social justice movements (Peterson *et al.*, 2006) and in developing community governance (Secret *et al.*, 1999).

PAR is also increasingly being recognized as important in yielding and validating community knowledge and understanding that can guide policies and programs to reduce social disparities (Flicker and Savan, 2006; Ritas, 2003), particularly by improving communication between stakeholders (Luckin and Sharp, 2004; Hickay and Mohan, 2005). This type of community-based planning takes the form of citizen participation and is more likely to address the symptoms of poverty, such as difficulties with access to basic infrastructure, services and unemployment. Governments are realizing the long-term sustainability and locally relevant outcomes of working with communities in development and planning, and even more so in building the capacity of community to lead engagement processes (de Lange and Mitchell, 2012). An important aspect to truly approaching participatory community engagement is how we understand and appreciate various forms of knowledge. Eversole (2010) argues that “*Culturally and geographically situated knowledge (often referred to as ‘local knowledge’, ‘indigenous knowledge’ etc.) has become increasingly visible in development studies over the last three decades, and has become highly relevant to development processes*” (p.33).

These approaches are largely grounded in theories of ‘*knowledge democracy*’, pioneered by scholars such as de Sousa Santos (2007), ‘t Veld (2010), Gaventa (2005), and more recently, Hall *et al.* (2013). In this paradigm, there is an openness and

embracement in the representation and in the creation of knowledge of those previously 'invisible' or excluded. The idea of democratizing knowledge is both central theoretically to understanding change in society but also pragmatically in the creation of spaces for civic engagement that dismantles traditionally oppressive structures.

Participatory approaches to research create important bridges between academics and communities, through the use of shared knowledge and valuable experiences. This collaboration further lends itself to the development of culturally appropriate measurement instruments, thus making projects more effective and efficient. An important element of this approach is the mutual trust that is created, enhancing both the quantity and the quality of data collected. The ultimate benefit to emerge from such collaborations is a deeper understanding of a community's unique circumstances, and a more accurate framework for testing and adapting best practices to the community's needs (Roche *et al.*, 2008; AHRQ, 2004). Involving government in this process is imperative for responding quickly to community needs that can be easily adapted and re-structured accordingly.

The stages of the Community-based partnerships typically begin with the identification of a problem, deciding on a research question, conducting the study, developing and implementing action plans, and evaluating the outcomes. As pointed out by Vasquez *et al.* (2007), there are few 'guideposts' that provide direction for policy-related action in this process. They argue that a clearly defined field of policy making can provide a pathway for PAR findings to be translated into policy-change. This paper builds on previous research on community engagement in policy processes, and aims to fill some gaps on the use of PV as both a tool for visual communication,

both also in shifting power dynamics and in valuing varied and representational forms of knowledge not typically present in these political spaces.

5.1 Community engagement for inclusive development

Throughout the world, new spaces for civic engagement in policy processes are emerging. These spaces stem primarily from shifts toward more horizontal models of governance and toward a more organized, diverse and empowered civil society (Gaventa, 2006). In addition, advances in communication technologies have created new potential for how citizens might be involved (Phillips and Orsini, 2002). Genat (2009) suggests that often policy-makers develop interventions and programs on the basis of their own experience rather than the experience of the people who their policies are meant to benefit. Within the approach to participatory action research, the experience of the people who the policies or programs are meant to benefit is of key concern. Existing citizen engagement models suffer several limitations. Many are short-term, top-down models that are not likely to (and perhaps not intended to) provide lay citizens with the skills and capacities to significantly engage in - or affect - developments in meaningful ways (Irwin, 2006).

Public participation in decision making through the use of deliberative processes is now widely promoted as the means of enhancing institutional legitimacy, citizen influence, social responsibility (Petts, 2001; King and Cruickshank, 2010) and as a central component to democracy (Dryzek, 2009). Deliberation invokes a 'talk-centric' aspect of democracy (Chambers, 2003) and resides in the right, ability, and opportunity of those subject to a collective decision to participate in deliberation about the content of that decision (Dryzek, 2009). In this process consultation should

involve “*consensus building, be objective, open and fair, be explicit – where, when and how, legitimate so results can be used in the decision making process and traceable so participants can see how their efforts have influenced the decision making process*” (Dwyer, 2007; p. 1351). Furthermore, it “*must involve women and policies must be in place that deals with social, environmental and political issues as well as economic issues*” (p.1351).

From a Social Economy perspective, Vaillancourt (2009) defines this co-production of policy as the “*participation by stakeholders from civil society and the market in the implementation of public policy*”, while co-construction refers to “*participation by those very stakeholders in the design of public policy*” (p.12). This approach to collaborative planning and policy is an important component in Social and Solidarity Economy frameworks and is proving to be an effective and necessary approach, particularly in the South, where strong social movements are challenging traditionally oppressive structures for development.

Cornwall and Gaventa (2001) suggest that this growing trend of community engagement is in part as a response to declining trust in government and the need to demonstrate greater transparency and accountability. In addition, decision makers are becoming increasingly aware of the benefits of creating platforms for public debate, and the value of public knowledge. Communities are also demanding to be involved meaningfully in policy decisions that affect them. King and Cruickshank (2010) further attribute this trend to the role of technology in enabling a more informed public that is less reliant on specific government processes for information, and less likely to be passive recipients of information.

Community engagement as a concept is not new, stemming back to the beginning of the participatory development era in the 1970's (Hall, 2005). There has been a range of concepts describing the notion of community participation in policy processes, including 'community capacity-building', 'community development', 'deliberative democracy' (Dryzek, 2007), 'participatory democracy' (Pateman, 2012) and even to some extent 'social capital'. Although these practices have existed for some time, with a range of methods to support this interaction, there have been limitations in understanding how to measure their 'less tangible' outcomes.

Deliberative democracy and other democratic forms of citizen representation in part address the "*failing representative mandate in liberal democracies and explores a broad range of mechanisms for overcoming the profound disconnect between citizens, their political representatives and the policy-making process*" (Crowley, 2009; p.996). Dryzek (2009) describes communications that are deliberative as non-coercive, capable of inducing reflection about the preferences that individuals hold, and able to relate the particular interests of individuals and groups to more universal principles. This space of deliberation promises "*a process of involving the public in making decisions through open debate and dialogue; in contrast to representative democracy in which the public is involved only as voters selecting elites who will later make decisions*" (Pierre and Peters, 2000; p.151).

The idea of power is at the core of these discussions. These approaches represent the many ways that power can influence how people engage in policy debates, and the equality and legitimacy of the outcomes. Participatory approaches to planning and development aim to change existing power relations in the decision-making process, and are said to enhance democracy (Khakee and Barbanente, 2003).

Also referred to as communicative planning (Mannberg and Wihlborg, 2008), importance is placed on developing collaboration among various stakeholders in respect to policy development and delivery, a central tenet of deliberative democracy (Crocker, 2007). The communicative process is seen as being dependent on rationality – being the machinery of the process and securing the use of negotiations, and aiming for mutual understanding and agreement (Habermas and Cooke, 2001).

From the literature, Crocker (2007) draws on a spectrum of modes of participation in group decision-making including: nominal (the shallowest way in which someone participates in group decision-making is when that person is a member of a group but does not attend its meetings.), passive (people are group members and attend the group's or officials' decision-making meetings, but passively listen to reports about the decisions that others already have made.), consultative (non-elites participate by giving information and their opinions to the elite.), and petitionary (non-elites petition authorities to make certain decisions and do certain things, usually to remedy grievances.), participatory implementation (elites determine the goals and main means, and non-elites implement the goals and decide, if at all, only tactics - in this mode non-elites do more than listen, comment, and express.), bargaining (on the basis of whatever individual or collective power they have, non-elites bargain with elites, those who bargain are more adversaries than partners), and deliberative participation (non-elites - sometimes among themselves and sometimes with elites) deliberate together, engage in practical reasoning, and scrutinize proposals and reasons in order to forge agreements on policies for the common good, ones which at least a majority can accept). This spectrum describes the degree of expressing collective agency. This spectrum of citizen participation assumes that engagement goes beyond traditional “one-way”

education and outreach efforts and involves “two-way” interaction with citizens.”

(Powell, 2009). Phillips and Orsini (2002) describe this engagement as “*interactive and iterative processes of deliberation among citizens and between citizens and government officials*” (p. 3).

Crowley (2009) points to the fact that most public deliberations do not directly alter public decisions and actions and for that to happen powerful actors must be encouraged, persuaded, pressured or obliged to heed them. There are nevertheless well-cited examples where deliberation has had policy impact, such as the experience of participatory budgeting in Porto Alegre, Brazil for example (Ganuza and Frances, 2012). There are also well-cited examples of democratic decentralization of governance in countries such as India, catalyzing rethinking on models of inclusive and integrated planning. These experiences have shown that bottom-up approaches to planning can lead to strengthening local autonomy, and public/citizen participation (REF – PRIA). These approaches however, as stressed in Ganuza and Frances (2012), require an administration that can guarantee impartial political spaces that are as inclusive as possible – a common challenge in participatory spaces of democracy.

5.2 The context of organized and informal recycling globally

The recycling sector provides an important livelihood to many of the world’s poor and excluded populations. Often informal in nature, this activity includes individuals collecting, separating, classifying and selling recyclable materials as a means of subsistence. According to the Global Alliance for Incinerator Alternatives (GAIA), “*recycling provides productive work for an estimated 1% of the population in developing countries (approximately 15 million people), in processes such as*

collection, recovery, sorting, grading, cleaning, baling, processing, and manufacturing into new products...even in developed countries, recycling provides 10 times as many jobs per ton of waste as do incinerators and landfills". Most of their work is considered informal and conducted by independent recyclers, subject to risks, accidents and exploitation. Those engaged often remain extremely socially and economically marginalized, also facing harassment, stigma, and dis-empowerment.

