- WORKING PAPER -

Organic, Fair Trade Pot?

The State of Ethical Consumerism in Portland's Recreational Marijuana Sector

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I. Introduction

On January 1, 2014, licit, recreational marijuana became available for purchase in the United States. In the state of Colorado, the first to legalize, lines stretched around city blocks as dispensaries struggled to keep up with consumer demand. Since then, legal, recreational weed has hit the markets in Washington and Oregon, and has been legalized (but is not yet available) in Alaska and Washington DC. Voters in Texas and Massachusetts will have the opportunity to legalize later this year. Legal cannabis (both medicinal and recreational) is a $3.5 billion USD industry and is expected to grow to $4.4 billion before the end of 2016 (Oldham, 2015). In January this year, the state of Oregon sold $14 million in legal *recreational* pot alone, raising over $3.4 million in tax revenue in one month (Crombie, 2016b). This recent surge of legalization extends beyond the United States. Uruguay, for example, fully legalized in 2013 (Carless, 2015), and several countries have decriminalized possession of small quantities of marijuana or permitted individuals to grow a few plants (Brant, 2014).

For those concerned about the environment, legalization is a big win. Illicit producers who grow cannabis outdoors often work deep within protected public forests. They contaminate soil with heavy pesticides, divert water systems, and clear cut trees to make way for sunlight. Indoor illegal growers, on the other hand, use massive amounts of energy with high wattage grow lights, and often do not appropriately dispose of waste, such as one-use soils pumped full of nitrogen. While legal growers face some of the same environmental challenges, being subject to industrial regulations limits their negative impact. This article asks: How have environmental social movements, ethical consumerism networks, industry actors, and political consumers responded to this new opportunity to regulate the recreational marijuana sector?

The research presented here has three principal objectives. First, it responds to calls for more research on social movements and political consumerism in emerging industries (Vasi, 2009, p. 332) by examining the composition of actors and activities unfolding in the nascent licit recreational marijuana sector. Who is organizing and how? Which actors are the targets of mobilization? Which repertoires are enacted? How are issues framed? How do these activities compare to what we might expect? Second, it draws on two of marijuana's stereotypes to examine the role that stigmas play in framing environmental issues to ethical consumers. How does pot's reputation as being "natural," "hippy," and "earthy" impact frames? How does being marked as "seedy," "underground," and "counterculture" facilitate or inhibit ethical consumerism? Third, this paper aims to particularize power around consumer settings (Wahlen & Laamanen, 2015, p. 402; Dubuisson-Quellier, 2015) by evaluating whether ethical pot advocates make products and information widely available or instead market more intensively to privileged sectors of society? Are all consumers given equal opportunity to participate in the environmental marijuana consumer movement?

This article is organized as follows. The background section describes the case of newly legalized recreational marijuana. It introduces Portland, Oregon as a hub of ethical consumerism and environmental mobilization; outlines the status of recreational marijuana in Oregon and in the United States; highlights environmental issues related to the cannabis production; and describes an uptick in ethical consumerism of other recreational drugs in the United States. Next, the theoretical framework organizes extant research on political consumerism and suggests how this study may contribute to knowledge on emerging industries, the role of stigmas in framing, and power dynamics at the retail level of analysis. Following, the methodology section describes the three methods used in this study: qualitative analysis of internet research, networking, and semi-structured interviews; quantitative analysis of data collected at a random sample of 64 dispensaries; and spatial and statistical analysis relating the dispensary findings to socio-demographic indicators. The findings section offers what the author believes to be the first account of ethical consumerism in the licit recreational marijuana sector. It demonstrates that there is, indeed, a nascent "political consumerism movement" in the licit, recreational marijuana sector. The movement is largely industry-driven and is marked by an absence of third sector actors (such as environmental NGOs, fair trade certification organizations, and agricultural justice advocates). Mobilization efforts are challenged by two distinct stigmas: cannabis cultivation as a "natural" (and thus necessarily environmentally-friendly) process, and the marijuana industry as a "criminal" enterprise (which may deter potential allies). Interestingly, the distribution of "ethical" pot is quite consistent across neighborhoods of different socio-economic compositions--in contrast to most ethically-oriented products. The paper closes with a discussion of these findings, their implications, and suggestions for further research.

II. Background on Newly Legalized Recreational Marijuana in Portland, Oregon

This section provides contextual information about Portland, Oregon as a field site, the status of recreational marijuana in Oregon and in the United States, environmental issues in licit and illicit production of marijuana, and the demand for other ethically sourced recreational drugs in the United States. The objective is to provide background information about this emerging sector, and to aid the reader in considering about how findings from this case may (or may not) translate to other contexts.

Portland as a field site

Field research was conducted in Portland, Oregon, located in the Pacific Northwest region of the United States. Portland is mid-sized city with a population of 609,000, approximately the same size as Helsinki, Amsterdam, Washington D.C., or Stuttgart (US CIA; US Census Bureau). It is the 29th largest city in the United States and the second largest in the region, after Seattle (US Census Bureau). Portland is progressive and famed for environmentally-friendly policies, liberal politics, and organic food movement (McKenzie & Rapino, 2011). Portland is a particularly well-suited field site for this study because it has a vibrant history of environmental activism and zealous ethical consumerism. Portland earned the title of "most sustainable city in the United States" by setting the national bar for bicycle commuting, creating revolutionary recycling programs, and promoting ethical consumption (Sustainable Cities Results, 2013). More than 25% of the city's workforce commutes by bike, carpool, or public transportation, and residential recycling alone saves roughly 250,000 tons of CO2 per year. A third of Portland's energy comes from renewable sources--20% more than the national average ("Why Portland," 2013). Portland is also the home of several renowned environmental organizations including the Oregon Environmental Council, the Earth Liberation Front (ELF), and the Center for Earth Leadership. In the summer of 2015, for example, activists suspended themselves from a bridge above the city's Willamette River in an attempt to stop a Shell Oil icebreaker from heading north to the Chukchi Sea (Tomlinson, 2015). Oregonians became the second state to legalize medicinal marijuana (in 1998), and even before recreational marijuana was legalized, Oregon's rate of marijuana use was the highest in the country (Crawford, 2014, p. 118). Understanding that a community's "existing values, norms, and beliefs constitute a mindset that comprises the perception of issues, the involvement of citizens and the legit forms of public action" (Koos, 2012, p. 41), Portland is an ideal "stage of action" (Fine, 2010) for examining emergent environmental advocacy and ethical consumption in marijuana.

Legalization of recreational marijuana in Oregon

Under United States federal law, marijuana is classified as a Schedule I drug ("Drug Scheduling," n.d.). The Controlled Substance Act, passed by the United States Congress in 1970, describes Schedule I substances as having "no currently accepted medical use" and "high potential for abuse" ("Drug Scheduling," n.d.). It is illegal to sell, possess, or use Schedule I drugs, and doing so with recreational or medicinal marijuana can be prosecuted under US federal law ("Drug Scheduling," n.d.). However, in 1996, voters in the state of California passed Proposition 215 legalizing the distribution and use of medical marijuana. This created a contradiction between federal and state authority and procedures regarding marijuana ("State Medical Marijuana Laws," 2016). Since California's legalization, 22 states and territories[1] have also legalized some form of distribution and use of medicinal weed ("State Medical Marijuana Laws," 2016). In an effort to add clarity to the state-federal tension over marijuana legalization, President Obama issued a memo in 2009, instructing federal prosecutors to refrain from prosecuting marijuana sale and possession, so long as practices complied with states' laws ("State Medical Marijuana Laws," 2016). In November 2012, voters in the states of Colorado and Washington dramatically altered the landscape of marijuana in the United States by voting to legalize use, sales, and distribution of recreational marijuana for adults over the age of 21 (Colorado Amendment 64, 2012; Washington Initiative 502, 2012). In 2013, in response to Colorado and Washington's legalization of recreational marijuana, the US Department of Justice revised its marijuana enforcement policy. It deferred marijuana regulation to state legislatures, whilst retaining the right to review and challenge state laws ("State Medical Marijuana Laws," 2016). In January and July of 2014, legal recreational marijuana became available for purchase in Colorado and Washington, respectively. Later that year,

[1] Alaska, Arizona, California, Colorado, Connecticut, Delaware, Hawaii, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, Oregon, Rhode Island, Vermont, Washington, the nation's capital of Washington DC, and the territory of Guam.

voters in Oregon, Alaska, and the District of Columbia each passed voter initiatives to legalize recreational marijuana.

