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**RECYCLING FROM THE MARGINS:
Informal Recycling Networks in St. John's as Social Interactions**

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April 2012



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“I have come to realize there are so many stories out there, they are mostly different, many of them are on welfare, many of them are not, generally they are fiercely independent, they love their independence, they love being entrepreneurs, they don’t want to be conformed to any part of a system.”

(Interview with Bob Ross, Consultant with the Department of Engineering DTES Revitalization Project, City of Vancouver, August 9th, 2005).

-- (Tremblay 2007, 51)

Executive Summary

This study identifies social interactions and multiple value attachments as key motivators in participation in informal recycling networks in St. John's. Social interactions are defined as opportunities to engage in positive interactions within a network whose value outcomes and personal outcomes for participants are multiple, and which offer multiple value attachment motivations. In the future, formally linking professional recycling with social justice values as well as environmental is recommended.

For professional recyclers, identified value attachments are: Productivity, Community Interaction, Financial Incentive, Personal Freedom and Environmental Stewardship. For customers identified value attachments are: Environmental Stewardship, Hard Work and Inclusive Community.

The multiplicity of values and outcomes ensure the long-term stability of a network through time and through alteration of network conditions. Because the network does not rely upon one motivation and/or value system, its existence is not threatened when one of these motivations and/or values is weakened or absent. This is particularly relevant in light of recycling efficiency critiques which weaken traditional recycling motivations (Ackerman 1997).

It appears that the professional recyclers in St. John's work within a different context than that of the British Columbian and American recyclers or binners studied in the research highlighted in this report. Because of this, waste management policy makers in St. John's have an opportunity to create unique programs and responses which emerge from the particular everyday contexts within which the informal recycling networks exist in the city. Keeping in mind differences between St. John's professional recycling networks and those studied previously, future policy initiatives can re-imagine the role of recycling in St. John's.

Policy Implications

- Campaigns which increase the profile of professional recyclers while linking it to multiple values and outcomes. Specific suggestions are listed in Discussion and Policy Implications section of the report.
- Cooperate with professional recyclers (SIFE program led by Jon King, Bottlepreneur may be a venue for this) to identify St. John's based strategies and opportunities for inclusive waste management policies.
- Establish coalitions with St. John's organizations involved in inclusivity, poverty and homelessness. Such diverse coalitions could result in the establishment of waste management programs (and other programs) with multiple motivational factors and outcome objectives.

- Policy makers should consider how future programs can target multiple value attachments (as found relevant). These value attachments have implications for all multiple target populations, including those not currently participating in informal recycling networks.

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Introduction

As a child, my sisters, cousins and I spent one summer combing the ditches outside the city in which we lived, sometimes walking for hours beyond the city limits along gravel roads, in search of bottles to redeem at the depot. A few days of walking would keep us in candy and gum for a week. During the rest of the year, the collection of recycling was limited to the occasional organized drive, going door-to-door accompanied by an adult with a car to raise money for one group or another. Countless times I have witnessed someone, usually a man, rifling through a public garbage bin to pull out a few discarded bottles. But it wasn't until I moved to Newfoundland and Labrador that a man pushing a rusty, old shopping cart, dressed in ill-fitting, stained pants knocked on my door and asked where the previous tenant was and, since she no longer lived there, did I have any bottles or cans to give to him? I was on his 'trap-line' and the woman who used to live in our house was a much better customer than I was going to be because she drank much more and held more parties in one month than I did in six. The man at the door spoke in quick bursts that were hard to understand and I assumed, though I am no mental health expert, that mental health issues of some kind were present. I passed him the few bottles we had and he continued to knock on our door regularly until we moved. He was my introduction to St. John's network of professional informal recyclers, a community of men who had been almost entirely invisible to me until the moment this man knocked on my door.

That this man knocked on my door and continued to knock on my door was meaningful to me for many reasons. This recycling transaction represented my only recurrent interaction with a man I would have had very little reason to interact in any other situation. The simplicity of this was powerful to me. Second, after a while I learned that he knocked on many doors in my neighbourhood and well beyond and many people I talked to knew him or knew of him. In this way a man who might, in another situation, be unwelcome or be considered suspicious was made part of the community through recycling. And finally, these recycling interactions were everyday activities, their commonality almost made them invisible and unimportant to the people involved. But it is their commonality, I believe, which renders them so important and worth studying for what they reveal about the possibilities which are present in everyday interactions when they are conceived as a starting point for programs, policies or interventions.

This study was conceptualized while I was an MA student in folklore. Currently a PhD student in geography, I have been able to bring to this project a unique blend of folkloristic and geographical perspectives.

Project overview

The management of solid waste is a major challenge for urban and rural communities in Newfoundland and Labrador and across the world. Recent research shows that people-

centered approaches to the planning and design of waste management programs are key to program sustainability and high participation rates (Ali 2006, Nzeadibe 2009). Much emphasis has been placed upon the role of those involved with informal waste management systems (waste picker or waste scavengers for example) in developing countries (Adeyimi, Olorunfemi, and Adewoye 2001, Moreno-Sanchez and Maldonado 2006). Research suggests that an understanding and possible integration of the informal sector into program design can create positive outcomes for all involved (Wilson, Araba, Chinwah and Cheeseman 2009.). While there have been multiple studies involving individuals and/or groups involved in informal waste management networks that exist in developing countries, little research has focused on informal waste management networks in developed countries.

This is a study of the informal recycling economy that exists in St. John's, as performed through the everyday exchange of solid waste materials (primarily wine and beer bottles and cans) between marginalized individuals (mostly unemployed, older men who will be referred to as professional recyclers) and mainstream community members (referred to as customers).

The objective of the proposed study was to examine the instigating conditions for the emergence of an informal recycling network in St. John's.

The project addressed the following research question: 'What are the multiple individual motivations (of both recyclers and residents) which serve as trigger for the participation in this particular informal recycling network?'

This limited first study of this issue and this population in St. John's can act as the foundation for much future study, and a starting point for policy and social program development discussions.

Methods

This project employed an ethnographic qualitative methodology. Data was collected through semi-structured informal and formal interviews and through direct observation ethnography. Participants were recruited through identifying professional recyclers at bottle depots and in public spaces. Some professional recyclers were identified through the snowball method in which another person knew of a recycler and contacted that recycler to ask if he would take part in this project, however this method was successful in recruiting participants in only two cases. In all other cases, professional recyclers who were not directly contacted by me in person declined to be part of the study. However, all recyclers approached personally agreed to be interviewed. Due to confidentiality clauses in the consent form, I have not included or avoided identifying information about the recyclers interviewed.

Getting to interview the recyclers was a challenge. I was able to pre-arrange interviews with two recyclers. The other interviews were conducted on the spot. In some cases I was prepared and had my tape recorder on hand. In other cases I did not and took notes where possible. Some recyclers had an issue with being recorded. In these cases I did not record interviews. In two cases I had my tape recorder on hand, but did not request an interview because it was clear that the request would make the recycler uncomfortable and he might withdraw from the interview altogether. The data collected during each interview varied to some degree because some professional recyclers were quite nervous being interviewed and in those cases I kept the interviews short. One memorable professional recycler had been deaf since birth and could speak in only a limited fashion.

The use of ethnographic observation was limited to two cases. In these two cases the focus was upon interactions between recyclers and customers.

Interviews were conducted with MMSB and bottle depot employees to gain an understanding of the larger context of recycling activities.

Altogether ten professional recyclers were interviewed. Also interviewed were five customers, three bottle depot employees, customers, and two MMSB employees.

A secondary sources analysis was conducted to inform the results.

Terminology

Professional recyclers are people who recycle bottles and cans that they did not purchase. Other terms used in this report include **bidders** and **scavengers**. Workplace recyclers are people who recycle bottles and cans obtained from their places of work.

Household recyclers are people who recycle bottles and cans they bought and used at home.

A **customer** in this report is someone who gives their bottles and cans to a professional recycler. This can be done regularly over a period of time or on a casual or one-time basis.

A **trapline** is the route along which a professional recycler collects bottles and cans.

Selected Literature Review

This selected literature review focuses upon a selection of readings upon three main topics: Insight from an Empirical Study, Recycling Behavior, and Inclusive Waste Management.

An Empirical Look at Recycling for Cash **Ashenmiller 2009, 2010**

Leading this literature review are insights from a report characterized by the author as the first empirical examination of people who recycle for cash: *Cash Recycling, Waste Disposal costs, and the Incomes of the Working Poor: Evidence from California* (Ashenmiller 2009). The study noted that bottle laws have the potential to shape the way people recycle and concluded that there is evidence that bottle laws and policies can increase overall beverage recycling rates beyond that captured by curbside programs, particularly in rural areas. Ashenmiller observed that because people respond differently to recycling incentives “it is important to design programs which capitalize on people’s varied responses” (2009, 540). The article noted that more research is needed and observed that “a mixed recycling program, including both deposit-refund and curbside recycling, may well be the most efficient strategy” (Ashenmiller 2009, 550).