There has been a considerable amount of literature, and debate, on the integration of informal recycling into formal waste management systems (Wilson *et al.*, 2006; Baud *et al.*, 2001; Jaffe and Nas, 2004). There are still major challenges in demonstrating the significant value inherent of this sector, and resistance in moving traditional policies of repression and neglect to one of positive engagement, support and integration with the formal system. In order for this shift to occur, governments and society need to first recognize the social, economic and environmental benefits that result from working with this sector, particularly through cooperative-based models. Despite these challenges, there are strong arguments for the inclusion of the informal and organized recycling sector in formal municipal services (Sembiring and Nitivattananon, 2010; Iskandar, 2003). An obvious debate is highlighted in the Millennium Development Goals (UN, 2005), whose focus on poverty reduction would be counter-intuitive if municipalities tried to eliminate the livelihoods from a major section of the urban poor. Clearly, a solution to move forward in this direction would be to enhance the existing recycling system, including recycling cooperatives, and building on their capacity

Approaches in integrated solid waste management, and the growing organization of

recycling cooperatives and associations have been instrumental in improving the livelihoods of recyclers in many parts of the world (Medina, 2000; Berthier, 2003; Gutberlet, 2008a). Increasing complexity, costs and coordination of waste management has necessitated multi-stakeholder involvement at every stage of the waste stream – calling for an integrated approach. This reflects the need to approach solid waste in a comprehensive manner with careful selection and sustained application of appropriate technology, working conditions, and establishment of a ‘social license’ between the community and designated waste management authorities (most commonly local government) (Hoorweg and Bhada-Tata, 2012). An integrated system considers how to prevent, recycle and manage solid waste in ways that most effectively protect human health and the environment. Gutberlet (2010) and (Tremblay *et al.*, 2009) go on to describe a more socially ‘inclusive’ approach described as resource recovery with reuse and recycling practices that involve organized and empowered recycling co-ops supported by public policies, embedded in solidarity economy and targeting social equity and environmental sustainability. This approach aims to tackle socio-economic vulnerability, reduce waste management costs, promote greater resource efficiency, build social cohesion and foster community – all of which requires an inter-secretarial and interdisciplinary urban planning and development approach.

There are well-cited experiences from around the world documenting the organization of recyclers into social groups such as the Zabbaleen in Egypt, Pепенadores, Cartoneros and Buscabotes in Mexico, Basuriegos, Cartoneros, Traperos and Chatarreros in Colombia, Chamberos in Ecuador, Buzos in Costa Rica and Cirujas in Argentina (Medina and Dows, 2000; Berthier, 2003), rag pickers in India (Pattnaik and Reddy, 2010) and China (Jha *et al.*, 211). Many of these groups operate as

cooperatives providing an important organizing structure that have more capacity to form important partnerships with government, and the non-governmental sector, creating creative and inclusive solutions to waste management. Cooperatives operate on principles of reciprocity, shared democratic decision-making, and are in themselves vehicles of community empowerment and collective agency.

The selective collection of recyclable resources is now widely recognized as a sustainable approach to solid waste, both as a means of environmental education stimulating the reduction of waste generation and of addressing the urgency of conserving natural resources. Municipal programs that include cooperatives in their programs provide many benefits to these groups, including a better standard of living, validating their profession and creating a link between the cooperatives and the government (Baud *et al.*, 2001; Jaffe and Nas, 2004). Partnerships between the government, the non-governmental sector and the recyclers have been shown to provide creative solutions for solid waste management. Adequate public policies therefore need to be created to support these initiatives, and open structures and processes for inclusive communication.

5.3 The role of recycling cooperatives in Brazil

In Brazil, most recyclers are still informal. According to a national survey in the early 2000's by the network *Lixo e Cidadania*, 37% of the municipalities in Brazil acknowledged having informal recyclers separating on the landfill, particularly in cities over 50,000 inhabitants (Gutberlet, 2008b). It is estimated that there are approximately 800,000 to one million catadore/as (*recyclers*) in Brazil, out of which 60,000 are

organized in cooperatives and associations (Gutberlet, 2011). In the metropolitan region of São Paulo many of the recyclers – *catadores* and *catadoras*, *carrinheiros*, *carroceiros*, or *recuperadores* – are organized in cooperatives providing employment, improved working conditions, and increased environmental education (Gutberlet, 2008a). In São Paulo for example, the recycling forum ‘*Forum Recicla São Paulo*’ includes 29 groups (co-operatives, associations and other grassroots recycling initiatives) (Gutberlet, 2011).

In 2010, the Brazilian government sanctioned new federal legislation on waste management, institutionalizing selective waste collection and formally recognizing *catadores/as* as key agents in the system. The law requires each municipality to develop a solid waste management plan, which focuses on a hierarchy from not generating, to reduction, reuse, recycling and final disposal of waste at landfills. The law (article 41 and 42) specifically guarantees the contemplation of recycling cooperatives and associations in the waste management plan and in addressing the needs of these groups to participate in the implementation of the programs. Despite these innovative policies for inclusive programs, there are a number of shortcomings that make the inclusion of cooperatives still problematic, if not impossible (Gutberlet, 2011).

Worth mentioning in the legislation is the inclusion of waste incineration as an option before reuse, recycling or composting has been performed. Essentially, cities can choose incineration as a viable option, leaving the entire recycling sector with little options or power in these decisions. In addition, article 58 excuses governments from including *catadore/as* in the programs if the recycling organization is inefficient.

Unfortunately, the reality of most recycling cooperatives is that of vulnerability and lack of support – creating serious barriers for them to be efficient *from municipal standards*.

Few governments in Brazil, and globally, have embraced an inclusive waste management model, by recognizing the social and economic benefits that are present in working with recycling cooperatives. This support, however minor, is most urgently needed in infrastructure (triage center, equipment, trucks etc.) and remuneration, where the recyclers are paid for the service they provide. The purpose of this action research project was to strengthen dialogue, using participatory videos, between governments and recycling cooperative in three municipalities in the metropolitan region of São Paulo. Specifically, the project aimed to raise awareness catadore/as struggles, and capacity to provide selective collection services – given the proper support and remuneration. The following provides a brief description of the methodology, and the outcomes of focus group discussions focusing on the most pressing policy debates.

5.4 PV methodology: case studies from three municipalities in the metropolitan region of São Paulo

This project used participatory approaches as part of a process specifically designed to create the space and opportunities for leaders of participating recycling cooperatives to voice their perspectives on inclusive waste policies in their municipalities. The main focus of the research was on understanding how participatory video empowers citizen-government engagement, and creates opportunity for dialogue about issues related to how government is supporting the inclusion of recycling

cooperatives in waste management policies. The research methodology is Participatory Action Research (PAR). Through this process, knowledge production is emancipatory and has the potential to create positive social change, where participants are the action agents (Reason and Bradbury, 2001). Chambers (2003) points out that this approach embraces the lived realities of experience, and collective knowledge of the poor, and often excluded voices.

Following the collaborative production of four participatory videos (over a period of ten months in 2009), three focus groups were conducted with local governments and catadore/as in Maua, Riberão Pires and Diadema over the course of four months in 2010. The methodology applied in each case study was the same, however the contexts differ, reflecting the dynamic nature of the situations and relationships in each municipality.

The focus groups were organized with local government, 1-2 catadores/as representing their group, and the executive members of the Participatory Sustainable Waste Management project (including the researcher). In all three of the focus groups, various representatives from local government were present, including social and economic development, waste management, engineering services, and in one case the Mayor (Diadema). The focus groups were structured in four stages: 1) pre video interviews, 2) watching the videos, 3) focus group discussions, and 4) post-focus group interviews focused on the methodology and impact of PV. The research design of this project was entirely participatory and was developed through numerous discussion sessions with the larger PSWM group and smaller participatory video groups. As an additional strategy to shift power dynamics during the focus group the catadores/as guided the questions. The role of the researcher in this case was more of a facilitator.

At the beginning of the focus groups (pre-video stage), the cooperative leaders asked the government representatives six questions concerning their level of knowledge, and understanding of recycling cooperatives, some of their perceived barriers, and their perspective on inclusive waste management programs. This discussion enabled a 'base line' of information in order to evaluate the use of the videos in contributing to enhanced dialogue, understanding and citizen-engaged public policy process (Appendix C).

Following the video (between 12-15 minutes), the cooperative leaders led the discussion with a series of questions including: 1) the percentage of residents who have recycling services, and if those services include catadore/as; 2) specific municipal public policies, which include catadore/as on waste management plan; 3) which public policies are needed to improve waste minimization and recycling programs; 4) how selective collection can be improved and expanded with cooperatives? And what is needed?

The final stage of the research was the post-focus group interviews, which inquired into the use of the video as a tool for communication in policy dialogue. The leaders again led the following semi-structured questions: 1) what have you learned from participation in this meeting? 2) Has your perception of catadore/as and / or recycling cooperatives changed? How? 3) Was the video an effective tool of communication during our meeting? 4) Are you supportive of the integration of coops in the municipal waste management plan? How will you do this? 5) Are there benefits to this model that you did not see before, anything new you have noticed? 6) Has this process of communication and engagement strengthened your relationship with the cooperative? 7) are you interested in continuing to work with the cooperatives? and 8) how do you

think collaboration between the government and the recycling cooperatives can be improved?

These discussions were videotaped, transcribed and translated from Portuguese into English over the course of eight months in 2011, in collaboration with members of the PSWM project. The focus group sessions were then analysed across groups for recurrent themes and issues. Group interactions enabled the discussion and identification of issues that probably would not have come out in individual interviews or participant observation. The focus group process proved to be an observable context in which the power struggles and social structure of catadores/as were reproduced.

In addition, I also conducted individual interviews with the catadore/as participating to explore their experience post-focus group, delving into aspects of empowerment and power relations (chapter three). A short survey was also administered to 37 participants, representing both government and the public at different screenings during the research phase. The survey inquired into additional information on the use of PV as a communication tool.

This video project was a space to discuss the mounting challenges and barriers, despite the successes, that all the cooperatives were facing. The space was also an opportunity for inserting the diverse and often absent forms of knowledge into the policy discussions. Although difficult to measure the long-term policy impacts of this project, it was clear that the process of PV and using video as a representational tool for this community for enhancing dialogue was successful. The following sections describe the outcomes of the focus group discussions and in-depth interviews with the catadore/as, focusing on how the PV process enabled supportive representation and power dynamics. I briefly discuss some of the current challenges for these

cooperatives, providing some context for the nature of the policy discussions in the focus groups.