In Oregon, where this study took place, residents voted to legalize the growth, distribution, and possession of recreational marijuana on November 4, 2014, by passing Measure 91 with a vote of 56% to 44% ("Elections Division," 2014). Measure 91 gives the Oregon Liquor Control Commision (OLCC) authority to license, regulate, and tax the commercial growth, processing, and distribution of recreational marijuana. Measure 91 also scheduled the transition to legal recreational marijuana in two phases. The first phase, implemented on July 1, 2015, made it legal for adults over 21 years of age to grow up to four plants on their own property, possess up to eight ounces on private property, and possess up to one ounce in public ("Recreational Marijuana FAQ," n.d.). The second phase is to make recreational marijuana available in licensed dispensaries. On January 4, 2016 the OLCC began to collect applications for the production, processing, and distribution from retail locations ("Recreational Marijuana Frequently Asked Questions," n.d.). According to the OLCC's Medical Marijuana Dispensary program, Oregon aims to issue its first licenses for recreational dispensaries around October, 2016 (personal communication, January 22, 2016).

Interestingly, on June 30, 2015, state legislators passed a bill that would make recreational marijuana available sooner. Oregon Senate Bill 460 updated Measure 91 to allow registered *medical* marijuana dispensaries to sell small amounts of *recreational* marijuana to adults over the age of 21 beginning on October 1, 2015 (Oregon State Legislatures, 2015). Bill 460 authorized the Oregon Health Authority, which regulates medical marijuana dispensaries, to oversee this interim process of making recreational marijuana available. The OLCC estimates that once implementation is complete, recreational marijuana will generate between $17 million to $40 million in annual tax revenue, a small amount, compared to the $1.11 billion raised from distilled spirit sales ("Allocation of Liquor Revenue," n.d.) (Brown et al., 2014).

Table 1. Timeline of Oregon recreational marijuana legalization and field research for this study

Date	Measure
November 4, 2014	Oregon voters pass Measure 91 legalizing possession and sale of marijuana in Oregon
July 1, 2015	Adults over the age of 21 allowed to possess marijuana in Oregon
June 30, 2015	Oregon State Senate passes Bill 460 allowing medical dispensaries to sell recreational marijuana before recreational dispensaries are licensed
October 1, 2015	Oregon's medical dispensaries permitted to sell recreational marijuana
January 1, 2016	Oregon begins taxing recreational marijuana sales
January 4, 2016	Oregon begins accepting applications for recreational marijuana dispensaries
January-April, 2016	*Field research for this study takes place*
October, 2016	Oregon plans to begin issuing licences to recreational marijuana dispensaries

Marijuana production and the environment

Cannabis production, whether legal or illegal, can have adverse environmental consequences. The nature of these impacts is largely determined by whether cultivation takes place indoors or outdoors. Indoor production is highly energy consumptive. Energy is required to heat and/or cool the air, generate high-intensity lighting, dehumidify air to avoid molding, pre-heat irrigation water, and remove waste heat using ventilation (Mills, 2012, p. 59). In the United States, one square foot (0.09 square meters) of indoor marijuana cultivation uses four times more energy than a hospital, eight times more energy (per square foot) than a commercial building, and 20 times more energy than a center for religious worship (Mills, 2012, p. 62). Additionally, because CO2 is pumped into grow houses at four times the natural level in order to encourage more rapid growth, the average kilogram of final product results in 4600 kg of CO2 emissions into the atmosphere (Mills, 2012, p. 59). CO2 emission from US marijuana production is similar to the emissions of three million average American cars (Mills, 2012, p. 58). Outdoor cannabis production, on the other hand, primarily harms the environment through the leaching of chemicals into the environment: herbicides, pesticides, fungicides, and fertilizer contaminate water, degrade soil quality, and may add toxic chemicals to the food chain (O'Hare et al., 2013, p. 10).

Producing marijuana illegally can exacerbate these negative impacts and create additional hazards. Illicit *indoor* production can be especially consumptive of dirty energy, as producers burn fossil fuels in order to generate

energy off the grid (Mills, 2012, p. 59). Additionally, illicit producers may be less likely to properly dispose of indoor grow lights, which contain the neurotoxin Mercury, a hazard to both humans and the environment (O'Hare et al., 2013, p. 18). The environmental problems associated with illicit *outdoor* production are numerous. Research typically draws on evidence from Northern California, which is renowned for illicit production of pot (Carah et al., 2015, p. 1). Illicit cannabis producers clear land, build terraces, and construct roads on public land that is not approved for agricultural production, resulting in deforestation and erosion (Carah et al., 2015, p. 2). They also divert streams to water crops, which can have devastating effects on water levels and the species that rely on streams for survival--especially during dry summers and drought years (Carah et al., 2015; Bauer et al., 2015). Producers can use great amounts of potent pesticides, fungicides, herbicides, and rodenticides. In Northern California, for example, rodenticide used on pot has entered the food chain, killing *Pekania pennanti* (Pacific fisher), a candidate for the Federal Endangered Species List (Thompson et al., 2014, p. 92). Investigators have also found off-grid diesel fuel generators (to provide power for marijuana grow operations) deep in forests and next to rivers where drips and spills pollute the watershed (O'Hare et al., 2013, p. 19; Gurnon, 2005). Finally, illicit growers have been caught poaching wildlife in protected areas (Carah et al., 2015, p. 2).

Legalization and the environment

Legalization has the potential to improve marijuana's impact on the environment in several ways. First, it allows the state to set standards and enforce compliance. Second, it allows the state and other actors to fund research on sustainable production, offer agricultural extension services, and provide educational materials to the public. Third, it allows any actor to create voluntary standards and offer incentives for meeting them. And fourth, tax revenue can be generated and used to mitigate industry-related damages (on all of these, see Mills, 2012, p. 66; O'Hare et al., 2013, p. 3; & Cahar et al., 2015, p. 6). In Oregon, for example, cannabis growers and processors are subject to regulations regarding odor, emission of volatile organic compounds, burning waste, composting, solid waste storage, hazardous waste management, wastewater discharge, and overall water usage ("Business Readiness," 2016, p. 23-28). Additionally, marijuana must be tested for pesticide residue before it is put on the shelf, a policy to both protect consumer health and the environment (ODA, n.d.).

Despite its potential, legalization does not *ensure* regulatory oversight. In January 2016, several marijuana samples were shown to contain abamectin, a chemical that can cause birth defects and reduce male fertility if consumed in excess amounts (California Environmental Protection Agency, 1993). It was traced to "Guardian Mite Spray," which the Oregon Department of Agriculture had approved as a pesticide for cannabis crops, and many growers believed to be organic (Crombie, 2016). Incidents like these raise concerns about regulation of a recently illicit crop, and open up discussions about enforcement (Crombie, 2106).