There are clear benefits which support recycling programs designed to respond to the realities and concerns of professional recyclers, bidders or scavengers, Ashenmiller argues. Such programs target a population which can otherwise be difficult to reach. There is “[n]o evidence the professional scavenger increases crime rates, but there is evidence they do increase recycling rates. In fact, there is a substantial literature showing that increasing the legal labor market opportunities of low-income workers may in fact lower property crime” (Ashenmiller 550). Additionally, Ashenmiller argued that if professional recyclers return a significant amount of recyclable material or if they receive a significant income from recycling, “then it is important for policy makers to structure new bottle laws in ways that encourage recycling by all groups, especially the people who scavenge recyclable material” (2009, 540). His concluding statements reinforce this: “The evidence presented should compel policy makers to consider structuring new bottle laws in ways that encourage professional recycling for its positive environmental and labor market consequences” (2009, 550).

Of particular interest to this study are Ashenmiller’s observations about the different contexts of the three different kinds of recyclers he studied. (This study picks up this idea of multiple contexts which motivate recycling participation, focusing upon the role of community networks.) Ashenmiller’s team interviewed the recyclers who came to particular refund depots and classified them in three ways: the professional recycler (a person who collects recyclables from public places, other households and garbage),

workplace (a person who returns recyclables obtained from his or her workplace) and household recyclers (people recycling personal household materials). Factors which influenced recyclers' decision to recycle included: number of working hours, income levels, time spent recycling and access to recyclables (for example: workplace recyclers may have access to a large amount of recyclables from work and may use work time in which to recycle). In the context of professional recyclers, Ashenmiller assumed that their market wage was lower than their recycling wages. However, Ashenmiller does not take into account the ways other motivations may impact participation in recycling, including that recyclers may enjoy the time spent recycling. Ashenmiller does suggest this as an area for future study.

The study took place in California, a recycling context shaped by the California Redemption Act. Ashenmiller wrote that the act is unique in three ways: 1. Redemption is paid by count or weight, which allows for easy storage/transportation by crushing. 2. The act requires recycling centres to be available within a half mile of larger stores. 3. Unclaimed deposits are put into a government-held fund that covers the program's administrative costs and also subsidizes curbside recycling and other recycling programs in the state. In other states, private beverage distributors handle the redemption process and the acts of these states let the keep unclaimed funds. Question: do these acts let the states keep the unclaimed funds, or the private beverage distributors keep the funds?

A second article by Ashenmiller (2010) reinforced the links between providing access to income and lower crime rates: "Although the primary positive benefits of recycling income go to low-income individuals, the unexpected secondary benefit of lower crime rates affects both high- and low-income individuals (2010, 245)".

The article also addressed unintended consequences of bottle laws, concluding that subsidizing recycling markets with a deposit refund program provides a wage for recyclers and that "removing the refund from the labor market would have negative welfare implications not recognized by the current theoretical literature" (2010, 256). Additionally, Ashenmiller cautions that raising the deposit refund too high may reduce overall recycling wage:

"The wage is dependent on the number of cans caught per hour. When the deposit is set higher, the number of people choosing to recycle bottles will rise. This means that while each bottle may bring in a higher deposit, the effort it takes to catch each bottle will rise. In this case, it is difficult to know what the resulting change in the wage will be. It could in fact be that at some point a higher deposit would result in a lower wage for people collecting recycling." (2010, 254).

Recycling Behavior

Pratarelli 2010 and Smeesters et al. 2003

Pratarelli 2010

Through an informal meta-analysis of literature about recycling behavior, Pratarelli (2010) states the international literature suggests that the keys to increasing recycling participation include: institutional commitment to support and maintain regular public information programs, facilitating waste collection for consumers and creating/sustaining environmental education programs for children which focus upon developing values and attitudes rather than accumulation of dry facts. Pratarelli concludes that although recycling programs are more successful in collectivist societies, individualistic societies can achieve high levels of participation “provided that sponsored recycling programs demonstrate they share some common values with consumers” (2010, 27).

Pratarelli’s discussion of recycling behavior literature accepts the widespread assumption that recycling behavior requires people to be able to work toward benefits within a long, rather than short, time frame. He points to arguments which state that because of the environmental pressures faced by our ancestors, they evolved to favor short-term survival strategies rather than long-term. Pratarelli notes that “[i]n order to overcome such an innate predisposition, Shackelford (2006) offers the suggestion that the best solution would be to use social pressure to compel participation in recycling efforts” (Pratarelli 2010, 4). Pratarelli then goes on to critique the use of social pressure, writing that social pressure works only in very small bands/communities and is resistant to individualistic societies. Further, Pratarelli points to the general consensus in the literature which shows that the two most important factors in recycling participation are individual knowledge and convenience. Pratarelli notes that more research needs to be done into the gaps between symbolic and instrumental beliefs about recycling.

Smeesters et al. 2003

In this study Smeesters et al. explore different value-based motivations for participation in voluntary and mandatory recycling programs. This study identifies ‘civic duty’ values which emerged during conversations with participants about their involvement in mandatory recycling programs. Participants of voluntary recycling programs cited environmental values as their major motivation. Smeesters et al. observed that social marketing may need to address different values and beliefs when promoting mandatory recycling programs than when promoting voluntary programs because “The *mandatory* nature of the programs we are investigating seems, indeed, to call for different value orientations” (Smeesters et al. 2003, 4570).

Participants of mandatory recycling programs in the study:

“referred to ‘doing one’s duty’ as the dominant motivational ‘force’ underlying their recycling behavior. They found it important to comply with the sorting and recycling rule and regulations because that is part of “being a good citizen”. The dominant underlying value is therefore not different

from that for other civic behaviors like paying taxes or obeying traffic rules. Purely environmental values were only secondary, and mentioned by a minority of respondents.” (Smeesters et al. 2003, 457)

This study demonstrates that recycling participation can be motivated through concerns other than environmental.

Inclusive Waste Management

Gutberlet 2007, 2008, 2009; Tremblay 2007; Taylor 2008

While leading and/or taking part in research projects with binners in British Columbia (Victoria, Mayne Island, Hornby Island, and Vancouver) Gutberlet makes the argument that waste management policies can and should have multiple benefits to many government and community stakeholders. Gutberlet created the Community-Based Research Laboratory (CBRL) and pursues projects related to Participatory Sustainable Waste Management in Latin America and British Columbia.

Gutberlet urgently calls for a paradigm shift in waste management, one that recognizes “the contribution of inclusive resource recovery to global sustainability” (2008, 223).

Gutberlet argues that potential positive outcomes for poverty reduction and other community benefits are overlooked in waste management policies which ignore the work of informal recycling networks. Despite the real “benefits to the environment and to the community at large the recyclers are usually disregarded. As a result of their marginalization, the full potential of the informal and organized recycling industry is not harnessed” (2008, 223). In response, Gutberlet created the concept called Inclusive Waste Management. Also called participatory waste management, the concept calls for the inclusion of

“...those individuals that are already working with resource recovery, by performing activities known as binning (recovering recyclables from the garbage bin) or selective collection (highly structured, door-to-door collection of recyclables)... The collection, separation and recycling of these materials has become a widespread survival strategy for the unemployed in poor countries and is becoming a more widespread phenomena also in the North.” (Gutberlet 2008, 224).

According to Gutberlet, waste needs to be redefined as a resource. In the North American context, scavenging through garbage can lead to harassment, but Gutberlet’s experience with both Latin American and Canadian recycling networks focuses upon the role of waste as a resource which has the potential to enhance global sustainability, and create local job opportunities. In many parts of North America garbage scavenging is

illegal and can lead to harassment. Gutberlet is convinced that the “real environmental services provided by this population are yet to be fully recognised” (2008, 225).

Gutberlet is concerned that most official recycling programs exclude the people that are already doing this job, jeopardizing their livelihoods:

“It is still dismissed that the occupation provides the ability for this population to become independent, without having to resort to begging or crime, nor is the environmental benefit they provide with resource recovery valued (including climate change mitigation). Organized community recycling initiatives have yet to be recognized as innovative tools for social justice and economic development.” (Gutberlet 2008, 224)

Gutberlet argues that inclusive waste management programs create benefits which do not occur in conventional waste management schemes. Gutberlet concludes that informal professional recyclers have local knowledge about space and waste that can inform waste management and environmental education.

In another article, Gutberlet et al. (2009) describe the results of a participator socio-economic survey involving informal recyclers in Victoria, BC to determine factors which impact their livelihoods which is described more fully in the 2007 project report. The intent was to provide policy- and decision-makers in Victoria with awareness (or knowledge) about the assets and difficulties of this population.

“This research aims to improve the livelihood of Binnners by recognising their social function, generating awareness in the community about the benefits from strong partnerships between consumers and Binnners, and by restoring the dignity and integrity of Binnners, that are often challenged by society’s negative perception.