5.5 Current challenges for recycling cooperatives

Despite some successes of inclusive, integrated waste management in Brazil (*i.e. Diadema's 'Vida Limpa' and Londrina's 'Reciclando Vidas' programs*) there are still significant challenges for recycling cooperatives and the livelihoods of catadore/as. The major barriers highlighted by catadores/as during the focus group include: a) lack of government/business support, which are dominated primarily by the prevailing growth oriented economic development model, b) lack of integration of cooperatives into official waste management programs, in order to play the leading role in waste reduction, c) lack of dialogue and integration among the stakeholders: consumers, producers, government, recycling initiatives, and recycling industry.

Recycling cooperatives are in a vulnerable position, despite federal commitments supporting the Solidarity Economy, and still compete in an open market. The privatization of municipal waste management services for example is a common threat for this sector throughout the world. The experience of the Zabaleen in Cairo, Egypt, documents the exclusion of more than 60,000 recyclers, when in 2002 the authorities decided to privatize the entire MSWM system, signing four contracts to international companies (Iskandar, 2003). These contracts ignored the services that the Zabbaleen had been providing for over 70 years, and the fact that they were already collecting one-third of the city's waste (a service that has now been included in the foreign contracts). Some of the contractors were planning to hire Zabbaleen or to allow them to scavenge at the new landfill sites, while others appeared to be intent on

‘meeting international standards’. This is an extreme example where privatization of services can be detrimental to the livelihoods of thousands, ignoring a large existing sector in planning new services.

5.6 Enhancing communication through PV: ‘A new way of seeing’

Communication can be described as a complex process of creation, transmission, maintenance and transformation of information and ideas, using a mix of interpersonal and mediated channels, which are sustained by political, economic and social structures (Melkote and Steeves, 2001). Participatory communication is a social process in which groups with common interests jointly construct a message oriented towards the improvement of their living conditions and the change of unjust social structures (Morris, 2003). This form of communication provides people, including the marginalized, with access to information and communication systems and an equal opportunity to participate in creating new information and challenging existing unjust social practices (Servaes, 1996). PV can enhance and stimulate this form of communication. The images can be revealing and eye-opening – it can provide new ways of seeing, challenge existing perceptions and gives opportunity for creative processes. Given the increasingly accessible nature of video technology, this form of representation has enormous potential for widespread, immediate and powerful impact on how communities are perceived and understood by both community members and outsiders (Evans *et al.*, 2009). The participatory methodology in this project proved to enhance the process of dialogue, by providing an iterative process of visual and communicative data. The images provided the audience, in this case the government, with a ‘real-life’ picture of the realities of this community; a significant step in

challenging preconceived perceptions of this community, and in documenting their struggles.

In an interview with Eduardo, *President of the National Movement of Catadores (MNCR), in São Paulo (November 2010)*, it was made clear that “very few [governments] know the day-to-day reality here. Not everyone knows”, referring to a real disconnect between the perception of government and reality of catadores/as. Armando, a catador from Coopercata, Maua, during an interview, spoke of the challenges of being a catador, and the importance of working with government in inclusive planning.

“It is a tremendous challenge being catadores, right? Knowing, understanding, participation in public administration it is essential and they [catadores] are making so much progress, they already know both the secretary and Valentino [mayor], and they know that we are trying to expand in a constructive manner, in a planned way because without planning we get nothing, so we can reach the goal. I have a dream, do not know if this is a dream or utopia, which Maua has within five years, has, at least covered 50% of selective collection and the next 10 years is 100%...and the work it has to be visual I'm afraid to show who we are and what we came for, and where we go, no doubt.”

Similarly, during the focus group in Diadema one of the government representatives, Ricardo, commented on how the video provided a new way of seeing and reinforced his perceptions of catadores/as as environmental stewards – one of the main goals of the PV project.

“I found it interesting because it shows the reality for those unfamiliar with Diadema, and São Bernardo do Campo...It is interesting to draw people's attention ... People put their waste at their home door and think it will go away on its own. There is a whole work towards the environmental awareness of people that is important. People say “lixeiro” (garbage man), stigmatizing the collectors, but I say, I'm lixeiro, I am the one who produces it... The catadores are environmental agents who collaborate... What's cool here and in other places I visited [cited Bogota and Buenos Aires], is that the catadore/as are the ones who speak, are prepared, represent ... It is important to think about this consciousness. ” (Ricardo, Municipal government of Diadema, Dec 1st, 2010).

The findings from this research reveal that video can provide an opportunity to shed light on local knowledge and understanding of the reality of the community. It is an excellent learning tool for government, whom are typically not in direct contact with these groups. *"I think the first is to show the reality of Diadema, because the images sometimes speak louder than words, for even a representative, for example, Kelly will talk about the network or Cooperlimpa, when you have a video, you register the image of the entire process"*(Noe, Municipal government of Diadema, Dec 1st, 2010).

The focus groups enabled a 'two-way' form of communication, where the catadore/as initiated the conversations, and in one case provided a more accurate picture of the process at the cooperative. During the focus group in Riberão Pires for example, Joana, a catadora from Cooperpires, highlighted that the cooperative actually separates between 30-35 tonnes per month, which is a significant amount more than the perceived 15 tonnes that the government had indicated. This discussion was valuable in that it made a clear distinction between what the government had initially assumed, and was indicated as one of the reasons why they could not more fully support the cooperative, given the small amount of material processed compared to other, more established waste management companies. The discussion then flowed into what some of the main barriers are for expanding production and meeting higher targets. Joana, the representative from Cooperpires, explained that a lot of material does not come clean and has to be discarded, producing a huge discrepancy between the amount collected and processed.

Another example where communication was strengthened was in the city of Diadema, where the municipal government revealed significant budget restraints for

expanding the support for collective waste collection with recycling cooperatives.

During the focus group meeting, it was suggested by the government representatives that the video be used to place pressure at the state level to increase the budget in this area of the sector.

In all three case studies, the governments all suggested the use of the videos as tools for communicating with other government departments, the business sector, and for public educational programs. Overall, the government responses to the videos were positive and sympathetic, despite some of the challenges associated with political agendas and bureaucratic ties (*i.e. budget constraints*). In each case, there was genuine interest in working with the cooperatives, and to strengthen their participation and capacity in recycling services. Noe, a government representative from Diadema, highlights the importance of strengthening dialogue with cooperatives, and recognizes the process is a ‘two-way’ negotiation.

"...it can always improve, I think this is an ongoing process of improving dialogue. There is an issue there that is the two sides; there is always a two-way in this process, the public manager and also the person who is representing the cooperative or association. This is a permanent process of dialogue. Of a common goal, on one side the public management is in charge of the waste, which is important to the city, a metropolitan area ... and on the other side it is the effectiveness and establishment of these collectives".

5.7 Towards an inclusive approach to waste management

Increasing complexity, costs and coordination of waste management has necessitated multi-stakeholder involvement at every stage of the waste stream – calling for an integrated approach (Gutberlet, 2010). This reflects the need to approach solid waste in a comprehensive manner with careful selection and sustained application of appropriate technology, working conditions, and establishment of a ‘social license’ between the communities and designated waste management authorities (most

commonly local government) (Hoornweg and Bhada-Tata, 2012). An integrated system considers how to prevent, recycle and manage solid waste in ways that most effectively protect human health and the environment.

Gutberlet (2010) goes on to describe a more socially ‘inclusive’ approach described as resource recovery with reuse and recycling practices that involve organized and empowered recycling co-ops supported by public policies, embedded in solidarity economy and targeting social equity and environmental sustainability. This model of inclusive waste management is well illustrated in the ‘*Participatory Sustainable Waste Management*’ project (www.uvic.pswm.ca), a multi-year initiative with recycling cooperative and local governments in São Paulo. This approach aims to tackle socio-economic vulnerability, reduce waste management costs, promote greater resource efficiency, build social cohesion and foster community – all of which requires an inter-secretarial and interdisciplinary urban planning and development approach.

Eversole (2010) also calls for the integration of local knowledge in planning, in which communities know the particular constraints, capabilities and appropriate ways to suggest change, of which outsiders seldom have. This knowledge is acquired from the communities lived experiences and ability to understand the nature of connections and interrelationships compared to practitioners working within particular silos of expertise. It is therefore essential to develop tools for communities themselves to be the bridge and driving force in their own development. PV and other forms of participatory arts-based methodologies are well aligned to enable creative spaces for this engagement, particularly due to the large inclusion and direct representation of the community.

The focus group discussion brought to light the importance of an integrated and inclusive model and provided an opportunity for the government and catadore/as to discuss the *why* and *how* of enabling policies for this support. It is increasingly being recognized that social, economic and environmental challenges are inextricably intertwined, and need to be addressed in a holistic multidimensional perspective, particularly within the context of public policy and planning. Integrated programs provide an opportunity for shared learning processes, where the government can also learn about poverty reduction through social economy practices. Noe, from the Department of Economic Development in Diadema, stressed that *“the departments need to be integrated, for example, the secretary of the environment that is responsible for the selective collection, but also needs to be with welfare, economic development, etc....So suddenly this video helps one approach to show the departments who are away”*. Here, the video can be used long after the ‘research’ is conducted, representing the community to multiple audiences and in varying contexts. This is a valuable, and perhaps underestimated, use of participatory videos, where the ‘*action*’ component of the project is dynamic over time and space. Ricardo, another government representative from Diadema, highlighted the importance of integrative practices during the focus group:

“The department of social welfare has to be together in this process. I will speak in the specific case of Diadema, which has a term partnership, I think that this term gives legitimacy and makes room for other offices, while we're talking with the secretary of health, we want them to come with knowledge, not only with the supervision, but to work on this issue of health and mainly talk with them about the developments of the recycling industry. These contracts are already in partnership, it gives legitimacy to dialogue with other departments.”