Ethical consumption in other recreational drugs in the United States

For the past two decades, supply and demand of ethically produced wine, beer, spirits, and tobacco has increased in the United States. Organic wine labeling originated in the 1980s when small farms inspired by the organic movement began producing wine without sulphur dioxide. After 1990, when Congress passed the National Organic Foods Act in 1990, many larger wineries began adopted such practices (Fisher, 1991). Today there are many environmental labels for wine, including the California Certified Organic Farmers, USDA Organic, and the Lodi Rules for Sustainable Winegrowing. Sixteen percent of American wine consumers report that they look for sustainability labels (Thach, 2015). The rise of organic beer and spirits can be traced to the 1997 USDA National Organic Program, which created standards for the beverages' ingredients. Today, organic beer makes up 11% of the market share and is a $9.6 billion dollar industry continuing to grow (Morris, 2015). Sales increased 20.7% from 2013 to 2014 (Morris, 2015) and production rose 16% from 2014 to 2015 (Rotunno, 2015). In 2015, the National Restaurant Association identified "micro-distilled and artisan spirits" as the most frequently cited bar trend among America's chefs (Sciacca, 2015). Other sources confirm that demand for organic spirits, such as vodka distilled from organic grain or brandy from organic grapes has started to grow (Sciacca, 2015; Clarke, 2011). Finally, the US tobacco market has also seen an uptick in demand for its more environmentally conscious products. In 1991, the Santa Fe Natural Tobacco Company became the first producer of 100% additive-free natural tobacco cigarettes. Today, organic tobacco commands twice the price of conventional and domestic sales have increased ten percent annually over the past decade ("Organic…Tobacco?," 2011). Across wine, beer, spirits, and tobacco, demand for environmentally oriented products is growing strong.

III. Theoretical Framework

This paper examines evidence of political consumerism and environmental social movements in the context of an emerging industry. Because "social movement scholars… rarely devote their attention to how movements affect industry development" (Vasi, 2009, p. 315), "very little research exists on social movements' influence on emerging industries" (Vasi, 2009, p. 318; see also Fligstein, 1996). This study aims to contribute toward filling that gap. This section lays out the theoretical framework that will be used to analyze data from the case, in four parts: 1) define the phenomenon; 2) describe actors and activities as viewed from a political opportunities and mobilizing structures lens; 3) examine the frames actors are deploying in their mobilization efforts; 4) consider how the dissemination of information, opportunities, and products may be unevenly distributed to consumers of varied socio-economic statuses.

Defining the phenomenon

First, this study aims to situate activities in the nascent recreational marijuana industry in relation to other activities in other industries by determining whether they can be considered political consumerism, a social movement, and/or a lifestyle movement. Is there evidence of a political consumption movement-- a specific multi-organizational field in which different social movement organizations constitute a movement industry (Dubuisson-Quellier, 2015, 404)? Such a movement would facilitate political consumerism, defined as "actions by people who make choices among producers and products with the goal of changing objectionable institutional or market practices. Their choices are based on attitudes and values regarding issues of justice, fairness, or non-economic issues that concern personal and family well-being and ethical or political assessment of favourable and unfavourable business and government practice. Political consumers are the people who engage in such choice situations. They may act individually or collectively. Their market choices reflect an understanding of material products as embedded in a complex social and normative contest" (Micheletti, 2003, p. 2-3).

Next, is there a social movement around ethical pot? Or, are more broadly defined social movements, such as the environmental movement, involved in the marijuana industry? This project follows the multi-institutional politics approach to social movements, which argues that "politics" relates to not only the state but also to other sites of power within society (Armstrong & Bernstein, 2008). Thus I refrain from "making assumptions about which institutions will be most important, their logics, and the ways they are interconnected collected" (Armstrong & Bernstein, 2008, p. 82). This paper takes the position that movements may have many targets, including but not limited to the state (e.g., Cordner & Brown, 2015). I follow Snow's (2004) definition of social movements as "collectivities acting with some degree of organization and continuity outside of institutional or organizational channels for the purpose of challenging or defending extant authority, whether it is institutionally or culturally based, in the group, organization, society, culture, or world order of which they are a part" (p. 11). While actors do not necessarily need to be engaged in collective action (e.g., Della Porta & Diani, 2006, p. 20), they must be working collectively to some extent.

More specifically, have sustainable community movement organizations (SCMOs) formed? SCMOs are defined as "social movement organisations that have the peculiarity of mobilising citizens primarily via their purchasing power and for which the main 'battlefield' is represented by the market where SCMOs' members are politically concerned consumers" (Forno & Graziano, 2014, p. 142). "Unlike other social movements, these SCMOs do not place at the centre of their repertoire predominantly contentious forms of actions but rather organised actions and networks aimed at supporting different forms of consumption" (Forno & Graziano, 2014, p. 148). Finally, this study looks for evidence of lifestyle movements, which have three defining features: lifestyle choices are identified as tactics for social change, personal identity work plays a central role, and activities take on a diffuse organizing structure (Haenfler et al., 2012). These categories are not mutually exclusive. As has been shown in other studies, activities may be mapped on a venn diagram in which political consumerism and a social movement overlap (e.g., Bossy, 2014, p. 183 on the global justice movement, political consumerism, and the ecological movement).

Describing actors, targets, and strategies

What organizational forms, targets, and mobilization tactics would we expect to find in this emergent sector? This section draws on extant literature to develop a list of eight hypotheses about a new sector. First, which types of actors would we expect to be involved in an ethical marijuana movement? Forno and Ceccarini (2006) found that traditional, institutionalized actors such as church parishes and leftist organizations were able to aid in the promotion of alternative consumption, saving, and travel activities in Italy (p. 202). *H1: Traditional,*

institutionalized actors such as neighborhood associations, environmental advocacy groups, organic certifiers, and fair trade organizations will be involved in advocacy efforts. Forno and Graziano (2014) found that the 'core activists' (or local initiators) of the Global Justice Movement had also been active in movement organisations such as Via Campesina, Peoples' Global Action, Jubilee 2000, Friends of the Earth, Focus on the Global South, and Third World Network (151). *H2: Core ethical pot activists will have experience in agricultural justice and/or environmental activism.* The organizations that form to carry out an initiatives work are social movement organizations (SMOs). SMOs contribute to industry development by shaping entrepreneurs' perceptions of opportunities, influencing supply chain actors, and influencing adoption and implementation of public policies. The stronger these organizations, the greater impact they may have on policy makers' decision making (Vasi, 2009, p. 317). SMOs have formed in new and emerging sectors, such as wind energy (Vasi, 2009), (Lounsbury et al., 2003), and renewable energy (Sine & Lee, 2009). *H3: New SMOs will form for the purpose of facilitating the ethical sourcing of marijuana.*

Advocacy efforts differ not only in their composition but also in which targets they choose and which repertoires of action they use (Walker et al., 2008). How would we expect pot activists to choose between lobbying the state for regulatory reforms versus campaigning for consumers to 'vote with their dollar' to incentivize change among industry actors? The political opportunity structure literature argues that political opportunities offered by the state shape social movements (Tarrow, 1998). When citizens have a sense of confidence in state input and output structures, they are more likely to target the state. Conversely, when activists are more skeptical about input structure they are less likely to target the state (De Moor et al., 2013). Input structures refer to how the government takes citizens' demands into account, while output structures refer to its ability to translate those claims into efficient public policies (Kriesi, 2004). In this perspective, political consumerism emerges when state institutions are not meeting consumers' demands, when collective action for change is difficult, or when political parties' capacities to engage citizens decline (Forno & Graziano, 2006; 2014, p.145). Conversely, when demands are readily channelled and implemented through traditional interest mediation channels, we would expect that mobilization 'from below' may remain confined to a small group of activists (Forno & Graziano, 2014, p. 149; Kriesi et al., 1995). *H4: If ethical pot advocates believe the state will successfully regulate, they may initiate political consumerism activities and growth may not extend beyond a small group of activists.*