Organising informal recyclers into cooperatives and social enterprises can significantly improve their working and living conditions (Medina 2000, Baud et al. 2001, Nyachhyon 2006), build their capacity to network and collaborate with businesses, industry and government (Gutberlet 2008a), and stimulate community environmental awareness of waste reduction and selective collection, among other benefits. Cooperative recycling practices can be part of an integrated strategy to reduce urban poverty and environmental contamination.” (2009, 734).

The article described learning from Gutberlet and Tremblay’s 2007 study of binnners in Vancouver. The study used a livelihood assessment as a tool to assess the assets available to and needs of a selection of binnners.

In 2006, 156 bidders took part in a survey administered at various bottle depots, along collection trap-lines, at shelters and in the streets. Some in-depth interviews were conducted during which researchers engaged in trapline mapping.

Of the bidders who took part in the survey:

- 90 were homeless
- 58 were not homeless
- 2 temporarily homeless
- 6 did not respond

Of the homeless:

- majority were males between 40 and 59 years of age
- female between 40 and 59
- reported homelessness as cause of financial difficulties (followed by political, social and health)
- majority were Canadians or identified as First Nations

Tremblay's study lists the challenges to binning which exist in Vancouver. These include:

- noise
- competition in affluent areas
- stolen carts and materials being confiscated by police
- locking of dumpsters to prevent access to materials

In response to these challenges, bidders organized to form a Bidders Association. Bidders are distributed ID cards and promise to adhere to a code of conduct. Tremblay also points to United We Can, a bidder-organized bottle depot whose goals include the development of self-sustaining urban environmental enterprises and the creation of jobs for inner city residents. UWC is a support system for this population, providing the social networks and support that many of the bidders, who are often socially excluded, do not get from family or other social networks.

Tremblay's 2007 thesis concluded that "economic circumstances such as unemployment, limited and/or no social assistance are found to be the primary incentives for participation in binning activities in the Canadian context (Tremblay 2007, 95).

Gutberlet et al. observed that bidders' economic situations could be improved through building upon social assets:

"Since income from binning is a sole economic source for many homeless individuals, building partnerships with residences and

businesses for secured and regular access to materials is a significant social asset. Building these assets, a measure of the extent of social networks in a community, is particularly important in creating opportunities for homeless and excluded individuals to be engaged in civic life and to promote greater economic prosperity.” (Gutberlet et al. 2009, 742)

Noting tensions with blue box pickup Gutberlet et al. conclude that there is opportunity for cooperation between binners and local government:

“There is opportunity for the local government to employ Binners in resource recovery in order to fulfill their mandate of increasing waste diversion and reducing poverty and homelessness. A unique partnership arrangement is possible between the government and the binning community that would embrace both social and environmental directives.” (Gutberlet et al. 2009, 744)

Gutberlet et al. (2007) advocate creative co-governance of waste with informal recyclers and local government. Tremblay’s 2007 thesis recommends similar measures, saying that there is:

“an opportunity to engage, integrate, and build capacity among those that have limited economic options, who in turn can contribute to the construction of a more sustainable and inclusive urban environment. In developing countries, innovative and locally-driven strategies for waste management problems go beyond the ecological implications of resource recognition and consider both social and economic goals.... Inclusive waste management approaches in these countries facilitate mechanisms to improve the socio-economic conditions of those working in the trade. *By contrast, in Canada, ecological considerations such as conserving landfill space and resource depletion are a primary focus of recycling policies, and there is limited interest in promoting these programmes as an economic opportunity for the poor.*” (Tremblay 2007, 6) (Italics mine)

Taylor’s (2008) thesis also recommends co-management strategies. Taylor looked at two case studies in community-based recycling on two small islands in British Columbia, Mayne and Hornby Islands. Taylor concludes that:

“...community recycling groups are central to building social capital and inculcating environmental awareness on the islands as well as to contributing to the wider social economy network. Co-management partnerships between the community recycling groups and local

government allow for increased local engagement and participation in resource recovery.” (Taylor 2008, iii)

Tremblay (2007) notes that research on informal waste management in developed countries is rare:

“Despite the prevalence of informal resource recovery in many developed countries, research has been generally limited in both quantity and scope, especially in comparison to the developing world where a number of studies have been completed to date (Gutberlet 2005, 2003; Adeyemi et al. 2001; Medina 2000). More specifically, studies focusing on creating opportunities for environmentally sound economic development through recycling are rare in the developed world. Acknowledging this activity as important income generation for marginalized and socially excluded populations could also contribute significantly to future policy development directed towards poverty alleviation and social inclusion in Canada.” (Tremblay 2007, 10)

Tremblay (2007) identified case studies which integrate the informal waste sector in waste management programs:

- Diadema, Brazil became the first city to pay recyclers for door-to-door service
- Gonzales (2003) identified a program in the Philippines
- Medina (2000) identified programs in Columbia and Mexico

This report identifies two others, from a Canadian context:

- United We Can and SOLE (unitedwecan.ca) (unitedwecan.ca/history.html)
- Bottlepreneur

Tremblay recommends inclusive waste management policies which include:

- expanding bottle depots
- stewardship programs which provide socio-economic opportunities
- access to recyclable materials
- public education and awareness
- reducing harassment
- reevaluating the social assistance program
- the development of social enterprises
- injury prevention and health protection?

The St. John's Recycler

*"How long will I continue recycling? As long as I am alive."
- quote from a St. John's recycler.*

The typical professional recycler is an older man who has retired or who is not involved with a traditional workplace for various reasons, including mental health issues, personal preference, aging and illness.

Overall:

- Ten recyclers were interviewed in total. Based upon interview responses, this number seems to represent about 2/3 of the core professional recycling population. Empirical studies are needed to confirm this.
- All were male.
- None were homeless.
- Ages ranged from late forties and fifties to seventy-years-old.
- None were working at traditional jobs. The majority had retired.
- The majority had been recycling for over a decade. Many for more than two decades.
- Stated earnings ranged from \$100-\$200/month to \$600/week.
- Two were part-time. One collects every Saturday and the other a few hours several days a week.
- One had quit recycling due to illness.
- One recycler started recycling as a workplace recycler and became a full-time recycler after retiring.
- The remaining were full time--recycling between 5-7 days a week and between five and ten hours a day.
- All the recyclers I interviewed worked a regular route
- One recycler did not collect from customers, but picked only from streets and parks.
- Nine professional recyclers had a regular customer base. Some rarely picked recycling from streets and/or parks. Others picked regularly from streets/parks.
- All but one recycler I interviewed used an old shopping cart. One used a bicycle with a cart-trailer.
- All except one said there has been an increase in the number of professional recyclers in St. John's within the previous 3-5 years.

Gender

All professional recyclers interviewed were male. Although two people spoke about a female recycler who either was working traplines or had worked traplines at one point, I could not locate her. This was not pursued because this project was not intended to be a study of gender within recycling networks, though that would be an interesting topic for future study.

Common histories

Four of the professional recyclers voluntarily shared a history of living in an orphanage and/or foster care as a child. Because of the small sample size, it is significant that this similar background was shared by four recyclers. I did not ask questions of a personal nature, nevertheless many professional recyclers shared this part of their histories voluntarily. These histories play a significant role in this study's interpretation of the societal meanings and role of informal professional recycling in St. John's.

Getting Started

There are three different categories of explanations for how a professional recycler got started in the work: Community Interactions, Family History, and Recruitment.

Most of the professional recyclers interviewed told anecdotes about interactions with people in their communities which started and/or shaped the work they did. In one case a professional recycler got started after he became too ill to shovel snow and do yard work for money and one of his regular shoveling customers suggested that he collect recyclables from the home instead. Two other recyclers shared stories in which people they knew in the community approached them and offered their recyclables. In one case, a recycler shifted his work from collecting from parks and streets to a customer base entirely, expressing satisfaction with this work arrangement. One recycler said:

“I used to see the owner of the club take bottles out and take them in the car but I guess she got fed up and she saw me and said I see you are recycling would you like me to save these for you?”

Three recyclers spoke of a family history in recycling work. In two cases, recycling had been introduced to them by family members (fathers) who also collected recycling for cash (part-time) as part of other revenue-generating activities. Another recycler's family had been owners of a recycling business in St. John's, which paid money for a variety of materials which could be resold at the time.

Recruitment occurred as part of helping out a friend or acquaintance living on a limited income. It may be as simple as casual conversations about the financial incentives of professional recycling. One professional recycler obtained grocery carts for new recyclers to use:

“I find now more older people are getting involved with the carts. Because now they're starting to realize, they're on pensions and stuff, and they're starting to think holy moses... So I went in and got 'em a cart and now they got \$400, and that'll do for Christmas gifts or whatever.”