As a capacity-building activity of the PSWM project, the participants, including local government representatives, visited the city of Londrina, to see an inclusive model

of waste management. This was an important discussion that later came up in the focus group in Diadema, as highlighted by Ricardo. *"It was important our visit in Londrina because we saw a model. From this experience we will come back and sit down with the program managers, and even with the cooperative and say that we will resume door-to-door... Now, with the door-to-door you raise environmental education and this justifies the program, and from this experience we will resume in Diadema, we are more willing to reach the homes in the near future to achieve 100% collecting door-to-door."* It is clear from the discussion with recyclers, government and the literature that inter-sectorial approaches are needed for economic and resource planning.

Lack of communication between agencies, complex structures, overly bureaucratic procedures, and inefficiencies can be major institutional barriers (Gutberlet, 2008b). There needs to be enabling structures in place that can support breaking away from siloed approaches, and key-stakeholders need to be engaged for appropriate and effective policies that can support integrated solutions for waste management. In addition to the integration of multiple departments, there needs to be increased decentralization of decision-making to local levels of government. This will enable greater power at the local level, with active engagement of local stakeholders, co-creating solutions and enabling more effective forms of democracy.

Unfortunately, the new government in Diadema (*since conducting this research in 2010*) is not as committed and engaged with these models of inclusive recycling initiatives, and the door-door program currently faces vulnerability. This illustrates a good example of the negative impacts that arise with government discontinuity and the uphill struggle of this community without permanent forms of democratic and

participatory engagement.

5.8 Remuneration for catadore/as

The issue of remuneration was a common subject in each of the videos, and throughout the focus group discussions. Remuneration refers to paying the recyclers for their service, which is still rare in most municipalities throughout Brazil, and elsewhere in the world. Diadema, one of the participating municipalities, is a particularly important case as it was the first municipality in the country to pay the catadore/as for the volume of material collected²². In 2006, a partnership memorandum with *Pacto Ambiental*, a civil society organization, was signed to remunerate the recyclers for the material diverted from the landfill. Diadema generates approximately 416 tons/day of solid waste. Approximately 120 tons/month are recovered with door-to-door and business collection, representing a recovery rate of 3.4%. The recyclers receive 59.94 R\$/ton (US \$37.35), which translates into approximately 100R\$/person/month. The average monthly remuneration in 2010 was: 479R\$/person. Remuneration for resource recovery and landfill diversion is a significant step in recognizing the environmental service catadores/as provide.

Despite this successful model in Diadema, one of the case studies in this research, few municipalities pay recyclers for this service. During the focus group in Riberão Pires, this was a hot topic of conversation, where Joana, leader of Cooprepipes, highlighted the urgent need for support in this area. At the moment, members of Cooprepipes only get paid by tonnage of material collected and not by the hours they

²² Diadema website: <http://www.diadema.sp.gov.br/municipio/governo/94-secretaria-do-meio-ambiente/2170-programa-vida-limpa-de-coleta-seletiva.html?sec=1>

work, making it nearly impossible to earn a decent, let alone an honorable living.

It was through the discussions that the government revealed Cooperpires still did not have the necessary structure (infrastructure, equipment etc.) to be in agreement with the city for remuneration. The government here recognizes the difficulties in getting to that capacity, and “*want to move forward in this conversation and make payments over time*”(Eliete, government representative from Riberão Pires, 2010). Indeed, this ‘catch 22’ is a significant hindrance in the inclusion of recycling cooperatives in waste management programs. Cooperatives need the start up support and capacity building to be able to compete in a commercial market, despite policies that support the solidarity economy.

Within 12 months of this project, Cooperpires had been given significant support from the local government, in way of toilet facilities (something that had been years in the waiting), and support for improved infrastructure including a truck, and equipment. It is difficult to measure the direct impact of the video on these outcomes, however it is clearly an accumulated effort in the larger capacity building goals of the cooperative.

5.9 Waste for Energy not an option!

‘Waste for energy’ schemes have become a popular management trend throughout the world. Increasingly, governments are turning to this expensive technology as a strategy to eliminate the massive burden of increasing waste, and as an attractive source of energy to meet the rising demand. Unfortunately, this waste management option does not take into consideration options for resource recovery, reuse, recycling and other promotions of waste reduction. Gutberlet (2011) highlights serious alerts to this

trend, particularly for the recycling sector. *“Solid waste incineration is propagated by business and the media as an efficient management solution...yet, the environmental and social dimensions of this technological approach to waste often remain unconsidered. Social and environmental injustice may arise from locating these technologies and from displacing the workers who already make a living through resource recovery. Deliberating authorities often overlook the wider implications from deviating recyclable materials away from the recycling sector.”* (p.224). Her work, and other’s (e.g. MNCR, 2010), raise serious caution to not only the environmental impacts (i.e. loss of resources, emissions, fueling consumptive lifestyles), but significance threat to the recycling sector, many of whom depend solely on this activity for their survival.

Currently, there are numerous waste incinerator proposals in Brazil, and the impetus for social movements organized by the recycling sector, not only in Brazil but worldwide. The Global Alliance for Incinerator Alternatives (GAIA) represents a worldwide alliance of more than 650 grassroots groups, NGO’s, and individuals in over 90 countries, working against incineration. In São Paulo, and other parts of Brazil, the MNCR and associated cooperatives have been instrumental in forming a strong social movement against this technology. Armando, leader of Coopercata in Maua, stressed during the focus group:

“And now there is a big challenge for the national movement of pickers, it’s incineration. I say I’ll make this very clear and hopefully it arrives in the ears of those who need to hear you know? We will fight against incineration... which is founded on the working class and a mayor who was security minister and former president of the union of the ABC. Then surely, the national movement of collectors, the Brazil-Canada project, and other actors involved will bring society to the discussion”.

Recycling cooperatives from Sao Bernardo do Campo were involved in the production of a PV and had planned to be involved in the focus group discussions with their local government. Unfortunately, due to a serious lack of support, we could not organize a meeting. It is no doubt that in this city, a very strong lobby was at that time fighting for the approval of a waste incinerator. Over the course of a year, and during this research, there had been numerous social movements forming here and in other parts of Brazil, fighting against incineration. Members of the PSWM project and the MNCR were key in this organization. Unfortunately, after many attempts to meet with the government, there was no support or even slight display of interest in discussing this decision with the recyclers. This goes to show that even with an ‘engaged’ and empowered community, without the support from local government in creating spaces for participatory forms of planning, the power remains in the hands of the elite.

5.10 **Environmental education**

It was made very clear in the videos, focus groups and interviews how important environmental education is for inclusive and integrated waste management. No doubt, societal awareness of waste issues and strategies for waste reduction practices are clearly a priority in most municipal waste programs. PSWM models go beyond simply informing the public by involving them in the process of selective collection, and engaging with their local catadores/as. Gutberlet (2008) highlights that “*door-to-door selective waste collection systems makes households co-responsible in separating recyclable materials. There is potential for dialogue between recyclers and household members and education about minimizing waste and responsible consumption can take place.*” Some of the cooperatives participating in this project (i.e. Cooperpires,

Riberão Pires) for example receive high levels of rejected materials due to contamination, as a result of low awareness among the population of the municipalities. Gutberlet and Takahashi (2007) note that when there is interaction between the recyclers and the residents, material comes cleaner and there is less rejection at the cooperative, resulting in higher recycling rates and income for the cooperatives. The videos are powerful tools in showing the stories of the catadores/as, hearing their voices and seeing their day-day realities. Sensitizing the public about waste reduction, inclusive recycling programs and of catadores/as important role in that process is of paramount importance for tackling environmental threats and in alleviating poverty and social exclusion.

“And the process is educational, specifically for the residential population who wants to get rid of waste, they see the image of that which is a distant place, they do not see that this could be reused to generate income, and that it is the survival of many people. So I can see the video as much richer in the process because it shows several lines, it shows that sometimes images can not translate into words, and the image shows the person making the effort, pulling the cart, and the sensitivity she has with the resident. ... This shows they are exercising a function, are ordinary people. The video I think it is very rich, with people and an elaborate sequence. ” (Noe)

Organized catadores/as have accumulated local knowledge regarding space and resources in the areas where they live and work. *“They draw from valuable experiences that can also inform waste management and environmental education...involving the population of informal and organized recyclers in the design and implementation of a waste management strategy can benefit the community and the local government” (Gutberlet, 2008b).* Ricardo and Noe, government representatives from Diadema, both highlighted the important use of the videos as educational tools to demonstrate the door-door collection program with catadores/as. *“It is very important to sensitize schools, we had the “Clean Life Go to Schools” program. It was an environmental*

exercise that children learned in schools and needed to bring the material from home. So, the video instrument is important for that, we can work now, when the door-to-door is resumed, in schools, in the neighborhoods. It will be an instrument, another work tool.”

5.11 Power and knowledge in spaces of politics

As Gaventa (2005) writes, there is urgency to work on engagement from ‘*both sides of the equation*’: *that is, to increase both the participation of civil society, and the responsiveness of government institutions*” (p. 27). True public engagement needs to be framed and valued through participatory spaces. This paradigm shift from traditional consultation style approaches to policy and planning requires both specific attention to knowledge co-creation and power sharing with communities. This brings up both the challenges and opportunities in facilitating the common ground between them. Participatory Video provides an innovative methodology and practical tool that can enable community-led engagement, with a clear message and direction that exemplifies the voices of the entire community.

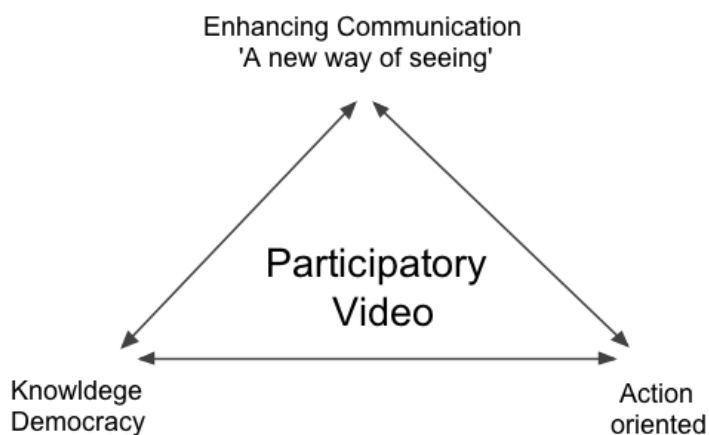


Figure 3. Framework for Participatory Video as a policy tool.