Identifying frames and paradoxes

Framing processes explain how individuals become involved in collective action (Benford & Snow, 1992; Snow et al., 1986) and impact how groups mobilize (Laamanen et al., 2015). Framing makes social arrangements that are "ordinarily perceived as just and immutable must come to seem both unjust and mutable" (Piven & Cloward, 1977, p. 12) and are necessary components of mobilization (McAdam, 1982; Gamson et al., 1982). When a social movement organization's programs, values, or causes do not resonate with conventional or extant frames, advocates may need to nurture new values, jettison old understandings, and reframe erroneous beliefs (Snow et al., 1986, p. 473), in a process called "frame bridging" (Snow et al., 1986, p. 468). Frame-bridging can also bring multiple issues together in an effort to influence broader discourse-- such as anti-GMO and seed saving advocacy (Andersen Huey, 2005). *H5: Ethical pot advocates will frame conventionally produced marijuana as socially unjust and environmentally damaging and inform consumers about preferred production practices.*

One strand of framing research focuses on socio-nature, which asserts that social relations are inherently ecological and that ecological relations are inherently social. It argues that the political construction of socio-nature shapes how people interact with nature and thus shapes environmental outcomes (e.g., Alkon, 2013 on local organic food discourse). For example, the food justice frame helps activists/policy makers understand institutionalized nature of denied access to healthy food (Alkon & Norgaard, 2009). Research in this area demonstrates how socially constructed notions of "the natural" have various material and environmental effects. In the context of agriculture on the west coast of the United States, Alkon (2013) shows that local organic food discourse focuses on farm owners but marginalizes issues around hired laborers. In the same context, Harrison (2008) argues that the alternative food movement's frames have focused on consumer safety, not worker health, effectively marginalizing farm workers from mobilization efforts. Similarly, Allen (2010) draws on findings from Europe, Canada, and the United States to argue that local food frames can mask issues of power, equity, and justice (Allen, 2010). *H6: Ethical pot advocates will focus their frames around local food, small farmers, and organic farming practices while ignoring labor issues.*

Extant studies show that an industry's reputation can constrain framing options. Hook (1996), for example, shows how the chemical industry's reputation as deceptive and untrustworthy made its claims of ethical practice uncredible. Similarly, paradoxes may create special constraints to framing. A paradox "concerns the idea that two

opposite conditions of the same situation exist simultaneously" (Quine, 1966). For example, an ethical product may be offered by an unethical retailer, or presented in wasteful packaging (Moruzzi & Sirieix, 2015, p. 527). *H7: Marijuana's reputation as a "natural" substance and/or its stigma as "counter-culture" or "criminal" will present unique constraints to framing.*

Considering who consumes

Who participates in ethical consumerism? This study focuses on supply side explanations: Who is invited to cognitively pursue not only their economic/rational interests but also their broader human interests in the marketplace (McShane & Sabadoz, 2015, p. 548)? Supply-side explanations show how product availability and retail structure matter (Clarke et al., 2002; Thogurson, 2010). Likewise, *who* is targeted by information and marketing campaigns impacts who participates. Consumers who are educated about ethical shopping are more aware of and equipped to take advantage of choices than those who are not informed (Harrison et al., 2006; Brennan & Coppack, 2008). Findings in this area show that marketing and product availability disproportionately target privileged groups over traditionally marginalized groups (Sage, 2014, p. 256). For example, research on the West Coast of the United States shows a greater supply of ethical consumer opportunities for those with White privilege (Alkon & Norgaard, 2009). Likewise, across 18 European countries, Koos (2012) found that fragmented retailing structures (such as corner stores and market stalls offering a very limited range of products) increase citizens' transaction costs, creating constraints on the opportunity to engage in political consumerism (p.52). Finally, Forno (2015) finds in a study of Palermo, Italy, that businesses engaged in a particular political consumerism campaign were concentrated in the wealthiest and most tourist-oriented areas of the city center (Forno, 2015, p. 542). She notes that this finding "confirms that those who live in more marginal areas and have fewer resources (both cultural and/or economic) are less likely to be drawn into political consumerist struggles, either as consumers or as entrepreneurs" (Forno, 2015, p. 542). Uneven ethical consumerism not only limits progress toward a mass consumer movement but also may reify other socio-economic boundaries (Baumann, Engman, & Johnston, 2015, p. 419). *H8: Ethically sourced marijuana and quality information about ethical pot will be more prevalent in wealthier, Whiter, and more educated neighborhoods.*

Theoretical Framework

A review of the literature on social movements and ethical consumerism generate eight expectations for the case of ethical marijuana in Portland:

1. Traditional, institutionalized actors such as neighborhood associations, environmental advocacy groups, organic certifiers, and fair trade organizations will be involved in advocacy efforts.
2. Core ethical pot activists will have experience in agricultural justice and/or environmental activism.
3. New SMOs will form for the purpose of facilitating the ethical production and/or consumption of marijuana.
4. If ethical pot advocates believe the state will successfully regulate, they may initiate political consumerism activities and growth may not extend beyond a small group of activists.
5. Ethical pot advocates will frame conventionally produced marijuana as socially unjust and environmentally damaging and inform consumers about preferred production practices.
6. Ethical pot advocates will focus their frames around local food, small farmers, and organic farming practices while ignoring labor issues.
7. Marijuana's reputation as a "natural" substance and/or its stigma as "counter-culture" or "criminal" will present unique constraints to framing.
8. Ethically sourced marijuana and quality information about ethical pot will be more prevalent in wealthier, Whiter, and more educated neighborhoods.

IV. Methods

This study employs three distinct methods: 1) internet research, review of periodicals, networking, and semi-structured interviews; 2) structured visits to a random sample of dispensaries selling recreational marijuana; and 3) spatial analysis using publicly available demographic information.

Semi-structured interviews

I used several methods to gather basic information on the ethical marijuana movement and generate a list of potential interviewees. To identify the organizations/networks/coalitions involved with legalization advocacy, I

searched for various combinations of the terms cannabis, environmental, advocacy, groups, Oregon, energy, measure 91, pesticides, and production on the following sites: Google, the Oregonian (the local newspaper), and Lexis Nexis (for major US newspapers). These searches collectively identified five different organizations. To identify industry actors using ethical, fair, or organic in their title, I also reviewed the Oregon Leaf Magazine (March 2016), the Oregon Cannabis Connection (Feb/March 2016), and The Potlander (2015) Magazine. These searches yielded about a dozen businesses. To learn about and network within the industry, I attended several events, including a two-day business conference, women's networking events, and OLCC meetings.

I contacted the organizations, individuals, and businesses identified through the activities described above. Before each interview, I read the information available on each interviewee's website. The interviewees are described in Appendix A. I conducted semi-structured interviews (over the phone, in person, and by email). Notes were taken during the interview. While the content of these activities was highly context-specific, each interaction aimed to uncover information about these three topics:

1) Describing the landscape: Which tools of ethical consumption are environmentalists employing to promote earth-friendly pot? Who is doing the organizing? How widely available are ethical products or opportunities for ethical consumerism? How strong are the standards? Are these the same groups involved in the fight for legalization?
2) Explaining mobilization and frames: Do you trust that the government is listening? Do you believe that government policies can create environmentally and socially responsible pot? How has pot's stigma as "seedy" created challenges to creating environmentally friendly product? How has pot's reputation as "natural" and "from the earth" created opportunities/challenges?
3) Considering consumer composition: Where do you make products available? Or think they will be available? Why not try to market to low end consumers?

Collectively, these data provided an overview of Portland's ethical pot sector. Thirty-three pages of field notes were coded using numbers 0-8. Zero marked data that might help to define the phenomenon, while 1-8 correspond with the eight hypotheses developed through the theoretical framework.