A Changing Workplace

- Three professional recyclers cited the increase in refund at the depot from 3 cents to 5 cents as the time they began recycling or when they increased bottle and can recycling activities.
- Half the professional recyclers interviewed had been engaged in recycling activities for decades, collecting all sorts of materials, including cardboard and metals, to any available recycling business that paid money for such materials. Although some of these recycling for money opportunities were no longer available, these men continued to collect and redistribute a wide variety of used materials/objects, sometimes for money, sometimes using an online selling program and sometimes simply giving things away to people perceived to be in need.
- The shift toward a focus on the use of customers seems to have occurred with the introduction of curbside recycling. This could be because the program motivated more householders to separate recyclables from their garbage (making more recyclables available), but householders preferred having their recyclables collected by a professional recycler. Curbside recycling also increased reliance upon regular customers by making some professional recyclers fear interference from city workers if it was perceived that they took their recyclables from curbside recycling.
- Noting the increase in the number of professional recyclers, one recycler said that he had to switch to a bicycle and cart because he had to travel farther to collect the same amount of recyclables. He was happy about this, however, expressing satisfaction in the fact that the city was cleaner and that he saw more of the city each day as a result.

Value Attachments/Personal Meaning

It is clear that recycling holds great personal meaning for recyclers which results in strong value attachments to the informal network. Professional recycling requires enormous physical stamina over long hours for comparatively little pay so it is not surprising that the people who engage in this activity find a variety of rich and powerful meanings in the work and have a high level of attachment to it.

Highlighted here are six common personal meanings expressed during interviews with professional recyclers. These are: Productivity, Community Interaction, Financial Incentive, Personal Freedom and Environmental Stewardship.

Productivity: When asked about their motivations for recycling, many professional recyclers said they were “bored”, they wanted “to get out of the house” to “do something” and they didn’t want to “sit around at home all day”. Because many were not linked to the traditional workplace for a variety of reasons, recycling activities acted as the venue through which professional recyclers could interpret themselves as productive community members. One recycler explained how he was “always doing work” for other people in the community, such as lawn care and snow shoveling, and that the connections he made naturally led to the addition of recycling to his work activity. One recycler said:

“You know, I’m home I’m doing nothing. I suppose I don’t have the ability to go to school you know. Just never had the smarts for it. So I said I’ll take this up. And this is what I’ve been doing ever since.”

The majority of professional recyclers discussed other work they had done or were still doing on an informal basis, work which included trading recycled objects, house sitting for some customers, lawn care, shoveling and odd repair jobs. One said:

“And I cut her grass for her. Front and back. And then the other person on the corner here I do the same thing. So I get paid that way too.”

Another recycler talked about receiving customers’ recyclables as a trade for keeping customers’ garbage areas clean.

“You keep it clean. For all customers you clean the area of garbage, so they give you bottles.”

The commonality of this suggests that professional recyclers as a whole tend to value productivity. This productive self-image has mental health benefits both for professional recyclers with mental health challenges and those without.

“People appreciate the work. That’s a big bonus. It makes you feel like you’re wanted in society. I feel good about it at times, you know.”

One interviewee talked about the role of professional recycling in a dramatic change in one professional recycler he knew who had previously spent his days attempting to convert people to Christianity. As a result, people responded to him negatively, sometimes with uncertainty or fear. As told during the interview, when this man began collecting recyclables as a productive outlet people began to view him positively and valued his role in keeping the streets clean. The interviewee perceived this man to have become accepted as a part of the community and to have visibly improved interactions with people around him, in part because he took pride in his work. During interviews, customers often cited the recycler’s hard work as one reason they engaged in informal recycling networks by saving their recyclables for a professional recycler.

Community Interaction: Many professional recyclers would otherwise have limited opportunity to interact positively on a regular basis with the wider community.

Professional recycling provides opportunities for positive community interactions. One recycler described himself as unable to work in the traditional workplace because he did not have the education and because he could not handle being in groups of people, but

recycling on the streets allowed him to engage in social interactions which were not threatening to him.

When interviewed, professional recyclers talked about meeting people as one of the best things about their work. In some ways, professional recycling is an activity which provides visibility and recognition: if they were not recycling, other people would have no reason to talk to them or interact with them in a positive manner. There are a variety of community interactions which are the result of professional recycling work. A professional recycler will not be interpreted as threatening and so will remain generally unchallenged when on the streets with a grocery cart.

One recycler described how he got new customers just by “coming by with a cart” and people saw him and told him they’d put out their recyclables too.

“I go by and pick them up off their porch and the neighbours know me by now and they say he’s okay, he’s here to pick up the recycling.”

Strangers will often approach recyclers and give them amounts of recyclables which range from a single bottle to a truckload of recyclables.

“Two or three bags given to me. People stops their cars too. They stop their cars and I don’t know how they get to know me name, [Recycler’s name]! Yes, I said, who are you? Oh, he said, we knows all about you, you’re a good fellow, whatever. We got some recycling for you. God, that’s very nice of you. I really appreciate it. They’ll give me their address or phone number and they say give me a call [recycler’s name] in two weeks’ time and we should have a bag for you. We can bring it down to your place. Not a problem.”

“Another time a guy with about 8 bags was waiting I said to him I said boy do you want to go ahead of me go on. Boy I got things to do, but you go on ahead of me. He said, no, thank you very much. But I’ll tell you what, I’ll give you those he said. That’s nice, thank you very much. I said you know, now you don’t have to do that. I was only trying to be generous. I like people’s generosity and people’s courtesy. It makes you want to do what you’re doing. It makes you feel good about yourself you know. Somebody say, now [recycler’s name] a nice guy.”

“I like meeting the people. A lot of times I’ll go by and I see them doing some work I’ll give them a hand for ten or fifteen minutes.”

“Some people would see me and say well I got recyclables. That’s how I got started with so many customers. They see me and they say

well we got recyclables in the house, would you like to take them.
And I would say well I got enough now but I can come back.”

For some recyclers, their work gave them a name. The role of the recycler’s name in the above quotes demonstrate how pleasing it is to the recycler that his name is known to others through the work of recycling--to be visible to others, in other words. This visibility works in other ways too: one recycler explained that one of his customers will put his name on the recyclables that are left outside for him so that no one else takes it and so that he is not ticketed for taking recyclables from curbside recycling. Two professional recyclers interviewed shared nicknames they had acquired related to their recycling work (providing the names here would potentially breach anonymity).

The community interactions which are part of recycling can lead to much more involved relationships between a professional recycler and his customers. It was not uncommon for customers to leave gifts for their recyclers, particularly around holidays. Three recyclers described the response of their customers when they became ill (two were admitted to the hospital, one for heart surgery): customers noticed the absence and inquired; in at least two cases customers set up an account at the depot for the recycler and brought their recycling in for him; other customers saved their recyclables until the recycler recovered; one recycler described being visited in the hospital by customers. Interactions which began as an informal recycling transaction grew into relationships which demonstrate a high level of care for the professional recycler.

Community interaction is also at the heart of good recycling business practice. A recycler who manages positive interactions well will maintain a loyal customer base. Recyclers not only know their routes but tend to know their customers as well and by keeping track of their habits and preferences will be able to keep them as customers. One recycler described how he changes his working hours to fit his customers’ schedules: for example, he tends to collect earlier in the morning during the school year when parents are on the go earlier with their children and comes by later during the summer for parents who are on the go at a later hour. Another recycler relied upon a positive relationship with a man employed in the maintenance in the parks to help him when the weather turned bad. When the wind becomes too strong, the man working in city parks maintenance lets one professional recycler store his shopping cart and recyclables in the park shed for a few days. Two other professional recyclers mentioned having arrangements with other people for storage of their grocery cart and recyclables as needed. One professional recycler described how he got one of his best customers, a man who collects cans and bottles, stores them in his basement, and calls the recycler when he has enough to fill a grocery cart:

“[Name] knew that I was collecting bottles. So he says there’s some people that I know around here that got ‘em, so I’ll save them for you.

I really didn't think he'd be able to save as much as he did. But he does. Sometimes he gives me five and six bags at one time."

Recycling allowed professional recyclers themselves to give back to the community. Charity contributions were not part of the questions I asked recyclers, but four recyclers volunteered the ways they contribute to charity through recycling. For these professional recyclers, this particular community interaction provided a deeper purpose for their recycling activities. One recycler described how he takes the tabs off the cans to help a disabled man saving up to for a wheelchair. One recycler described how he chose to collect one day a week for different charities:

"I often donated a bag or a bag and half to the children down in Janeway. Another time it'd be for the dogs, the SPCA, cats and dogs."

Another professional recycler told how he donates the money refunded from bottles collected from a portion of his route or trapline to support foster homes because he grew up in foster care. Throughout his career, he said he has collected 87,000 bottles whose refunds he gave to support the care of foster children. These stories were shared with a good deal of visible pride. Other professional recyclers who collected used items often described giving some of these items to people who needed them. This sense of giving back to the social community is a part of a foundational ethic which keeps the informal recycling network working well.

Financial Incentive: Financial incentive was a motivation cited by all recyclers. Recycling was an important source of income for all but one of the recyclers interviewed. For a few, the income represented an additional source of income, while for the majority the income was necessary to survival. When asked why they recycle, some professional recyclers answered:

"I'm getting social services. You don't get a good deal on that, but then again be happy with what you got."