The PVs discussed in this article were made with the intention of facilitating the government in seeing the catadores/as in a new way, recognizing their perspectives and struggles, and acknowledging their knowledge as valid and valuable in spaces of policy and decision-making. Figure 1 provides a useful conceptual framework for understanding PV and other forms of arts-based participatory methodologies (See Clover et al., 2012) as a tool in spaces of politics for enhancing dialogue through new ways of seeing, that are embedded in within the ideas of knowledge democracy with the purpose of community-led action. This project has the intention of strengthening communication and dialogue, and in essence the relationship of power sharing between these two groups. Shifts in power dynamics are not easily achieved and there can be many obstacles in challenging entrenched systems of oppression and authority. The case studies presented in this research offer an example of using PV in spaces of policy discussions, where local knowledge is often absent, is not represented and undervalued. Despite the difficulty in measuring any concrete long-term policy implications as a direct result of the PV project, there is no doubt they have contributed to the larger mobilization strategy within the PSWM project and recyclers movement itself, that have aided in contributing to a more engaged policy environment. Through the PV project, the process of collaboration within the groups, and the catadores/as-led focus groups contributed to strengthening relations, trust and enhanced dialogue between the government and recycling cooperatives. However, as Wheeler (2012) stresses, there needs to be an on-going process of community engagement for significant policy change to exist. Acknowledging and including the various forms of knowledge expressed through participatory processes is a first essential step in creating more democratic forms of governance.

5.12 Discussion

A significant portion of the world's poor urban populations depend on the recycling sector for their livelihoods. As urbanization and the subsequent generation of waste continues to rise, coupled with rising rates of poverty and economic uncertainty, there is an urgent need to recognize the assets, socio-economic and environmental benefits of working with this sector, and improving their working conditions.

Few governments in Brazil, and globally, have embraced an inclusive waste management model, seeing the social and economic benefits that are present in working with recycling cooperatives. This support, however minor, is most urgently needed in infrastructure (triage center, equipment, trucks etc.) and remuneration, where the recyclers are paid for the service they provide. In order to achieve these goals, strategic planning of municipal solid waste management needs to document, understand and build on existing informal and cooperative recycling structures. Developing good communication and governance practices with this sector is key to their success. More importantly, co-creating adequate policy for integrated waste management must be in place. This entails moving across '*institutional and knowledge terrains*' (Eversole, 2010) and creating spaces for communities and organizations to engage in policy. This timely shift is necessary for true democracy to exist.

As demonstrated in this chapter, PV is only one of the elements involved in enabling spaces for deliberative democracy. It is a tool that can help shift perceptions, give voice, and embrace diverse knowledge and representation. This form of participatory collaboration challenges the typical consultation style approaches, and can

have immediate and long-lasting impacts in contributing to more profound shifts in governance.

Some final highlights from this research, and in particular of using PV as a communication tool in public policy, include:

1. The PV project enabled a ‘new way of seeing’ catadore/as, legitimizing their work and validating their capacity to perform selective collection programs;
2. The participatory process enabled multiple voices and representations of the community, by way of facilitating the PV focus groups with government, encouraging a ‘two-way’ engagement within a space of power redistribution;
3. The project helped strengthen relationships between the cooperatives and their local governments, providing a more unified space for knowledge exchange;
4. The project increased government awareness about the communities current struggles including remuneration, and more support in way of infrastructure and capacity-building;
5. The project increased government awareness concerning the catadore/as united voice and movement against *Waste for Energy* technologies and the socio-economic significance of selective waste programs;
6. Revealed the paramount importance of education programs involving the public and recycling cooperatives for selective collection programs to be successful;
and
7. The necessity of an integrated waste management system that works inter-departmentally, with multiple stakeholders, that is embedded in principles of the Solidarity Economy and participatory processes.

Chapter Six: Discussion and Conclusion

6.0. Introduction: PV, citizenship and democracy

This research is fuelled by a desire to make a contribution to the livelihoods of catadore/as in the metropolitan region of São Paulo, and elsewhere. The research both documents the challenges that this community faces, such as poverty, stigmatization, and social exclusion, and highlights the enormous potential present in supporting and building the capacity of recycling cooperatives for both community development and more sustainable and inclusive waste management practices.

In order to do this, engaging with policy-makers is of key importance. In this context, engagement goes well beyond consultation to include elements of power, representation and voice in making real change possible and sustainable. PV has been well documented for decades as a powerful social tool for communities. This research has demonstrated that through self-reflection, determination and developing awareness of ones own interests individuals can draw on their strengths, exercise their citizenship and make action for change.

Despite the ability of individuals to recognize their capacity to make change, without supportive structures in spaces of policy-deliberation – power ‘over’ and top down strategies will still prevail. This top down dimension of power can be seen as the ability to prevent certain people from getting to the decision-making arena in the first place, and of legitimizing some voices and discrediting others. Democratic processes that inspire and embrace citizenship should therefore provide multiple avenues and

spaces for engagement. PV can be an innovative avenue for the inclusion of multiple voices in these arenas, voices of people otherwise left on the margins.

6.1 Key research findings

The main research results point to a number of key principles to consider in the use of Participatory Video for community development, particularly as a tool for empowerment and communication for public policy.

In terms of expanding and challenging the critical discourse of PV, I point to the following considerations for future inquiry in this area:

Critical PV: There is a need for greater understanding of self-reflexivity and representation in using PV for development. In the literature about PV there is little discussion of the genesis of projects, who is facilitating, and the nature of reflexive communication. Understanding the collaborative process of PV, and other methods in PAR, is extremely valuable in understanding where the power lies and in moving towards creating spaces for authentic and reflexive communication. Yang (2012) discusses the idea of ‘reflexive interview’ as a reciprocal and collaborative process, in which “*two speakers enter into a dialogic relationship with each other*” (Pg.111) to co-construct their unique experience and its meaning by listening to each other attentively. This approach, Yang (2012) argues, breaks the division between interviewers and interviewees and the unequal power relationship between them. This is not always simple to do. My work touches on these ideas of reflexivity within the use of PV and highlights the importance of prompting participants to revisit their experiences (*from watching themselves through the lens*) in relation to their situation, their reality, their

beliefs and assumptions, and place themselves in a space of reflexive communication with their audience (*i.e government or decision-makers*). In the context of this research, power structures were destabilized in two distinct ways: 1) by having the participants at the centre of the film-making process they have co-created the research and are more inclined to take ownership of the process and results, and 2) by the participants facilitating the interviews with government, they are exercising their authority and taking action in influencing decision that affect them – and essentially enacting some level of accountability of their government to respond in a meaningful way.

Identifying Power: It is important for participants to identify and understand issues of power, vulnerability, and ownership of knowledge that underlie social structures. This might not be evident when working with communities in the planning stage of the PV project, and in fact might not even surface until an audience is chosen – which sometimes is only decided once the video is complete. Making room for discussions of underlying power in our society can be an empowering process in itself – and lead to a greater sense of citizenship. This awareness can further prepare, create greater reflexivity and strengthen a group when walking into spaces of politics – with the intent for change. Chapman (2005) elaborates on his discussion in what is needed for citizen-led engagement in policy: *“if human rights are to have real meaning, they must be linked to public participation. And participation must be preceded by empowerment of the people. A sense of requirement requires a sense of dignity, self worth and the ability to ask questions. The sense of empowerment with a sense of legal entitlements and constitutional guarantees gives rise to political consciousness based on rights. A process of political empowerment and a sense of rights empower citizens to participate*

in the public sphere” (p.15). It is imperative, and highlighted in the case studies in this research, that transformative change in the decision-making process needs to be driven by the participants themselves – by showing their videos and driving the discussions. Only then will political consciousness, as Chapman (2005) writes, truly take form and manifest in social change.

PV is an effective tool for individual, community and organizational empowerment, and can contribute to:

Personal Transformation: This research points to clear moments during the process of the PV project where participants experienced personal transformation. Personal transformation in this context can be described as an ingredient of empowerment by realizing the agency within to make change, but I believe goes beyond this construct to include the desire to continue down the path of personal power and change. In some ways it can be visualized as an upward cycle, where an individual experiencing personal growth will most likely want to continue to grow and seek out ways to do so. This research points to characteristics or traits of transformation that can lead to empowerment such as self-confidence, self-esteem and self-efficacy, all through the process of participatory collaboration and the action–reflection cycle that PV inspires.

Building a Knowledge Democracy: At the recent Global University Network for Innovation (GUNi) conference in May 2013, the idea of fundamentally challenging the hierarchy of knowledge was central. This is echoed in a speech given by Dr. Budd Hall (2013) at the 100th Anniversary of the Association of Commonwealth Universities in London last April 2013. Here, he presented a number of stories from around the world

in which knowledge was central, and fundamentally linked to social, political, cultural and sustainable changes. Dr. Hall calls for an “*opening outwards of our comfortable assumptions about whose knowledge counts and what the relationship between knowledge and life might be*” (p.10). Hall, and others (*including John Gaventa, Rajesh Tandon, Christina Escrigas etc*) are spearheading the development of this discourse and having an impact across the world in influencing policy for institutional structures that embrace this philosophy, and taking action to deepen democracy and ways of collaborating. PV and other arts-based methodologies within CBR are well aligned to evolve within this emerging discourse and praxis, as tools to deepen our understanding of the value and richness in this ecology of knowledge.