Structured dispensary visits

To understand the experience of ethically oriented consumers of legal recreational marijuana, my three research assistants and I visited a random sample of half of the dispensaries selling recreational marijuana in Portland. We focused on the information provided by the customer service staff, or "budtenders" because of the key role they play in educating consumers about marijuana. As the keynote speaker at a cannabis business conference asserted, "There's so much power that budtenders have. If they like a product, it flies off the shelf." The list of all (130) dispensaries was obtained from the Oregon Liquor Control Commission (OLCC) website on 26 February 2016. The RANDBETWEEN Excel function was used to select the random sample of 65 dispensaries. The data collection protocol was tested and revised at three dispensaries not included in the random sample. Our team visited each of the dispensaries in pairs. At each dispensary we pretended to be ethical consumers. We asked the "budtenders" (the term for consumer service in dispensaries) four questions:

1) Do you have any "environmentally friendly and socially responsible pot" -- something that is "similar to organic and fair trade"?
2) (If there is something available or if something is available at other dispensaries), What makes it more socially or environmentally responsible than conventional products?
3) Why isn't it easier to find ethical pot in Portland?
4) Do people often come into this dispensary asking for ethical pot?

We asked open ended questions instead of "leading" questions; did not ask about price; did not discuss our knowledge or opinions, and did not state that we were conducting a study. Immediately after each visit (in the car) we each independently recorded the responses to these questions and noted whether the aesthetic was high-end (like a fine restaurant), low-end (similar to a cheap bodega), or mid-range (akin to a diner) (for more details on coding, see Appendix B). We then compared and combined our answers in the overall dispensary visit data spreadsheet. To analyze these data, I used open and closed codes. Closed coding is a deductive process in which data are categorized on the basis of theoretical concepts while open coding refers to an inductive process where data are coded on the basis of insights from the analysis itself (Lichterman, 2002). The codes are summarized and examples from the field notes are provided in Appendix B. Two researchers independently coded the data from each visit: myself and one of

the assistants who did not participate in that particular visit. We compared codes and reached reasoned agreements where there were inconsistencies. The codes were revised and a third team of researchers (who had not participated in the data collection) then coded the data a final time. Both qualitative and quantitative methods were used to analyze the data, as discussed in the findings section.

Spatial analysis

Spatial analysis was used to compare the availability of ethical marijuana products and information to the socio-economic composition of the neighborhoods in which dispensaries were located. The socio-economic indicators were education (percent of residents with bachelor's degree or higher), wealth (median home value), ethnicity (percent White), and income (median household income). Data were obtained from the US Census Bureau 2010-2014 American Community Survey 5-Year estimates. Availability of products was coded as 0 or 1 for whether or not Clean Green Certified marijuana was available. Quality of information was coded as A, B, or C, as described in Appendix B. QGIS software was used to plot the color coded dispensary data onto maps of each socio-economic indicator. Additionally, each dispensary's address was buffered by 0.1 miles, and the address buffer was joined to block groups to assign each dispensary the mean value of each socioeconomic variable for its surrounding block groups. These values, combined with dispensary visit data, could be analyzed using statistical methods to further understand the relationships between variables.

V. Findings

This section draws on the multiple sources of data and methods of data analysis described above to examine environmental advocacy and political consumerism in the recreational marijuana sector in Portland, Oregon. First, I describe the landscape of actors, supply and demand for products, and consumer experience. Second, I compare the findings to the eight expectations discussed in the theoretical framework. The following section discusses these findings and offers some conclusions about consumerism and movements in emerging sectors.

Major environmental organizations (e.g., Sierra Club, Audubon Society, or Greenpeace) and political consumerism actors (e.g., Fair Trade USA, the Domestic Fair Trade Association, and Fair World Project) are not involved in efforts to make Portland's recreational marijuana industry more sustainable. Only one NGO, the Oregon Sungrown Growers' Guild, has been formed with this objective. Two for-profit private certifications, currently run by their founders, are available, and of the many businesses that use ethical branding to differentiate themselves, several discuss interest in creating new labeling schemes. Although an industry association hosted an event on organic farming, and a local media outlet partnered with a marijuana business to sponsor a quality competition for eco cannabis bud, there are no multi-stakeholder organizations taking leadership in facilitating environmental weed.

Despite a lack of organized efforts or information, there is supply and demand of eco pot. Twenty eight percent of the 64 dispensaries we visited said customers asked about ethical products frequently, 53% said occasionally a consumer would inquire, and 19% told us that we were the first to ask for environmentally friendly marijuana. When asked why ethical marijuana was not more prevalent in Portland 38% said (sometimes among several reasons) that it was because the industry is still so new--suggesting the ethical pot sector would grow--while only 23% of budtenders related availability to issues around customer demand, such as apathy or unwillingness to pay more. On the supply side, 55 (86%) were willing to sell us environmentally-friendly recreational marijuana, six (9%) said that they did not sell any, but thought we would have luck finding eco pot at other Portland dispensaries, and only three (5%) felt such a product was not on the market. Where "ethical" pot was available, Budtenders explained that their product was "environmentally friendly" because they know and trust the growers (51%); it is pesticide tested (20%); it is Clean Green certified (18%); it is certified, in a vague sense (9%); s/he or the dispensary owner grew it themselves (13%); a government entity was involved in regulating it (9%); it is sun grown (7%); it is naturally environmentally friendly (4%); or they didn't know (11%). (Some budtenders gave several answers, so the total is over 100%). Where "ethical" pot was available, seven percent noted that it was locally grown (note: all licit marijuana must be grown in-state) and 11% argued that it was fair or socially responsible in some way. Spatial analysis showed that we were equally likely to be offered Clean Green Certified products in more and less privileged neighborhoods.

How do consumers learn about opportunities for advocacy and ethical consumption? Consumer-facing information was limited to a few advertisements in free marijuana magazines and posters in dispensaries. Today, budtenders are a primary source of information for consumers. Thus, we evaluated the quality of the information

provided by each dispensary's budtender based on our own understanding of the ethical recreational marijuana sector. Each dispensary was given a letter grade for quality of information. Of all 64 dispensaries we visited, 19% earned an "A" (most to all accurate information, knowledgable staff, know/mention certifications, can identify the environmental issues in marijuana production); 48% earned a "B" (some inaccuracies, unaware of certifications, understand some environmental issues); and 33% earned a "C" (no information, mostly false information, denial that certifications exist, claims that USDA standards apply, or cannot be both ethically produced and high quality). Spatial analysis showed that we were equally likely to receive accurate information in more and less privileged neighborhoods.

How do activities in the recreational marijuana sector compare to instances of political consumerism, environmental movements, sustainable community movements, or lifestyle movements? Table 2 presents findings in italicized text. I find that this is a case of a nascent political consumption movement, that will become a fully developed movement when additional organizations are created to facilitate environmentally oriented consumerism. Ethical pot activism is distinct from sustainable community movements because there are few consumer-facing mobilization efforts (despite the availability of products) and because actors continue to see the state as a central 'battlefield' for activism. Environmental weed activism is also distinct from a lifestyle movement in that there is no evidence of identity work or discussion of how personal choices aggregate to a societal level. In the following section, I compare the political consumer movement in ethical pot to the eight theoretically derived expectations for such movements.