"Pay me bills. That's why I do it."

"This recycling now, I just put that aside. My wife, she has a lot of grandchildren. We put it aside for Christmas for them."

However, it is important to keep in mind that although financial incentive was a motivator for considering work of any kind, other motivations account for the choice of this particular money-generating activity.

The importance of non-financial motivations in informal recycling networks is shown through the recycling history of one professional recycler interviewed for this project.

One professional recycler explained that he did not need the money. Having retired from his profession of choice, this professional recycler chose to recycle in order to cope with the social marginalisation he experienced as a result of the onset of a disease: he recycled in order to experience the community interactions described above.

Personal Freedom: The majority of recyclers expressed an appreciation of the personal freedom available to them in their work as professional recyclers. This was expressed in different ways.

Generally there was a rejection of the traditional workplace. This quote from one recycler sums it up: "I'm not the working type you know."

There were various reasons for a rejection of the traditional workplace. Some were directly provided during interviews: lack of education, illness (physical) or disease, social anxiety, inability to put up with workplace conflict, personal preference. Other reasons were implied: mental illness and/or a dysfunctional or abusive childhood which impacted the adult's ability to hold down a steady job. For these reasons it was ideal for professional recyclers to take up work which was independent and self-directed. This freedom allows professional recyclers to decide which customers they will have and which they will avoid. Professional recyclers choose where they work and for how long. It may be that professional recycling is one of the few occupations available to people who are socially and economically marginalised which has this degree of personal freedom.

There is an additional aspect to personal freedom. When talking about their work most professional recyclers expressed a pride in their mobility. There was a satisfaction in traveling their routes throughout St. John's each week. Their traplines were difficult and physically demanding but they could work them when and how they pleased. Two professional recyclers described a much greater mobility through recycling work: one described living across Canada (Vancouver, Montreal, Toronto) supporting himself, sometimes partially and sometimes entirely, through recycling work (he returned to St. John's to help out his mother when she became ill); another recycler said he had travelled to Australia and engaged in recycling work there. In this sense, personal freedom extends to a certain extent to the ability to pick up and go where one wants, when one wants with little repercussions.

Environmental Stewardship: A portion of the work-related pride expressed by the professional recyclers was related to their contribution to keeping the city clean and the belief that their contributions to recycling were an important part of taking care of the earth. This value was a vital part of their identities as professional recyclers who were contributing to the improvement of their communities. It may be that this part of their identity was so important because, as interviews with their customers revealed, the professional recycler's role in keeping the city and earth clean is one of the most important reasons customer's and the public in general value professional recyclers.

The ability to interpret professional recyclers as having a shared goal may be the value that creates an initial bridge between professional recyclers and the general public in St. John's: interpreting professional recyclers in this way first values their work, and possibly, then creates a bridge to allow them to be valued as fellow community members with common goals, despite the fact that many professional recyclers have attributes which could mark them as community outsiders and create fear and/or anxiety. This study did not explore this potential link. I note this here as a theme that came up that is worth further exploration and study.

When asked why he enjoyed his work, one recycler responded:

“Nobody here picks up their cans. I keep the city clean, do something good, you know?”

This recycling ethic extended beyond bottles and cans to the recycling of any used object, including electronics, clothes, furniture, lumber, etc.

Only two recyclers I talked to said they collected from dumpsters. I encountered one recycler by a dumpster and stopped to interview him. He spoke at length about taking care of the environment and the importance of keeping as much garbage as possible out of the landfills.

“Have you ever looked at what’s in a dumpster? Well now. Look at this. Why is all this going to a dump? Someone could use that. And what is this? This is a planter, that’s what it is. You could put that in your backyard and plant flowers in it. Me, I haven’t bought any of the furniture in my house. I got it all for free. Recycled.”

The increase of the number of professional recyclers at work throughout the city was interpreted as a positive thing, despite there being fewer recyclables to pick up in public areas as a result. One recycler spoke approving of the recycling programs because “it made more people pick up their cans, keep things clean.” The increase in recycling awareness in general has also had benefits for the professional recycler because the increase in traffic to the depot means more people give their recyclables to professional recyclers rather than redeeming them themselves, as they intended. With the increased number of people at depots, “sometimes when I comes in, people in line give me their bottles”.

The Cart

The object which most defines a professional recycler is his shopping cart. The first time a recycler knocked on my door (a year before this project), I could not understand his quick, barely-coherent bursts of speech. At first, I didn't know what it was he wanted. It was the shopping cart behind him that made me understand he was asking for empty cans or bottles. The cart explained his purpose. The shopping cart can transform an unknown and potentially threatening man into a known safe entity--a professional recycler.

One professional recycler told me how he got the buggy he was using:

“I got the buggy about 15 years (ago). I was down in Victoria Park one day and the buggy was down there and uh what happened was uh, the guy from the park was going to beat it up. So I asked him for it. He told me I could have it. Sturdy. But it's light because it's plastic.”

Some expressed appreciation for the grocery cart.

“It's the only thing I got to transfer the bottles. Without that I wouldn't be able to have all this. So it's good.”

The shopping cart can be difficult to push.

“Haven't had much trouble with buggy here. Sometimes it's a bit hard steering it from side to side. With the weight sometimes it's a struggle to try to push it.”

Winter weather was difficult, but no barrier. When asked how he recycled in the winter, one professional recycler said simply:

“Same way. With a cart. Only, that much harder.”

Another recycler reported continuing his work in all--wind, rain, snow, sleet. Only a strong wind could get in the way of recycling. Wind seemed to make collecting the most difficult.

The full-time professional recyclers who have been working for years have worn through multiple shopping carts. One, who had been a professional recycler full-time (six days a week, six-eight hours a day) for 22 years, was pushing his third cart. He explained that the wheels were the shopping cart's weakness. The wheels of a shopping cart were not

designed for long-distance wear and tear or for easy pushing. Another concurred, saying:

“Only downfall, is these wheels. The wheels, after a while they go. The rubber sometimes comes off, I’m after wearing them out so much. Then it’s very hard.”

Professional recyclers each had their own particular way of arranging their grocery carts and interacting with its physicality. Newer recyclers tended to limit themselves to pushing from the front and filling the shopping cart in the way one fills a cart with groceries. But professional recyclers who had been recycling for decades were more likely to use rope to arrange systems in which bags of plastic bottles hang off the sides of the buggy and bungee cords allow the recycler to pile their loads very high. While observing one professional recycler, I noted that he tended to pull the grocery cart from the front and preferred using the street rather than the sidewalks. Another recycler set up a rope handle and found it easier to pull the shopping carts up hills rather than pushing from the cart handle.

The one recycler I met who no longer used a grocery cart for the majority of his recycling but had switched to a bicycle and trailer said he had made the change because he needed to travel much farther to collect the same amount of bottles and cans (because of a perceived increase in the number of professional recyclers at work). He could not travel the same distance on foot. He did not blame the grocery cart, but his feet.

When asked if there was a way to make their jobs easier or the cart better, the professional recyclers offered no suggestions. They perceived their work to be inherently difficult. Their main complaint was that the wheels wore away after a while, but this was interpreted as a natural consequence of wear and tear.

However, some non-recyclers have thought it was a good idea to build a better buggy for professional recyclers. In British Columbia, a project funded by the International Development Research Council developed an Urban Binning Unit (UBU). The shopping cart was seen as inadequate:

Typically binners transport recovered materials in shopping carts, which is not a proper solution for the binners themselves, for business or the wider community. Shopping carts also generate significant noise in residential areas creating a negative public image and hence re-enforcing the marginalization of this population. (<http://cbri.uvic.ca/en/Projects/mothersproject.html>)

Designed for binning activities, UBU is a cart which can be attached to a bicycle. A variation was designed for homeless people, with a cart which can convert into a one-person shelter. Limited amounts were produced and distributed.

An interview with a bottle depot, United We Can (a bottle depot run by binners in Vancouver) indicates that the UBUs are not widely used by professional recyclers but were used more often by depot employees. Despite its excellent design and ease of use, the UBU had a smaller carrying capacity than the grocery cart. Also at issue was the limited numbers available which made the UBU itself a commodity of value and difficult to obtain. (This is reflected by one interview and is not by any means a conclusive evaluation of the UBUs.) By its very ubiquity, the grocery cart was less likely to be an object stolen and was much easier to obtain.

During interviews, two people spoke of someone who in the past planned to design and build a cart for the use of the professional recyclers in St. John's. However, nothing came of it, in part due to lack of interest among professional recyclers and liability concerns. I have not yet been able to verify the details of this attempt.