PV is an effective and innovative communication tool for informing public policy that can shift power dynamics for greater inclusivity of community voices. The main findings, in the context of enhancing communication between recycling cooperatives and local governments for inclusive waste management programs include:

Strong Partnerships: The importance of building strong partnerships between the government and the recyclers is central in this research. These partnerships need to be built on trust and mutual respect and embrace reflective communication (Hall & Tremblay, 2012). As Gaventa (2005) writes, there is an urgency to work on engagement from ‘*both sides of the equation*’: *that is, to increase both the participation of civil society, and the responsiveness of government institutions*” (p. 27). Some major challenges that became evident in this research, and I assume are common in many political struggles, is both the accountability of government to uphold their commitment for public engagement and the action required for consensual change and

the vulnerability of changing government support. In the case of Diadema, for example, years of developing strong partnerships between the cooperatives and local government for inclusive waste management models were lost with a change of government. This can be defeating while at the same time fuel the fire for social movements – something we are seeing in strength and numbers around the world. So, how do we create sustainable and long-lasting structures that support continued collaboration and engagement between government and communities within the uncertainty of democratic change? This is I imagine not a new question but one worthy of attention as we move towards greater model of citizen engagement – with government and academia.

Education is key: The necessary expansion of environmental education programs valuing principles of Participatory Sustainable Waste Management is key. As highlighted in the introduction and throughout this thesis, there are a significant number of the world's poor and excluded populations that work in this sector, facing precarious working and living conditions, stigmatization and harassment. The participants in this research (*and others working to advance these inclusive models*) envision a different future! There is enormous potential, both for livelihood enhancement and environmental sustainability, to value this population as environmental agents, working through models of cooperation and educating society on how to reduce our consumption and revalue resources.

Supportive Policy: Without supportive policies and structures to support models of inclusive waste management, this population and sector will remain vulnerable and on the margins. I present in Chapter five (*public policy and PV*) multiple ways PV can enable spaces for deliberative democracy by giving voice to people otherwise excluded,

shifting power dynamics, and embracing diverse knowledge and representation. I also demonstrate that this model of citizen engagement can have immediate and long-lasting impacts in contributing to more profound shifts in governance. This research, being action oriented, is geared towards having policy impact, and changing communication dynamics for participatory decision-making. In the context of this work, some case studies revealed immense potential in this area, and some very subtle. In looking towards future research in the area of policy impact and PV, I would inquire into new ways of measuring this impact (*short term and long term*), and the genesis of what is needed to make real policy change. It is still unclear how much weight community knowledge has in terms of shifting entrenched policies, and what longer term changes result from these interactions. As Wheeler (2012) highlights, in her research on citizen engaged policy change, “*a single space for debate is not enough, there needs to be ongoing pressure on different fronts*” (p. 376). I echo Wheeler, in that although the PV process can be the beginning or impetus in stimulating dialogue, it is insufficient for policy changes without institutional change of the deliberation process.

6.2 Theoretical Contributions

This research is grounded and informed through theories of Social Economy, Political Ecology, Community-based Research and Feminism. Given the complex and dynamic state of human society and our interaction with each other and the natural environment, it is only fitting that I explore the multi-dimensional nature of my research through a combination of these rich lenses. It is through a social geography

lens, informed by these theories that this collaborative research has contributed to greater understanding in the following ways:

'Beyond' a Social Economy: The movement towards a Social and Solidarity Economy is strong and vibrant across the world. There is substantial evidence pointing to the Social Economy as a way to “*address increasing inequalities of social health economic and ecological conditions, to provide alternative solutions to the perceived failures of neo-liberal dominated globalization and to address the weakening social capital of communities*” (Tremblay, 2012; p.15). Networks are leading the way in this movement, such as the *Brazilian Solidarity Economy Forum (FBES)*, which brings together thousands of cooperatives to build mutual support systems, facilitate exchanges, create solidarity enterprise programs and shape public policy. Networks have an important role to play in the future of the Social Economy, and in creating a system of and strategy for “*socio-economic relations centered on the human and its need to evolve, develop and fulfill its potentials, its work, knowledge and creativity; planned and managed democratically, and aimed at generating satisfaction of its rights and aspirations, including the right to a dignified life, a healthy environment and enabling conditions for the fulfillments of ones potential*” (Arruda, 2008; p.16). Countries such as Brazil, and others in Latin America, are paving the way towards creating a supportive environment for these attributes to flourish. It is within this space that communities are able to respond to local challenges and develop innovative actions, while integrating values of solidarity and social justice. Recycling cooperatives present one example of how this sector are responding to social and environmental struggle and they need to be supported.

Political Ecology: This research is set within the context of strengthening inclusive and integrative waste management models, and is motivated by the urgency to reduce consumption, and rethink our understanding of waste. The idea of waste as a resource is not new, and if we look at how our grandparents valued their possessions, and even more so how products were manufactures to last – we have truly been misguided in this dominant disposable culture. Furthermore with today’s challenge of *waste to energy* in waste incineration plants, the environmental and social justice perspectives have regained importance, particularly in the South-North context (Gutberlet, 2011). A political ecology perspective helps us understand the relationship between economic, social and political factors of environmental issues. Waste management is complex and requires a multidisciplinary lens to truly understand how to create equitable and equal distribution of resources within a changing (*and vulnerable*) environment.

Community-based Research – is there any other way? We are living in precarious times – in almost all spheres of human and natural life. We, as a global community, need to be looking for new ways of organizing, re-shaping and re-thinking how to collaborate so that we can not only respond to the present global crisis but also envision and plan for a better future. Community-based Research is an approach that can truly transform the way we (*local and global*) move towards greater social equity, human compassion and environmental flourishing. The way we apply and value CBR, in terms of theory and praxis, is extremely important as we move forward towards finding solutions. CBR has to be able to respond to global challenges where projects are linked to the changing uncertainty of our time. This requires working locally, with

communities at the heart of the process, driving the process and owning the knowledge and action for change. In addition to this valuing of knowledge, there needs to be greater collective impact and knowledge mobilization at a global scale to share effective experiences and the *models of tomorrow*.

6.3 Transforming the world: one frame at a time

Empowerment cannot be bestowed by a third party. Development agencies and practitioners are certainly capable of creating favourable conditions for empowerment, but it is the individual or collective group that make it happen. It is through the process of self-discovery, reflection and inquiry that realizing ones potential for change happens.

It is important to note the dynamic nature of empowerment, that it is an ongoing process and not an end state. Individuals become empowerment and disempowered as a relation to others, and more importantly to themselves. It is also important to note the dynamic nature of using PV and the changing self-reflection and impact it can have at different times and within different spaces. It is evident that the word empowerment has gained popularity as a major buzz-word in development for interventions that aim for social and economic improvements. Despite these well-intentioned outcomes, these approaches rarely challenge existing power structures that are necessary for creating bottom-up development. In addition, although empowerment is defined as a ‘key ingredient to development’, there have been limited methods in measuring and tracking changes in levels of empowerment. Individuals and communities have the capacity to make real change when they are genuinely engaged in the development process, and policy decisions. In order to do this, there first needs to be an understanding of what

and where power already exists, what empowerment means to those involved, and how can their voices be heard and represented. In this research, I explore the powerful and transformational outcomes of using PV as an avenue to transform and challenge power dynamics.

Despite the empowering impacts of the PV process for individual and collective transformation, without supportive and ‘open’ government, where does the power really lie? The transformation of democratic and citizen-led engagement needs to be met from both ends of the spectrum, meaning there needs to be genuine interest at the government level for an understanding and appreciation for these models of development.

6.4 Looking Ahead

As technology, social organization and distribution platforms evolve, so too will the capacity and adaptability for communities to be engaged in processes of public engagement, decision-making, advocacy and knowledge sharing. PAR, and PV in particular, provide an enriching avenue to explore new ways of communicating and collaborating for positive change. The process is dynamic and requires an on-going dedication, throughout the research process and even after the research is complete. It is my intention, and I believe imperative to the integrity of this methodology, to return to Brazil this fall, present my research findings to the participants and have this opportunity as a platform for exploring future research together. It is also my plan, and something that had been discussed during the research, to add the PVs to the PSWM

website and with the help of a blog, continue dissemination among our networks in Brazil and globally.

What does the future of PV look like? Where do we go from here? I think there is so much opportunity for self-discovery and realizing ones fullest potential in life. This will look different for every person, and might require different and/or multiple tools. We currently have at our disposal exciting tools in CBR that can offer creative outlets for self-expression, and this will only continue to grow as new forms of technology become available. In looking towards the future, I imagine the accessibility of tools such as video (*but also theatre, photo, poetry etc.*) will create a globally connected community of people working together to change their lives and the lives of others. This might sound utopian but that is the quality of excitement and wonder that working with the arts and communication creates, as experienced by the participants (*and myself*) in this project. These tools create hope, and it the responsibility of all working in this field of research to nurture that – and become aware of how powerful that can be.

Future research in this area could explore in which ways CBR tools, such as PV, transform often unexplored aspects of people's lives such as their home relationships, capacity for creating connections, networking, and strengthened confidence in communication and leadership. Although the research in this area touches on these ideas, and surely mine does, I think it would be fascinating to explore personal development using different frameworks for development. For example, perhaps gain a greater understanding of how these tools create and/or inspire social capital, illicit a global awareness, collective conscious, or even building a social movement (*i.e.*

towards a social economy). We are at an exciting time in both academia and civil society to be discovering the full capacity and innovation of collaborative partnerships and collective impact.

It is my intention that the research outcomes of this collective work contribute to enriching processes for working with PV, and enable a critical reflection on the ethical elements present in this type of engagement. I also hope the outcomes contribute to the collective movement towards greater inclusivity in waste management programs in Brazil and around the world, and to see the socio-economic and environmental value of working in cooperation with community recycling cooperatives. The PV's produced provide an important snap shot of immense opportunity in regards to methods of participatory enquiry and in ways we can think about collaborative partnerships and participation. As we allow these partnerships to develop through collaboration with new technologies and growing networks in civil society, I have confidence that new forms of governance that can embrace participation and varied knowledge can flourish.

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Appendix A: Letter of Informed Consent

Title of Research Project:

Informal Recycling: Socio-economic and environmental perspectives.