Table 2. Defining the landscape of activities around ethical marijuana in Portland, Oregon

	Tactic and Objective	**Attitudes and values**	**Organizational forms**
Political consumption movement	Consumption choices as a way of changing objectionable institutional/market practices	Attitudes/values based on justice, fairness, wellbeing	May act individually or collectively; there are multiple social movement organizations
	Yes, consumers are demanding ethical products, even though all products are pesticide-tested for consumer safety.	*Yes, this describes the industry actors who are aiming to produce eco marijuana.*	*Somewhat: two certifications, several businesses, an industry NGO, and event sponsored by a business association and/or single business.*
Environmental movement	Collectivities aiming to challenge or defend extant authority	Members share distinctive collective identity	Some degree of organization and continuity outside of institutional channels
	Somewhat, several labels aim to increase standards, but they are individuals, not collectivities.	*Somewhat, a community is beginning to form, individuals are aware of each other.*	*Somewhat, two certifications, several businesses, an industry NGO, and event sponsored by a business association and/or single business.*
Sustainable community movement	Mobilize citizens to use purchasing power	The market is the main 'battlefield'	Organizations that target politically concerned consumers
	No, there are no consumer-facing campaigns.	*No, the state is also the target of activism.*	*No, there are no consumer-facing campaigns.*
Lifestyle movement	Lifestyle choices as tactics for more widespread social/environmental change	Personal identity work plays central role	Diffuse organizing structure
	Somewhat. Although people do not talk about the connections between individual action and community-level change, it is implied.	*Maybe, for some growers this is an expression of who they are.*	*Yes, there are no dominant organizing actors.*

1. Traditional, institutionalized actors such as environmental advocacy groups, organic certifiers, and fair trade organizations will be involved in advocacy efforts. Major environmental social movement groups, organic certifiers, and fair trade organizations *play very little role* in the ethical marijuana sector. One legalization advocate explained that national-level environmental organizations have not been involved in legalization advocacy or post-legalization lobbying because working with a federally illicit drug would inhibit donors, a phenomenon s/he referred to as "cannabis bigotry." The explanations for an absence of organic and fair trade organizations were diverse. One eco-cannabis advocate noted that outreach to a fair trade standards-setting organization had been unsuccessful. Two (different) national-level fair trade advocacy organizations said that they would be very interested in participating in and promoting a fair trade certification system for recreational marijuana, but had not been contacted. An organic certifier noted that although they "get asked an awful lot about [certifying marijuana]" and "the explosion of activity over the last year or two has been unreal," they were not involved in cannabis labeling as it could jeopardize their accreditation to certify the USDA organic standard. One exception is Energy Trust of Oregon, an NGO dedicated to providing utility customers with low-cost, clean energy solutions through outreach, technical services, cash-back incentives, and connections to local contractors, which offers licensed growers technical services and cash incentives for the installation of energy-efficient equipment at new and existing grow facilities (Energy Trust of Oregon, n.d.).

2. Core ethical pot activists will have experience in agricultural justice and/or environmental activism. The individuals who are growing, processing, testing, and selling ethical marijuana or planning educational events *do not* have extensive background experience in agricultural justice or environmental advocacy. They primarily come from the cannabis industry. Some have experience in environmentally friendly methods, such as integrated pest management or biodynamic vegetable farming. Both of the individuals who have started certification programs have backgrounds in organic agriculture certification (among other professional endeavors).

3. New SMOs will form for the purpose of facilitating the ethical production and/or consumption of marijuana. Although there are no NGOs, networks, or other collectives formed for the purpose of facilitating the ethical production and consumption of recreational marijuana in Portland, there are several new private sector entities with this objective in Portland. The most widely recognized in Portland is Clean Green (although it was developed in California for the medicinal market and now certifies recreational in states where it is legal). A quarter of the dispensaries surveyed (16 of 64) and almost every organization or business interviewed mentioned the Clean Green Certification, and 17% of dispensaries (11/64) offered to sell us Clean Green Certified pot. The company's founder both sets standards and hires auditors to inspect marijuana farms. S/he describes the standards of production as being very close to USDA, with his/her own standards for energy, water, and labor added on. A second voluntary label on the market is Certified Kind. While none of the dispensaries mentioned it, several people in the industry were aware of it. Similar to Clean Green, the founder borrows from IFOAM organic standards and adds on standards for energy and social justice. Several interviewees mentioned the Oregon Sun Growers' Guild, which is an NGO but maintains a mission around sustainable medicinal--not recreational-- marijuana. None of the dispensaries mentioned this group, though five (of 64, so about 8%) noted that sun grown marijuana was more environmentally-friendly than pot grown under lights. One grower who created his/her own product label based on eco dynamic, no till, non-GMO, and USDA standards said that while currently it is a "way for us to speak the language of labels to try to distinguish ourselves and communicate what we do [to produce marijuana in a sustainable way]." In the future s/he may turn it into a "third party certification so other farms can use it." Despite ethical marijuana's lack of organizing structure, one grower asserted that s/he felt part of a broader community of eco pot growers--in large part due to social media. S/he noted that "little pockets of eco-activism are being created" within the industry in a "culture revolution."

4. If ethical pot advocates believe the state will successfully regulate, they may initiate political consumerism activities and growth may not extend beyond a small group of activists. Many people believed that the state was doing a good job of creating regulations and that the USDA would implement organic certification when all states legalized. This may account for slow growth in the SMO sector, but evidence is insufficient to make that causal claim. Without exception, interviewees and speakers at events argued that Oregon is doing a better job of regulating recreational marijuana than Washington or Colorado (the two other states where it is legalized). "Oregon has the best chance of coming up with the best regulations," said one legalization advocate. "Oregon is doing a better job [and we have] big hopes for what's going to happen down here," said an industry equipment company CEO. Around environmental regulations, many were impressed with the state's pesticide standards, said the state was moving in a

"positive direction," and expressed hope that the state would begin issuing tax credits and otherwise incentivising environmentally friendly growing processes. Several people made the case that greenwashing was occurring in the industry and that false claims would be minimized if the USDA developed an organic cannabis standard. As one activist explained, the "bullshit claims" about organic production would "die off" once all states legalized recreational marijuana and the "real" [USDA] certification could apply. Of the 64 dispensaries we visited, 14 (22%) said that ethical marijuana was not more widely available because the local, state, or federal government had not yet facilitated such efforts, and five (8%) claimed that the products they were selling were certified as environmentally friendly by a government body.

5. Ethical pot advocates will frame conventionally produced marijuana as socially unjust and environmentally damaging and inform consumers about preferred production practices. There were no educational materials, conversations, campaigns, or organizations formed or disseminated to communicate the message that conventional marijuana is harmful to the environment.

6. Ethical pot advocates will focus their frames around local food, small farmers, and organic farming practices while ignoring labor issues. Recreational marijuana budtenders responded to our request for "socially responsible" or "fair trade" pot by discussing their products' local and small farm origins. Seven of the 64 dispensaries reminded us that all of the marijuana sold legally in Oregon must be grown within the state. Of those seven, three noted that *because* of its local origins, it can be considered "fair trade." Additionally, two dispensaries shared that their ethically sourced marijuana comes from small farms. One budtender mentioned that workers who trim the plant make very little, but there were no further conversations about labor issues in cannabis production. However, both of the certifications (Clean Green and Kind) have a social justice component that acknowledge labor problems and express a desire to address them. Clean Green expects a minimum wage, gender-separate sleeping quarters, and personal hygiene facilities. Certified Kind expects respect of indigenous land, employee health and safety, written terms of employment, and other basic rights. The auditing procedures are not entirely transparent for either company, and it was not clear in interviews with the founders that the rigor of audits against labor standards could be compared to those of the Fairtrade label. The Clean Green founder said that the labor standard was not well received by the cannabis production community. In his words:

> "15% of the growers left the room--they said *who are you to tell us how to treat [migrant laborers]?* Well, [I said], that's our label and that's what you have to do to get it. I said, *Fuck you, go away. White hippies*. It's like blood diamonds--you don't know if it's been grown with slave labor if all you do is take it in for pesticide testing."

Local, small farmer frames were clearly dominant, compared to agricultural justice frames.