However, there is a project in St. John's which promises to address the challenges posed by the shopping cart using a different approach. Jon King is a second-year student involved with SIFE (Students in Free Enterprise). He is leading a project called Bottlepreneurs (previously called Yes We Can) designed to help professional recyclers maximize their business opportunities. Project activities include mapping traplines and recruiting more customers. To date, one professional recycler is involved. Here I focus upon the recycler-focused approach employed to make improvements to existing shopping carts. King talked with and observed one professional recycler at work. King asked him what his difficulties were. Using this recycler-centred information as his base, King has made connections with an engineering student who will attempt to design minimal modifications to the shopping cart which may improve the usability of the cart. Other designs may result as well, including something similar to the UBU (in light of the one recycler I interviewed who already switched to bicycle and cart, it may be that, given the opportunity, some of St. John's professional recyclers may be interested in making a switch to a bicycle and cart). It is my opinion that King's approach is excellent. King's approach makes central the concerns and usage patterns of the professional recycler. This approach takes what the professional recycler has always used and is comfortable with and introduces small changes which may not increase the monetary or trade value of the grocery cart but may increase its ease of use to the professional recycler. There may be value in increasing the public's knowledge about this program and this is discussed in another section, as mentioned above.

It is also worth mentioning here that the concerns expressed in British Columbia about the noise were not discovered in this study. Noise concerns were documented in by Tremblay (2008) in British Columbia, but no one interviewed mentioned noise

complaints to me. In fact, when arranging a future meeting with one professional recycler, he proudly told me:

“You’ll hear me before you see me.”

In this sense, the noise of the grocery cart was not a nuisance, but worked to alert customers that it was time to get their recyclables out.

An issue for some professional recyclers is finding space to store their grocery cart and their materials which they have not taken for refund. Sometimes landlords and neighbours object to the visible presence of the cart.

I have noticed in some grocery stores new grocery carts have been introduced, whose wheels stop turning if taken outside the parking lot. I wonder about the long-term implications of these shopping carts to professional recyclers should they become widespread. This could be a subject to be explored more fully in the future.

There exists amazing potential to exploit the cart in public relations campaigns as a symbol of the professional recycler. This approach would increase the value of recycling and the value of the recycler, without requiring a focus upon a particular professional recycler.

I know of one photographer who is beginning a documentary photography project which focuses upon professional recyclers in general and their shopping carts in particular. Following the outcome of this project could be useful.

It would be useful to follow the trajectory of Jon King’s project, in particular to document (photographically and/or using video) the stages of designing grocery cart modifications. This could be used to generate increased public interest. (It would also be good to track the program to monitor any potential unexpected consequences which may or may not occur, such as the marginalization of recyclers not in the program and/or territorial disputes.)

The Trapline

The trapline is the geography within which the community-making performances between professional recycler and customer occur. These transformative geographies are intimately known to each professional recycler. They know the boundaries, they know their customers and they get to know their customers' habits as they relate to the collection of recyclables. Along these routes, professional recyclables interact with St. John's community members in a way they do not otherwise.

The length and difficulty of a professional recycler's regular routes were a source of pride which encouraged the sharing of stories. One professional recycler told me:

"I'm sixty now. Up over them hills too. I goes out around the winter too. Don't stop. Wonders how I does it. Got stopped from the cops on the street for the day was so bad. [Recycler's name], what are you doing out on a day like this? You can't see in front of your eyes? I got bills, I said, I got bills."

Professional recyclers in general were reluctant to share the details of their trapline and tended to describe their territories though its general boundaries. (I think this may have been partially a trust issue, which could have been overcome in follow-up interviews of the kind not laid out in the original intent and/or design of this study.) Professional recyclers were acutely aware of their own and another's sometimes flexible territorial boundaries. However, the professional recyclers I interviewed were eager to avoid conflict and would cut their territories short if challenged.

"Sometimes I collect from parks and such. But if there's someone else there, I don't go there. If I see a recycler or two I stay away from that and go off on my own. I don't want a dispute. Some people have their territories. I got mine too."

"You got to understand, it's upsetting to see someone come down the street with a cart if you've been there for twenty years."

"I had planned on going a lot more with the buggy but a lot of people they got territories. So I don't want to infringe on them."

"Like I say [recycler's name] got this George Town. They say [recycler's name] goes nearly everywhere up to Elizabeth Avenue and the university I think."

For many recyclers, summer celebrations, festivals and concerts were times when traditional territories were ignored and many recyclers took advantage of the opportunity to collect a lot of recyclables in a short distance and time span.

This project was not designed to capture specific information about where recyclables were collected. Through interviews, I understand that this information would be useful to MMSB. However, the best method of collecting this detailed information is through the use of targeted application of in-person surveys, as discussed in future research possibilities. However, through interviews, I was able to identify that the downtown area was the source of a sizable portion of the bottles collected by at least three professional recyclers. Two recyclers made a point of collecting there weekend mornings, after people would have been visiting the area's bars, pubs and clubs. One recycler mentioned a specific arrangement with one club (not in the downtown area), whose manager saved recyclables for him. This club was going to switch to canned rather than fountain non-alcoholic beverages and he was expecting a sizable increase in the number of cans he received from the club as a result. Dumpster diving was an activity acknowledged by only two recyclers I interviewed. Some would only pick up a bottle or can in passing, and did not want to take cans or bottles from the garbage. One focused only on those found from these sources. While these observations are not empirical, they do suggest that further study could uncover detailed information about where most bottles and cans are retrieved.

King's Bottlepreneur project focuses upon mapping traplines. It may be that King's approach could be used to gain more detailed information, should a researcher be present during interviews with professional recyclers. His project has mapped out six traplines for one professional recycler to date.

The Customer

The interest and stories generated any time I mentioned this project to people surprised me. Almost everyone had a story about a recycler, whether or not they gave their recyclables to a recycler or not.

Specifically for this project, I interviewed five customers and asked them about their interactions with their professional recycler.

From these interviews I identified three value attachments at the heart of customers' positive perception of professional recyclers: Environmental Stewardship, Hard Work and Inclusive Community.

Key to customer's perception of recyclers was that their work benefitted the environment.

“It's not garbage they are collecting. They're saving our world.”

“They're keeping the city clean.”

“They are hardworking citizens doing something wonderful for the environment and the community. It helps people who just cannot-- some people just couldn't be bothered to recycle their beer bottles and they'd rather somebody else do it. It helps people who wouldn't ordinarily recycle to recycle.”

Customers' perceptions of professional recyclers as hard workers was also key to their to customers' willingness to engage in ongoing interactions/relationships with a professional recycler. The following quotes demonstrate this:

“I would see them all the time around on the street... I started to see how much work they were doing.”

“[Recycler's name] was in the neighbourhood and he would chat with you and I just saw how hard he worked and what he was doing and the hours he was putting into it. Sometimes I would walk over to bring some [recyclables] over or tell him I had some and he would be gone.”

A third value that I call here Inclusive Community works to provide personal meaning to the recycling interactions and this meaning motivates customers to go out of their way to engage in these informal recycling networks.

“Because it’s more about what we call them - the invisible people. The people we tend to ignore. We don’t give them enough value. They need to be recognized because they do a lot of good.”

“They’re human beings. They should be honored, they should be respected.”

Another aspect of the value of Inclusive Community is the level of acceptance for community ‘characters’. Some customers valued interactions with unusual community personalities and expressed a high level of affection for the professional recycler they worked with. Customers enjoyed their interactions with professional recyclers, partly because these were unusual interactions centred upon helping professional recyclers in their work, which makes these interactions different from those with homeless and/or street people. Important are both a desire to help a community member perceived to be struggling while working hard and a desire to have connection with people who are different than themselves.

Discussion and Policy Implications

It appears that the professional recyclers in St. John's work within a different context than that of the British Columbian and American recyclers or binners studied in the research highlighted in this report. Because of this, waste management policy makers in St. John's have an opportunity to create unique programs and responses which emerge from the particular everyday contexts within which the informal recycling networks exist in the city. Keeping in mind differences between St. John's professional recycling networks from those studied previously, future policy initiatives can be guided by the programs which have been implemented elsewhere, their successes and shortfalls.

Homelessness

Studies which focus upon professional recyclers in Canada and/or the United States are not numerous. However, the studies surveyed for this project describe a professional recycling population with some key differences from the population described in this project.

Gutberlet (2007, 2008, 2009), Tremblay (2007), Taylor (2008) describe a population of mostly older, male, Canadian professional recyclers who are homeless. Much of the context of their work focuses upon issues relating to homelessness and advocates the use of inclusive waste management as a potential tool to end the homelessness of professional recyclers. Ashenmiller's (2009, 2010) work also notes the prevalence of homelessness in the population of professional recyclers who are part of his studies. However, all the professional recyclers I interviewed in St. John's had somewhere to live. In fact, having a place to live was key to their recycling work as it gave them a place to store and clean recyclables (some cleaned their recyclables at home and some relied upon their customers to do this work) and space to keep their shopping cart out of the street where it would not be long welcome because its visibility would cause complaints.