This is to state that you agree to participate in a program of research for a graduate thesis being conducted by Crystal Tremblay of the Geography Department of the University of Victoria. The researcher may be contacted by email at crystal@uvic.ca, or by phone at the University of Victoria at (250)721-7345 (office).

Supervisor: Dr. Jutta Gutberlet, Department of Geography, University of Victoria, BC.
Contact Information: Email: juttag@office.geog.uvic.ca; Phone: (250)472-4537

There is no toll-free number available at this time.

Purpose:

You have been informed that the purpose of this research is to collect information on the economic significance and environmental contribution of informal recycling through the activity of “binning”.

Procedures:

This research will be conducted at the United We Can bottle depot in Vancouver’s Downtown Eastside. Your participation in this research is voluntary. You are encouraged to participate in an in-depth interview concerning your average income and the amount and type of materials collected through “binning”. The interview will take between 30-50 minutes to complete and you will be asked to sign this consent form. All information collected in this research will be confidential.

- A copy of this consent form will be left with you and the researcher.
- The researcher is available to answer any of your questions concerning the procedures and research questions.
- You may verify the ethical approval of this study, or raise any concerns you may have, by contacting the Associate Vice-President Research at (250) 472-4545 or ovprhe@uvic.ca.

Conditions for Participating:

- You understand that you are free to withdraw your consent and discontinue your participation at anytime without negative consequences and the data will not be used in the research.

- You understand that your participation in this study is confidential (i.e. the researcher will know, but will not disclose your identity).
- You understand that the data from this study may be published.
- You understand the purpose of this study and know that there is no hidden motive of which you have not been informed.

Benefits/Risks:

- There are no possible or likely risks involved in participating in this research.

Compensation:

- Your participation in this research is voluntary. There is no payment, compensation or contribution for your participation.

Access to Information and Confidentiality/Publication of Results:

- Only the researcher will have access to the research data.
- Only the researcher will know the identity of the participants and signed consent forms will be kept in a secure location until no longer needed, at which time they will be destroyed.
- Research data will be kept in a locked cabinet at the researcher's residence.
- The research data will be used for analysis within a Masters thesis.
- The researcher intends to publish researcher findings and will maintain participant confidentiality by using pseudonyms.
- Dissemination of the research will include presentations at scholarly meetings, thesis presentation, published article, chapter or book.

Access to Research:

- A summary of the final thesis will be available at the United We Can bottle depot for you to view.
- Contact information is provided for you on this form.

YOU HAVE CAREFULLY READ THE ABOVE AND UNDERSTAND THIS AGREEMENT. YOU FREELY CONSENT AND VOLUNTARILY AGREE TO PARTICIPATE IN THIS RESEARCH.

Appendix B: In-Depth Interview Questions

Entrevistas do grupo do pós-focal com representantes das cooperativas

Vídeo participativo como uma ferramenta

1. Você sentiu que seu conhecimento e suas idéias foram expressadas no vídeo, durante nosso encontro?
2. Você achou que este vídeo é uma ferramenta eficaz para se comunicar? De que maneiras?
3. Será que o vídeo forneceu/ilustrou informações que seriam difíceis ou impossíveis de se comunicar sem este auxílio visual?
4. Quais foram alguns dos desafios que você encontrou neste projeto?
5. Quais são algumas das vantagens em utilizar a comunicação visual para compartilhar sua história?
6. Você estaria interessado em mostrar seu vídeo a outros municípios para apoiar a coleta seletiva de resíduos sólidos?
7. Qual foi sua parte favorita do projeto de pesquisa?

Empoderamento psicológico

8. Como você se sente ao compartilhar seu vídeo com as lideranças políticas em seu município?
9. Com esta experiência você sente ter mais capacidade fazer mudanças políticas em sua comunidade?
10. Esta experiência criou um senso de autonomia mais forte com seu grupo? Com outros grupos?
11. Esta experiência te motivou de alguma maneira? Explique, por favor?
12. Você descobriu algo novo sobre si mesmo/a, seu lugar e seu papel na comunidade, na sociedade? (reflexão crítica)
13. Você sente que é parte de uma comunidade? Este projeto reforçou novas formas de confiança e de reciprocidade entre seu grupo ou comunidade? Você pode dar um exemplo?

14. Você sente que você tem algum grau de controle sobre as decisões políticas em sua comunidade?
15. Você tem alguma oportunidade de influenciar aqueles que tem o controle?
16. Existe uma oportunidade para você participar e, eventualmente, informar os outros e / ou aumentar conscientização sobre questões ou preocupações que não são actualmente refletida na discussão?

Empoderamento Organizacional

14. Esta experiência lhe forneceu alguma habilidade nova da liderança? Explique por favor.
15. Você acha que este projeto gera empoderamento para seu grupo? Se sim, de que maneira?

A comunidade

1. Este projeto contribuiu para visualizar o seu trabalho?
2. Empoderamento econômico? Sua situação econômica pode ser melhorada com um projeto de vídeo? Você já sentiu alguma melhora desde o uso do vídeo participativo
3. Como você descreverá suas condições sócio-econômicas e políticas?

Appendix C: Focus Group Questions

Perguntas para entrevista (grupo pré-focal) - representante do governo municipal

Cooperativas de Reciclagem:

1. Qual é o seu conhecimento sobre cooperativas de reciclagem em seu município? Avalie de 1 a 10, sendo, 1 – nenhum e 10 – significativo.
2. Qual a sua percepção sobre os catadores? Avalie de 1 a 10, sendo, 1 – não favorável e 10 – muito favorável.
3. Quais você percebe serem algumas das barreiras para as cooperativas de reciclagem em seu município?
4. Você conhece outros municípios que estão integrando cooperativas em programas de gestão de resíduos sólidos? (Londrina, Diadema)
5. Você valoriza a integração de cooperativas de reciclagem em programas formais da gestão de resíduos sólidos?
6. Você gostaria de aprender mais sobre os benefícios das cooperativas de reciclagem?

Grupo Focais: Políticas públicas de Coleta Seletiva

1. Qual é a percentagem de residentes que possuem serviços de reciclagem? Será que estes serviços incluem catadores / catadoras?
2. Você tem políticas públicas municipais específicas, que incluem catadores no plano de gestão de resíduos? Que políticas públicas são necessárias para melhorar a minimização de resíduos e programas de reciclagem em seu município?
3. Como pode coleta seletiva ser melhorado e ampliado? O que é necessário?

Vídeo Participativo:

1. O que você aprendeu com a participação nesta reunião? a partir deste vídeo?
2. Sua percepção dos/as catadore/as e/ou das cooperativas de reciclagem mudou? Como?
3. O vídeo foi uma ferramenta eficaz de comunicação durante a nossa reunião? De que

maneira?

4. Agora você estará apoiando mais ou menos a integração da cooperativa de reciclagem em seus programas de resíduos sólidos municipal?
5. Há benefícios para este modelo que agora são mais visíveis ou que não havia percebido antes?
6. Este processo reforçou seu relacionamento com a cooperativa?
7. Você está interessado/a em continuar a trabalhar com a cooperativa?
8. Como você acha que a colaboração entre o governo e as cooperativas de reciclagem pode ser melhorado?

Appendix D: Survey Questions

Questionário: Reforço do diálogo entre Cooperativas Reciclagem e do Governo

A. Informações demográficas

1. Afiliação (governo, catador, catadora): _____
2. Sexo: _____
3. Idade: _____
4. Cidade: _____

B. Ferramenta de comunicação

5. O que você aprendeu a partir deste vídeo?
6. Você acha que este vídeo é uma ferramenta eficaz para a comunicação? Por que?
7. Você acha que este vídeo pode ajudar a fortalecer o diálogo entre os catadores e o governo? Como ?
8. Será que este vídeo muda a sua percepção da importância social e econômica da coleta seletiva? Como?
9. Quais são os três aspectos mais significativos deste vídeo?

Appendix E: Participatory Videos

The four Participatory Videos included in this dissertation are an important component to this research. As they are dynamic and reveal different perceptions, opinions and feelings for different people, and through temporal and spatial scales, they are constantly in a state of action, and continuously causing a process of change – both in theory and praxis.

The videos can be found at the following ULR: www.pswm.uvic.ca

Video Participativo: Experiências de Catadores/as na região metropolitana de São Paulo, Brasil

Esses vídeos são produtos de uma oficina de Vídeo Participativo realizada em 2008 com catadores e catadoras da cidade de São Paulo e região do Grande ABC, participantes do projeto "Gestão Participativa e Sustentável de Resíduos Sólidos" (Projeto Coleta Seletiva Brasil-Canadá), uma parceria entre a Universidade de Victoria, no Canadá e da Faculdade de Educação da Universidade de São Paulo, Brasil, apoiado pela "Canadian International Development Agency" (CIDA). Os quatro vídeos mostram a perspectiva dos catadores e catadoras através dos seus próprios olhos, retratando o seu trabalho nos municípios: Diadema e São Bernardo do Campo, Ribeirão Pires e Mauá, São Paulo - Zona Leste e São Paulo Zonas Sul e Oeste. Este projeto é parte de uma estratégia de formação permanente para ajudar o crescimento das cooperativas de material reciclável. Os vídeos são usados para ajudar a fortalecer o diálogo entre o governo e cooperativas, e para aumentar a conscientização e educação sobre resíduos sólidos e reciclagem para a comunidade em geral.