7. Marijuana's reputation as a "natural" substance and/or its stigma as "counter-culture" or "criminal" will present unique constraints to framing. Pot's reputation as a "naturally" occurring drug and consumers' difficulty applying lessons from the agri-food sector to marijuana may create challenges to ethical consumerism in marijuana. Six budtenders said that people assume that marijuana is always produced in an environmentally-friendly manner because it is a natural substance, the people who grow it subscribe to a culture of environmentalism, or because it can be used as a medicine. For example, one argued, "marijuana is pretty natural so I don't think people just assume it's grown with pesticides." Another said that growing organically "was just part of the culture naturally." Additionally, three budtenders argued or illustrated that people have trouble applying lessons from the agri-food sector to marijuana. Each gave a different reason: because it is difficult to apply lessons about what one eats to what one smokes; because the food and cannabis industries are qualitatively different; and because people are just getting used to the legal sector (and they didn't think about organics when they had to buy it on the black market). For example, one budtender said, "'It's a different industry than food… it's just a plant."In total, the responses of 9 of 64 budtenders (14%) suggest that pot's reputation as "naturally" occurring and immune from the widely recognized problems associated with food production may be a barrier to ethical consumerism.

Marijuana's other prominent stigma, as "counter-culture" or "criminal," has a mixed effect on collaboration with traditional social movement groups. As one extremely environmentally focused grower argued, "People still don't believe that intelligent, responsible people are growing and buying it." Likewise, one person involved with cannabis certification argued that fair trade labeling organizations would likely not become involved until cannabis is more widely or federally legalized. On the other hand, the Energy Trust of Oregon created an energy saving

incentive program specifically for cannabis growers, and a representative of a prominent American fair trade association argued that the American fair trade movement has been very understanding about hemp, the industrial cannabis varieties used to produce fibers, oil, and seed. Many disagree with stigmas standing in the way of hemp production, and claim that they would be very interested in collaborating with advocates of a fair trade standard for marijuana.

For ethical consumers, the drug's actual history of being illicit (as opposed to the current stigma) presents challenges to developing a movement of ethical consumption. Two budtenders noted that pot consumers are accustomed to "just getting what they can"--referring to the struggle to secure pot on the black market. Consumers are not accustomed to choice and information. Said another budtender, "[organic pot] is something I never would have thought about until… it became legal." Whether old habits (of being grateful to obtain weed and not asking nuanced questions about its origin) will inhibit ethical consumerism into the future remains to be seen. As a legalization advocate and two budtenders pointed out, ethical pot may be a lot like Portland's vegan strip club--paradoxically seedy and wholesome, yet embraced in the local marketplace.

8. Ethically sourced marijuana and quality information about ethical pot will be more prevalent in wealthier, Whiter, and more educated neighborhoods. At some dispensaries, we were informed that more dispensaries do not have ethical marijuana because its demand is limited to a specific demographic, that not everyone is willing to pay more for it, and/or that not everyone cares. Ten dispensaries (16%) reported that a barrier to growth of the environmentally friendly sector was consumers' willingness to pay, and/or noted that some but not all demographic groups seek ethically-sourced products. For example, "Our customers are looking for high quality products on a budget" and "you might have better luck in a yuppie neighborhood where people are more body conscious… the kind of neighborhood with high income can support something like that." Additionally, four budtenders (6%) argued that, in general, people don't really care about the ethics of how their marijuana is sourced. As one budtender explained, "I think for the most part there's basically just a large portion of the general public that doesn't really give a shit." However, spatial analysis shows that one is just as likely to find Clean Green Certified marijuana in a less privileged neighborhood as in a neighborhood with more education, greater income, higher home prices, and a larger population. Similarly, dispensaries in neighborhoods with different socio-economic make up had the same likelihood of providing high or low quality information.

Table 2. Summary of Findings

	Hypothesis	**Finding**
1	Traditional, institutionalized actors such as neighborhood associations, environmental advocacy groups, organic certifiers, and fair trade organizations will be involved in advocacy efforts.	No, with one exception: Energy Trust of Oregon.
2	Core ethical pot activists will have experience in agricultural justice and/or environmental activism.	No, with one exception: industry experience in USDA Organic certification.
3	New SMOs will form for the purpose of facilitating the ethical production and/or consumption of marijuana.	No social/environmental NGOs; One industry NGO (Oregon Sun Growers' Guild); Two founder-led, for-profit labels; Several ethically-oriented businesses.
4	If ethical pot advocates believe the state will successfully regulate, they may initiate political consumerism activities and growth may not extend beyond a small group of activists.	Correlation found, causation not clear.
5	Ethical pot advocates will frame conventionally produced marijuana as socially unjust and environmentally damaging and inform consumers about preferred production practices.	No.
6	Ethical pot advocates will focus their frames around local food, small farmers, and organic farming practices while ignoring labor issues.	Yes. Labor issues are mentioned by certifiers but the rigor of auditing is unclear.

7	Marijuana's reputation as a "natural" substance and/or its stigma as "counter-culture" or "criminal" will present unique constraints to framing.	Yes, its reputation as "natural" may present challenges. Its stigma as "criminal" may impact collaborations with various groups in different ways. It's actual history of being illicit also presents challenges to ethical consumerism.
8	Ethically sourced marijuana and quality information about ethical pot will be more prevalent in wealthier, Whiter, and more educated neighborhoods.	No.

VI. Discussion

In Portland's emerging political consumer movement, the private sector influence far outweighs the presence of environmental or fair trade-oriented NGOs or multi-stakeholder organizations that provide a counterweight to for-profit interests. Research on other sectors with great industry influence suggests this may impede progress toward environmental and social goals. Examples of this challenge can be found in both state regulatory processes and in non-state standards setting. At the state level, industry actors may produce research, lobby, or assert expertise in order to relax standards. In the context of non-state certification programs, industry actors have advocated "watering down" standards (e.g., Jaffee, 2010; Jaffee and Howard, 2010) and/or created new labels with lower standards to compete with NGO-led initiatives (e.g., Cashore, Auld, & Newsom, 2006; Meidinger, 2011).

In addition to bolstering standards, SMO participation generates additional benefits to emerging sectors. SMOs have the potential to re-frame issues in ways that reflect the nuances of environmental and social problems. For example, as Alkon (2013) argues, local organic food discourses should be--but are not--asking *who* is producing *what* kind of food and to *whose* advantage (Alkon, 2013). When we asked dispensaries for "environmentally or socially responsible pot" and expressed interested in something "similar to Fairtrade or organic," only one dispensary discussed labor justice issues. It is possible that by inviting agricultural justice SMOs to participate in the creation of an ethical pot consumer movement, information concerning the issues at stake might be more widely disseminated and such conversations might become more robust.

Why is it the case that traditional social movement groups are not involved? Future research should further investigate the decision-making processes of environmental and political consumer groups working in other industries: What impedes participation in the cannabis sector? Particular attention should be paid to the two stigmas identified in this project: pot's reputation as being "naturally environmentally friendly" and the stigma of people who engage the industry as "criminal" or "seedy." How do these preconceived notions inhibit SMOs from participating in emerging industries? Research on this issue should also investigate the industry leaders: Why not reach out to groups that might be considered "experts" in ethical sourcing? When such groups refuse to participate, why not create a multi-stakeholder NGO instead of an individual-led business? By understanding the ways in which stigmas inhibit political consumerism in recreational marijuana, we might begin to understand the dearth of advocacy around other social and environmental problems.

In addition to movement-level questions, this study focuses on a particular aspect of political consumerism that is often marginalized in the literature: product availability and point of purchase information dissemination (see Koos, 2012). Theories of social movements and political consumerism more typically focus on how movement actors organize (Bossy, 2014), what motivates consumers (Gotlieb, 2015; Coelho, 2015; Bossy 2014), which societal level factors facilitate participation (Zhang, 2015), or the role of social media (Kwang & Kim, 2015). This study instead aims to "particularize power around consumption settings" (Dubuisson-Quellier 2015 402) by examining the interface between motivated consumers and their primary source of information (on studying the experiences of a typical conscientious consumer, see, Anderson Huey, 2005, esp. p.129). It was surprising to find that both low income and more affluent areas were equally likely to offer Clean Green certified marijuana and accurate information about cannabis production and the environment. Environmentally-oriented growers and processors said that the most important factors in deciding where to distribute their products are professionalism, compliance with the law, and belief that the dispensary will promote and sell their product (a particular concern if the grower's responsible practices increase the cost of production). By targeting responsible retailers, ethical marijuana producers are going against the traditional practice of catering to more affluent clientele. However, as Portland's legal marijuana industry develops, it is not clear that these determinants will continue to shape the

availability of ethical products. Furthermore, because 81% of dispensaries do not provide sufficient, accurate information, consumers who are reliant on dispensaries alone to learn about environmental justice issues in agriculture may be at a disadvantage.