What does it mean that the professional recyclers I interviewed were not homeless? These men were marginalised in other ways: poverty, underemployment, mental health (for some), and difficult childhoods (for some). At least one I interviewed was housed in sub-par housing, yet even this low-quality house provided a home and a place to go after he finished recycling work and a space off the streets to safely store his buggy. Additionally his girlfriend lived in a city-owned low-income apartment and in this way he had a place to shower (the tap in his apartment bathroom ran brown water). Because these professional recyclers are not homeless, future programs and/or policies which incorporate their needs must address some different contexts than those identified by Gutberlet (2007, 2008, 2009), Tremblay (2007) and Taylor (2008).

Not only do Gutberlet (2007, 2008, 2009), Tremblay (2007) and Taylor (2008) describe a population of professional recyclers who are mostly homeless, but they live and exist

largely geographically separated from the rest of the population, and from the neighbourhoods from which they collect recyclables. For example, Gutberlet describes the population of bidders who live in the downtown Eastside (where high levels of poverty are concentrated), but who travel far outside this area to collect from neighbourhoods which are almost entirely from different economic brackets. In contrast, St. John's professional recyclers do live in the neighbourhoods from which they collect, and/or very close to the neighbourhoods from which they collect. Much of the recycling activities described to me focus upon the areas around and somewhat beyond the downtown and university areas, where there is more likely to be a wider mix of people from various socio-economic levels. In this sense, even when the professional recycler is collecting outside his immediate St. John's neighbourhood, he is rarely a complete outsider.

Public Perceptions

Gutberlet (2007, 2008, 2009), Tremblay (2007) and Taylor (2008) describe a population of recyclers who have been negatively perceived and who daily face negative interactions with community members and business owners and even harassment. Indeed, one of the stated goals of Gutberlet's community-based research is to reduce the stigmatization identified as a major barrier to their work. In focusing upon research which shows that professional recyclers do not increase crime, Ashenmiller's (2009, 2010) research demonstrates a similar focus.

Gutberlet (2007, 2008, 2009), Tremblay (2007) and Taylor (2008) found that the grocery cart contributed to the stigmatization of the recycler and so part of the community-based research project led to the design and production of a limited number of UBUs to distribute to bidders. However, one interview with a bidder in Vancouver associated with United We Can (a bidder-created bottle depot and social enterprise) indicates that bidders did not use the UBUs widely. The creation of the UBU was part of the attempt to increase the profile and positive public perception of the bidder due to complaints about the noise made by the shopping cart and the perception that a well-designed, business-like unit (some of which could be converted into a tent) would encourage the public to interpret the presence of bidders in a positive manner. This was an attempt to visually clean-up bidders and their work to conform to public preferences. While studies indicate this seems to have had some success, the shopping cart remains the dominant collection tool in British Columbia. This may be an indication that dramatically changing the collection tool may not be the way to go in St. John's, at least initially. This is backed up by the interview results which indicate that there is not a widespread negative response either to the noise of the grocery cart or to its visible presence. The grocery cart does not seem to be at present a barrier to positive public perception. Interviews indicate there is respect for the strength required to push shopping carts filled with heavy loads.

While more empirical studies are needed to be able to make definitive general statements, the customers I interviewed valued the visible and audible presence of

professional recyclers on their streets. Stigmatization, although present, appears to be less pronounced in St. John's. Recyclers shared mostly positive stories about their interactions with their customers and the general public. The few negative stories shared were noted for being the exception. There was a general fear of harassment or ticketing by city officials who might challenge whether the recyclables had been stolen from curbside recycling. One recycler described being challenged and that a community member had come out of her house to tell the city employee to leave the bin alone because the recyclables had been left for him. I witnessed an incident at the university where a university cleaning employee stopped a professional recycler who was taking recyclables from a large bag of bottles and cans left beside a dumpster and the university employee dragged the bag into the university, leaving the professional recycler quite angry and upset. The professional recycler said this was not the first time that had happened but further said there were only a few people who responded to him in that manner.

In general, professional recycling in St. John's is not plagued by the stigmatization and harassment described in the studies mentioned above. The relationships developed within the informal networks formed between professional recycler and customers over decades seems to have grown out of a set of values which include inclusivity, diversity and social justice. In fact, a part of the work being done by the Canadian researcher cited above is to establish conditions in which networks can be developed between binners and the general public. Because these networks already exist in St. John's, improving the public image of professional recyclers can be a secondary or complementary goal to any policy or program with them at the centre, leaving open the potential to use these informal networks as tools to redefine recycling.

Recycling Networks: For What Purpose?

Gutberlet uses research to emphasize the potential present in the increased normalization of interaction between binners or professional recyclers and household members. Gutberlet places this "potential for dialogue between recyclers and household members" (Gutberlet 2008, 227) within an educational framework. The dialogue she refers to could be used to educate householders about good recycling habits and increase environmental awareness in general.

This study suggests that this potential goes beyond the important educational encounters Gutberlet discusses. The everyday dialogue which occurs in St. John's informal recycling networks is essentially social, not educational, in nature. Any environmental educational benefits which occur are secondary. These entirely voluntary informal networks have been created because participants enjoy the social benefits of this everyday interaction, even when professional recycler and customer do not see each other (for example, when a customer puts a bag out, but does not see the professional recycler at all).

Recall that although financial factors partially motivated professional recyclers, there was at least one recycler who had no financial motivation whatsoever, but who began recycling when illness limited his other social outlets. Although financially in need, some of these recyclers had been in traditional workforces and opted out and/or retired. There is other informal and formal work which could provide the extra income needed. Environmental stewardship was a source of pride, but not a motivating factor. Social motivations, the desire to get out, be useful, see people, be visible, have people know their name, which was the single common motivator found in this study.

Social motivations were shared among customers who participated in this study as well. Customers had a variety of options for recycling participation. For this reason, their decision to engage in this network is significant. Convenience cannot account for this motivation entirely, because it is no more convenient to leave a bag on the step for a recycler to pick up, then it is to put a bag on the curb. It is more convenient to leave glass bottles out than to recycle them oneself. However, stories told in interviews show customers, both regular on-going customers and random one-time customers, go out of their way to deliver recyclables to a professional recycler, sometimes driving to his house, stopping one's car to give a professional recycler a load of recyclables, or, initially intending to collect deposit oneself and then giving one's recyclables to the professional recycler at the depot. Some of the stories about finding out about a sick professional recycler show a level of concern for professional recyclers which match motivations different than simple convenience.

It may be that the prevalence and depth of the informal networks in St. John's is unique. None of the studies surveyed in the selected literature review for this project mention extensive networks of household customers professional recyclers who completely rely upon networks of customers nor were informal networks described. However, these studies recommend measures which would work to increase positive relationships between professional recyclers, the public, and particular customers (businesses or individual households). These measures seem to focus upon creating social motivations without actually calling them such.

These social motivations can be used to maximize recycling compliance and/or participation. With this shift in perspective, other potentials can be unlocked. Social interactions and value attachment motivations can be used as catalysts to introduce new kinds of recycling programs in St. John's, which recognize recycling programs as much more than environmental tools. Programs and policies which respond to the presence of these networks and/or attempts to work with participants of these networks population in St. John's can be informed by the identification of the power of social motivations and multiple value attachments.

What Motivates St. John's Recycling Network Participation?

The question which drove this project is: what motivates participation in these informal recycling networks and can these motivations be exploited to increase recycling awareness and/or rates in St. John's?

Studies about recycling behavior indicate that programs which increase recycling participation focus upon values and attitudes rather than facts (Pratarelli 2010). Pratarelli disagrees with common arguments which call for the use of social pressure to increase recycling compliance, stating that this works only in small communities and works less well in individualistic societies. There is no mention in Pratarelli's article about the impact of networks or community interactions whose meanings are unrelated to long-term benefit to the environment. I mention this debate about social pressure to briefly discuss its relevance to the networks which exist in St. John's. I differentiate between the social interaction motivation noted in this study and the social pressure Pratarelli disagrees with: social pressure is a sort of negative pressure in which a person does something to avoid collective community disapproval or punishment and there is little positive reinforcement because the person who complies does not receive a noticeable positive impact other than maintaining their current status as a member of that community; however, social interaction is a positive outcome which works a bit like a positive feedback loop. It may be that this motivated behavior works more often or better in smaller, less individualistic communities; this study does not address this question. This study does note that social interaction is a strong motivation at work in St. John's right now and cannot be ignored because it does not or may not work in other areas or in larger, more densely populated areas.

Bottlepreneur (previously called Yes We Can), a Students in Free Enterprise project is currently maximizing social interaction as a way to help recyclers increase earning potential. The project was started in February of 2012 by business student Jon King who had come to respect the hard work of the professional recyclers he saw in and around his neighbourhood. To date, one professional recycler is participating in the program, which focuses upon mapping recycling routes and recruiting more customers along the recycler's traplines. While the distribution of fliers had limited success, King discovered that, although more time-consuming, in-person door-to-door introductions (King and/or SIFE volunteers accompanied by the professional recycler) was key to gaining much larger increases in customer participation (household customers and business customers). This recruitment did not focus upon environmental awareness, but upon introducing the professional recycler, and the professional recycling work with which he supports his family. King said that the participating professional recycler now sometimes collects in two hours what he used to collect in ten hours. King has been pleased to witness the relationships develop between the participating professional recycler and his customers, describing friendly interactions when the professional recycler comes to collect. King said:

“What I'm really excited about is that he's actually building a relationship with people. That gives me confidence. If he's building

relationships with these people, he'll be able to keep going after I'm gone."