Para obter maiores informações visite o nosso site:
www.pswm.uvic.ca



Diadema/São Bernardo do Campo



Ribeirão Pires/Mauá



São Paulo zone Leste



São Paulo zone Oeste e Sul

SCORE

Appendix F: List of Participants – *Catadore/as*

Name	Group
André Antunes	Pacto Ambiental
Aparecida Margarete de Souza	Raio de Luz
Claudemir Sebastião	Refazendo
Cristiane Rosa Braga	COOPERCOSE
Edilene B. Conceição	Pacto Ambiental
Eva Maria dos Santos Lau	COOPERPIRES
Guiomar Conceição dos Santos	Sempre Verde
Joana D'arc P Costa	COOPERPIRES
José Lacerda Borges	Pacto Ambiental
Luciana Miguel	COOPERPIRES
Luzia Maria Honorato	COOPERCOSE
Marcus A. Durante	Pacto Ambiental
Maria da Penha Aparecida Cunha Guimarães	COOPERMA
Maria Mônica da Silva	Pacto Ambiental
Marinalva Santos	Raio de Luz
Milena Justino	COOPERMA
Neise Rodrigues	Refazendo
Paulo Renato dos Prazeres	COOPERCRAL
Rosilda Lopes dos Santos	Fênix – Ágape
Rozenir Rodrigues Souza	Pedra Sobre Pedra
Vilma Moura de Souza	Pacto Ambiental
Zilda Félix de S. Barbosa	CRUFFI

Appendix G: Video logs

Fenix zona beste



**Gestão Participativa de Resíduos Sólidos Urbanos e Melhoria na
Qualidade de Vida de Catadores e Catadoras de Materiais Recicláveis**

Planilha de Registro das Filmagens

Nome dos integrantes do grupo: Rosilda Filda, Francisca
Socorro Nildo, Hilton, Eliete, Ana, Jara
Valdeci, Luciano, Argemiro, Ana Mary-claudineia
Eliete

No	Descrição do Clip (Onde, Quando, Quem)	Horário do Começo:	Horário do Fim:	Tempo Total:
1	abertura mostrando a coop com o nome e os parceiros na cooperativa	8:22 hs	8:25	3 minutos
2	Entrevista e/ou a Presidente Francisca contando com ajuda a Fenix na coop. no meio do galpão	8:25 hs	8:39	14 minutos
3	Josenilson falando, e/ou os outros coop. para coleta na Rua, Nildo, Eliete	9: hs	9:08	8 minutos
4	Socorro sendo entrevistada no núcleo núcleo reciclável	11:17hs	11:20	3 minutos
5	Entrevistando a cooperada Valdeci tirando material na mesa	11:15	11:18	3 minutos
6	Entrevistando Ana maria falando da falta de transporte e da coleta	11:20	11:23	3 min
7	Entrevistando Jara Fernandes Ela falando das dificuldades e planejando pet.	11:30	11:33	3 min
8	Rosilda Filmando, mostrando o espaço e falando das dificuldades p/ melhorar a situação precisa transp	11:40	11:42	2 min
9	Rosilda sendo entrevistada falando da importância do vídeo para melhorar nosso trabalho	11:50	11:56	6 min
10	Eliete uma das parceiras, falando da importância do trabalho do educador ambiental	12: hs	12:03	3 min
11	Nel Pres. núcleo ass. Tajubé P4 falando da importância da conscientização retirada de material mostrando Bug	13:25	13:33	8 min
12	Secretaria do núcleo Tajubé que uma das cooperadas falando da parceria da associação/cooperativa	14:00	14:05	5 min

CD #1
1º ed.

Cruffi Zona Oeste

**Gestão Participativa de Resíduos Sólidos Urbanos e Melhoria na
Qualidade de Vida de Catadores e Catadoras de Materiais Recicláveis**

Planilha de Registro das Filmagens

Nome dos integrantes do grupo: Filda Ruben, Ana
Paula, Maria Jose, Senhor Antonio,
Rosilda na cozinha. Cruffi Zona Oeste

No	Descrição do Clip(Onde, Quando, Quem)	Horário do Começo:	Horário do Fim:	Tempo Total:
1	Filda fazendo abertura da cruffi convidando a chegada de uma caixa grande, de material reciclável	12:23	12:30	7 min
2	Os cooperados tirando material Ruben carregando empilhadeira	12:31	12:34	3 min
3	copura da Ana Paula falando da necessidade de falta de transporte	12:00	12:02	2 min
4	Maria Jose umas das fundadoras de antes como ser, e hoje a dificuldade	12:40	12:43	3 min
5	Senhor Antonio tirando material que e o motorista da cruffi só falta o caminhão	12:32	12:40	8 min
6	A saída dos cooperados para coleta, arrastando os berris na rua	12:45	12:55	10 min
7	A chegada nas portas de coleta, reciclagem, explicando que nos está pegando p/ falta de caminhão	12:57	13:03	6 min
8	a volta da coleta a dificuldade dizendo a brada com berris.	13:10	13:15	5 min
9	Dona Filda explica a forma da burocracia do material a falta de apoio do poder público	13:20	13:33	13 min
10	Depoimento de Luis dos elaboradores que doa e tira na cruffi, tem experiência no estado unido	13:35	13:45	10 min
11	Dona Leonor tirando o seu material na cooperativa e falando da importância da reciclagem	14:00	14:05	5 min
12	Além da cooperativa de reciclagem artesanato, tem a escola comunitária	14:20	14:22	2 min

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Appendix H: Table of Video Screenings

Date	Activity	Location	Participants	Research methods/details	# of participants	Government
08-May	PV preparation meeting	Santo Andre	PSWM participants	Present research methodology/feedback, logistics	40	No
11-May	Meeting: Public policies in Sao Paulo	SP	PSWM participants	Attend meeting	40	No
16-May	Unisol presentation in Santana de Paraiba	Santana de Paraiba	Cooperative Avermare; Unisol; PSWM	Presented Gramacho video and Jutta presented on waste and environment. Capacity building workshop.	100	No
08-Jun	Interview with Roberto (MNCR) in Sao Paulo	SP	Roberto, Jutta and I	Interview	3	No
15-Jun	Feedback meeting for SP group in SA	Santo Andre	Luzia, Renato, Solange, Vilma	Focus Group: Watched video and made suggested edits.	5	No
18-Jun	Meeting with Diadema and SBC	Diadema	Prefeitura in Diadema ('incubador')	Focus Group: the biggest barrier at the moment is incineration, no support from government.	12	Yes
June 23-24	CG Meeting in Santo Andre	Santo Andre	PSWM participants	Focus Groups: Discussed common themes in the ABC, each groups situation and what has changed in the last years till now, identify largest problems.	45	Yes (Maua)
24-Jun	Meeting	Santo Andre	SBC/Diadema participnats	Watched Diadema/SBC video with the group: suggested comments and changes	12	No
26-Jun	Seminar Anti incineration	SP Camara	Various groups	Incineration seminar at the Camara Sao Paulo	200	Yes
July	Edit Videos 1-2	Victoria		Edited videos; anti incineration video; sent new video by email for feedback; attempted to skype with Monica (no response)		
August	Edit Videos 3-4	Victoria		Finalized PSWM Newsletter, prepared questionnaire and meetings		
21-Sep	Meeting: Ato in Sao Bernardo MNCR	FSA	PSWM participants, some community members	Discussed planning for anti-incineration Ato.	15	Yes
September 22-23	CG Meeting in Santo Andre	Santo Andre	PSWM participants	Presented research methodology, circulated new questionnaires, and updated videos for viewing. Scheduled meetings with groups.	30-40	Yes
01-Oct	Committee meeting USP	USP	PSWM executive committee	Evaluation CG, planning interviews, logistics ect	8	No
04-Oct	Research preparation meeting	Diadema	Sol, Jutta, Ruth, Luzia	Discussed strategy and methodology for research in Sao Paulo. Other leaders could not come because of to many other commitments, capacity building programs, out of town ect.	5	No
06-Oct	Rede ABC meeting in Diadema	Diadema	Ruth, Fabio, Francesca, Penha, Joana, Kelly, Sol, Noah and Barbara (Diadema government)	Discuss the Rede video and planning. The creator of the PET line was also there. Noah and Barbara came as well.		Yes (Diadema)
07-Oct	Rede ABC Meeting in Diadema	Diadema	Ruth, Jutta, Noah (secretary of economic development), intern with secretary Barbara, 2 reps from Banco Brazil	Presented the PV video and discussed the trip to Londhrina to exchange experiences, show best practice, they will be funding this trip. Organized with Noah to meet on the 25th for the interview with Monica.	8	Yes (Diadema)
08-Oct	Committee meeting USP	USP	PSWM executive committee	Planning for interviews	8	No

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07-Oct	Rede ABC Meeting in Diadema	Diadema	Ruth, Jutta, Noah (secretary of economic development), intern with secretary Barbara, 2 reps from Banco Brazil	Presented the PV video and discussed the trip to Londhrina to exchange experiences, show best practice, they will be funding this trip. Organized with Noah to meet on the 25th for the interview with Monica.	8	Yes (Diadema)
08-Oct	Committee meeting USP	USP	PSWM executive committee	Planning for interviews	8	No

Appendix I: Invitation to Focus Group discussions

FORTALECIMENTO DO DIÁLOGO ENTRE COOPERATIVAS DE RECICLAGEM E DO GOVERNO

PREZADOS COLEGAS,

Gostaríamos de convidar você para participar de um projeto de pesquisa facilitado pelo projeto “Gestão participativa e sustentável de resíduos sólidos” (Projeto Brasil-Canadá).

O objetivo desta pesquisa específica é de contribuir na construção do diálogo entre o governo e as cooperativas de reciclagem. Em particular, este estudo tenta avaliar o uso do vídeo participativo como uma ferramenta de comunicação para facilitar a construção de política pública. Esta pesquisa é parte de uma estratégia de capacitação permanente para ajudar ao crescimento das cooperativas de reciclagem no ABC e em algumas subprefeituras de São Paulo, usando os vídeos que foram produzidos com cooperativas de reciclagem em 2008. Os procedimentos para esta pesquisa incluem: um pequeno questionário, uma discussão de grupo focal e entrevistas individuais.

Esta pesquisa está sendo realizada por Crystal Tremblay, doutoranda da Universidade de Victoria, no Canadá, e está sendo orientada pela Dra. Jutta Gutberlet, diretora geral do projeto Projeto Brasil-Canadá e professora da Universidade de Victoria, atualmente professora visitante da USP. Agradecemos sinceramente à sua colaboração nesta pesquisa e ficamos com a esperança do seu apoio.

Projeto Brasil-Canadá
<http://pswm.uvic.ca/en/>