This study has shortcomings. First, more interviews with environmental organizations and cannabis industry associations are needed to confirm that the relationships between such groups are as limited as the study currently finds. A starting point may be the Energy Trust of Oregon, the group offering energy efficiency incentives to cannabis producers, and the Organic Cannabis Association, the organization that hosted an event on organic gardening. Second, the study generated quantitative data on 64 dispensaries but failed to leverage the explanatory power of those data by employing statistical methods to interrogate the relationships between them. Further analysis might examine the relationship between consumer demand and neighborhood demographics, or explanations of what makes pot "environmentally friendly" and explanations for why "ethical weed" does not (yet) have deeper market penetration.

The legalization of recreational marijuana presents an opportunity for political consumers to pull the industry away from its legacy of energy consumption and environmental degradation. This study finds evidence of a nascent political consumer movement for ethical marijuana in Portland, Oregon. However, these efforts are constrained by an absence of traditional social movement actors, such as environmental NGOs, which may dilute standards or constrain framing processes. Marijuana's image as "naturally occurring" may inhibit environmentally-oriented actors' involvement, as may its stigma (or status, in some states and countries) as criminal. Surprisingly, the availability of ethical marijuana goes against the typical pattern of targeting more affluent and Whiter populations. However, the factors accounting for this distribution may erode as the industry develops. Scholars and activists knowledgeable about political consumerism in other sectors would have valuable insight for those working to bring environmentally friendly and socially responsible marijuana to the marketplace. It is my hope that this paper ignites that conversation.

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Appendix A. Summary of interviewees

	Description of interviewee
1	Ethical cannabis certification program
2	Cannabis marketing firm
3	Organic and fair trade advocacy organization
4	Organic and fair trade advocacy organization
5	Cannabis testing lab specializing in the organic market
6	Carbon neutral, wind powered cannabis grower
7	Cannabis legalization advocacy organization
8	Environmentally and socially responsible cannabis processor
9	Eco-dynamic, no-till, Clean Green certified cannabis producer
10	Clean Green certified cannabis producer and processor
11	Ethical cannabis certification program
12	Organic-focused dispensary selling Clean Green cannabis
13	Cannabis legalization advocacy organization
14	Organic and fair trade labeling and certification organization

Appendix B. Sample of dispensary visit data codes

1. Do you have environmentally friendly or socially responsible marijuana available for purchase?		
Code	***Description***	
AVAIL	Yes. We sell something more environmentally friendly or socially responsible.	
NHERE	No. However, you I know/believe you can purchase ethical pot at a different dispensary.	
NEXST	No. Such a thing does not exist, it is not possible, I've never thought about it before or heard of it	
2. If ethical pot is available at this dispensary or available in other dispensaries, what makes it "ethical"?		
Code	***Description***	***Example of budtender's response***
CLEAN	It is Clean Green Certified.	Everything with this sticker [clean green] means that they tested everything in the growing process…the soil, the water, etc.
CERT	It is certified, verified, or accredited by an entity that is not Clean Green or the state.	This farmer is getting the water certification.
GOV	The state, city, government, and/or USDA were involved in ensuring that it is ethical.	Oregon State law and the OLCC mandates that all legitimate dispensaries are organic.
TRUST	I know/trust the grower, processor, and/or distributor.	I really like both of these producers because we've worked with them for so long so I know their product really well and I know it's grown cleanly and without pesticides.
SELF	I grow (or this dispensary grows) the pot sold here, so I know first hand that it is ethical.	The only product we have that's labelled organic is the stuff we grow ourselves because then we know for sure that it is.
TEST	Some mention of test that isn't explicitly referencing the government required testing.	All of our stuff has been tested for pesticides and has to pass those tests to be sold.
NTRL	All pot is organic because it is from the earth, natural, a plant	That is just how the farmers grow it.
DONT	I do not have an explanation.	I am not really sure about the market in Portland.
LOCAL	It is ethical because it is locally produced.	Most of the weed in this shop is hyper local literally grown a few blocks away.
FAIR	It is fair because of good labor standards, it comes from small farmers, or is local.	I try to buy from farms with just a few producers, not like a big farm.
SUN	It is sun grown, greenhouse grown, outdoor	Grown just with sunlight.
3. Why is ethical marijuana not more prevalent in Portland?		
Code	***Description***	***Example of budtender's response***
NEW	The dispensary, legalization of recreational marijuana, their growers, or another aspect of the industry is still new, in progress, might be coming in future,and things have changed a lot since legalization.	There isn't more [organic product] because it is so new and people are just getting used to the industry.
FED	The government (local, fed, or state) has not been more involved, USDA cannot be involved, the government is doing (or not doing) something that is slowing the industry's capacity to supply ethical pot.	There's no federal standard so people can claim to be growing organic but it doesn't actually mean anything.

STGMA	People assume that marijuana does not impact the environment because it is natural and/or grown by eco-minded individuals. They are slow to apply knowledge of the agri-food sector to cannabis.	It's just part of the culture naturally, everyone in the business pretty much just grows organic anyways.
DEMG	Consumer demand is limited by willingness to pay more and/or is related to socio-demographic composition.	People just have to be willing to pay more because of all the steps that go into it.
COST	Supply is limited because ethical practices will increase costs to the grower, decrease the yield, decrease the quality, or otherwise burden suppliers.	It is more expensive to grow that way, yield is smaller.
APATHY	Consumers don't care if the pot they buy isn't ethical.	People are satisfied with just having their weed be pesticide free and cheap.
OTHER	Unrelated answer, it kind of depends, erroneous answer.	We... don't really have time to ask the farmers more about their product, I don't know.
4. Do consumers request environmentally friendly or fair trade pot?		
Code	***Description***	
FREQ	Yes, frequently, all the time, it is what we are known for, a lot, people are interested.	
SOME	It is unusual, once/twice, a few times, it has happened, occasionally, sometimes, people ask all sorts of things, once in a blue moon, not a big demand but it happens, I guess, every so often, not that frequently.	
NEVR	No, never, you are the first, not really, not our demographic, only for edibles, no one has asked about it.	
5. To what degree was the information accurate and comprehensive?		
Code	***Description***	
A	Mostly/all accurate information, knowledgable staff, know/mention certifications, can identify the environmental issues in marijuana production	
B	Some inaccuracies, unaware of certifications, understand some environmental issues	
C	No information, mostly false information, denial that certifications exist, claims that USDA standards apply, can't be ethical and quality	
6. What was the aesthetic of the dispensary?		
Code	***Description***	
HIGH	Reminds you of a farm-to-table restaurant, an Apple computer store, an expensive coffee shop. An interior design team may have been hired to create the space. This is the trendy, hot, new restaurant of dispensaries.	
MID	Reminds you of a nice record shop or head shop, a souvenir store in a kitschy tourist town, a doctor's office, or a hospital waiting room. Some investments were made in design/decor to make the space feel like a dispensary. This is the chain restaurant or local diner of dispensaries.	
LOW	Reminds you of a punk house, basement party, bodega, 7-11, garage sale, tanning salon, or seedy stip club. It is cheap and/or juvenile. Very few investments were made to convert the space from its former use. This is the fast food joint of dispensaries.	