King is hoping to get funding to expand the program to include more professional recyclers. It will be interesting to follow the progress of this innovative waste management program and to watch how the professional recycling networks respond to this program.

Smeesters et al. (2003) concluded that different recycling programs may require marketing and/or awareness based upon different value orientations. Their study demonstrates that recycling participation can be motivated through concerns other than environmental. This is important because few studies have examined mandatory programs and because "[i]n most prior research, the guiding values were *assumed* to be environmental (Smeesters et al. 2003, 457). This study begins the process of looking beyond common motivational assumptions. I point to social interaction with multiple value attachments as an important motivator in informal recycling networks and one that can be exploited to create new, innovative and inclusive recycling programs.

What motivates participation? This study has focused upon social interactions, the definition of which in this report is the opportunity to engage in positive interactions within a network whose value outcomes and personal outcomes for participants are multiple, and which offer multiple value attachment motivations. It is the multiplicity of values and outcomes which ensures the long-term stability of the network through time and through alteration of network conditions. Because the network does not rely upon one motivation and/or value system, its existence is not threatened when one of these motivations and/or values is weakened or absent. This is particularly relevant in light of critical analyses of recycling which question its environmental benefits (Ackerman 1997). These critiques work to lessen the belief that recycling is better for the environment than other options and weaken traditional recycling motivations.

Participatory Waste Management

Structuring some of the waste management recycling programs differently can increase the public value of these programs.

Gutberlet (2007, 2008, 2009) , Tremblay (2007), Taylor (2005) argue that recycling programs can be shaped to embrace a variety of values and outcomes beyond pure environmental outcomes and values, including cooperation, social justice, social enterprise, poverty-alleviation, community-building and citizenship.

"Organising informal recyclers into cooperatives and social enterprises can significantly improve their working and living conditions (Medina 2000, Baud et al. 2001, Nyachhyon 2006), build their capacity to network and collaborate with businesses, industry and government (Gutberlet 2008a), and stimulate community

environmental awareness of waste reduction and selective collection, among other benefits. Cooperative recycling practices can be part of an integrated strategy to reduce urban poverty and environmental contamination” (Gutberlet 2009, 734).

Although informal and organized community recycling create social, economic and environmental benefits,

“Very few cities in the world have incorporated recycling cooperatives and associations in waste management and only a few policies have been developed to support this approach. The few experiences, however, highlight that besides redirecting solid waste into production streams, recycling also builds citizenship and contributes to creating community” (Gutberlet 2008, 223).

The information provided in this report can act as a catalyst to the re-imagination of the role and design of waste management policies in St. John’s. This city has the opportunity to develop unique waste management programs which change the way citizens think of the role of recycling and its immediate and long-term benefits.

Policy Implications

The findings of this study focused upon the value of building upon social interaction motivations with multiple value attachments in order to increase recycling value and participation among the general public. The policy implications listed here focus upon utilizing the data from the study to share these values and stories with citizens of St. John’s as a starting point to the development of programs which capitalize upon these values. Second stage policy implications recommended here focus upon setting in place the conditions to encourage the design of creative waste management programs which exploit social interaction and social motivations in general.

Data from this St. John’s study showed that the cart is a rich symbol of the professional recycler. There is enormous potential for a public relations campaign which focuses upon the cart as the visual symbol of the professional recycler. Such a campaign would increase the value of recycling at the same times as it increased the value of the professional recycler, potentially making way for new and/or different networks to be established between customer and recycler. Increasing the profile of professional recycling without focusing on an individual recycler would reduce the amounts of stigmatization and harassment which do occur in St. John’s and open the door for more cooperation with these individuals.

Through interviews and informal conversations about this research, this study found that customers and the wider population were very eager to hear and share stories about professional recyclers (the professional recyclers they knew and other professional recyclers). There is potential to exploit this interest to increase the profile of the link

between recycling, inclusivity and poverty alleviation. Such a program might fund the collection and production and/or performance of stories about and/or by professional recyclers. There is a strong network of storytellers in St. John's and excellent support for such a project and the mentoring of new storytellers sharing stories about any subject.

King's Bottlepreneur program suggests two potential initiatives. One initiative that might work to raise the profile both of recycling and the professional recycler is a 'Who Is Your Recycler?' campaign. King's success in introducing a recycler to more customers along his working routes could be replicated in a different capacity. Second, King structured his project around consulting with professional recyclers before creating any supporting program. This approach could be used by waste management policy makers. They have the opportunity to consult with professional recyclers (in St. John's and outside the province as well) and customers to determine how they can cooperate with St. John's professional recyclers and their customers. Selected templates for such cooperation are outlined in the next section.

Second-stage policy implications could be achieved through the establishment of working relationships and/or partnerships with St. John's organizations involved in inclusivity, poverty and homelessness. Such diverse coalitions could result in the establishment of waste management programs with multiple motivational factors and outcome objectives.

Using the data from this study, policy makers (and/or a coalition of policy makers) could consider how to incorporate and/or organize St. John's professional recyclers and their networks into future policy. Other studies point the way, but there is possibility for a unique St. John's model.

Future policy should take into account the value attachments expressed by professional recyclers and customers. Any future policy changes should attempt to maintain and/or increase these value attachments to the informal network. For professional recyclers these value attachments are: Productivity, Community Interaction, Financial Incentive, Personal Freedom and Environmental Stewardship. For customers these value attachments are: Environmental Stewardship, Hard Work and Inclusive Community.

Policy makers should consider how future programs can target multiple value attachments (as found relevant). These value attachments have implications for all multiple target populations, including those not currently participating in informal recycling networks. These findings can be applied to other public policy programs outside waste management policies and programs.

Knowledge Mobilization

Knowledge mobilization activities will be ongoing for some months. A fuller plan will unfold with consultation with partners and The Harris Centre. However there are pieces that are in place right now.

Over the previous semester I took a Creative Non-Fiction course, during which I developed three non-fiction pieces intended for publication in different media. The editor of The Newfoundland Quarterly has expressed interest in publishing one piece. One I will send to a Newfoundland-based publication and another to a national magazine. Additionally I have other non-academic non-fiction pieces in the construction phase, including an audio performance piece and the potential to present at Words In Edgewise and the possibility of a session with policy-makers (regarding waste management and/or poverty alleviation) organized through the Harris Centre, if there is interest on the part of the centre and policy makers.

My initial proposed knowledge mobilization plan targeted four audiences: community groups involved with poverty alleviation and/or marginalized individuals; individuals and groups involved with waste management program development; academic audiences interested in this project's theoretical implications within oral history and occupational folklife; and the general public. The current pieces will target community groups, waste management program developers, and the general public. To target academic audiences I will prepare at least one paper for publication.

I will notify the Harris Centre of the publication of any text generated through this project.

Additionally, I am interested in following up with the SIFE program Bottlepreneur and its participants (both customers and professional recyclers) either to generate a newspaper article and/or to contribute in any way. I have already promised Bottlepreneur's founder, Jon King, that I would provide a copy of this report to him.

I am open to meeting with The Harris Centre to create a more detailed knowledge mobilization plan and to generate a fuller list of mobilization activities.

Future Research Opportunities

This project has provided rich data from which significant follow-up research can unfold.

1. Using the data laid out in this study, a larger empirical study can be designed which can provide statistically significant data about St. John's recycling networks, customer motivation, including trapline data, customers' daily recycling praxis, and the geography of discarded bottles through informal mapping interviews with professional recyclers who collect these bottles. Ashenmiller's 2009 empirical study of recycling in California could serve as a research model (in which researchers stayed at selected depots for a week at a time to administer surveys) which could be adjusted to suit the context of informal recycling networks in St. Johns as uncovered in this report. The data generated from such research could be used to inform and shape the design of future recycling initiatives which target the specificities of recycling in St. John's.
2. A study which considered informal recycling networks across the entire province and/or in rural Newfoundland and Labrador would inform the design of recycling programs for the contexts in these areas.
3. The discussion from this study does not analyse gender implications. There is potential utility in a study which investigates how gender influences recycling practices in St. John's, and how this could inform policy, programs and public relations campaigns.
4. In response to the interest in stories about professional recycling (as shared by customers and professional recyclers alike), there is clear value in a study specifically designed to collect, analyze and share these stories.
5. Given the implications of the unique program created by Jon King (Bottlepreneur, through SIFE), a community-based research project could analyze its implementation strategies, its effectiveness, its strengths and weakness with the objective of identifying components which can be replicated in other waste management programs which target a variety of populations, including, but not at all limited to, professional recyclers and/or people living in poverty. Additionally, this program's participants could provide more data about St. John's informal recycling networks.

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