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How the Grass Became Greener in the City: On Urban Imaginings and Practices of Sustainable Living in Sweden

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Abstract

Far removed from a direct connection to the land and environmental feedback, most urban inhabitants have little choice but to rely on external sources of information as they formulate their understanding of sustainability. This reliance on analytical, scientifically produced, and highly technical sources of information – such as life-cycle analyses, carbon footprints and climate change projections – solidifies definitions of sustainable living centered on technological resource efficiencies while concentrating the power to define sustainability with experts and the industrial and political elite. Drawing on 14 months of ethnographic field work in and around Stockholm, Sweden, this paper explores how urban alienation shapes ideas about sustainable living among ecologically concerned citizen-consumers and how the urban focus on efficiency has led many to argue that the grass is now greener in the city. Meanwhile this ethnographic research demonstrates that the efficiency-based perspectives so dominant in urban settings are contested by other Swedes who argue that sustainable living also depends on localized connections to the land and communal self-sufficiency. Despite these contrasting perspectives, research presented here suggests that these views are united in the Swedish context by a historically-rooted concern for global equity. As such, the concept of “a fair share of environmental space” resonates with many Swedes who are concerned about human and environmental health, regardless of where they live or how they define or practice sustainable living. [Sustainability, technology, knowledge construction, ecological modernization, power, Sweden]

Introduction

In the sixth century BC, Aesop wrote a now familiar tale of two mice, a country mouse and a city mouse. The city mouse went to visit his friend in the country and was appalled by the rural lifestyle, where mice had only grain to eat. Conditioned by the conveniences of the city, he encouraged his friend to return the visit and experience all the fine things urban life had to offer. The country mouse

obliged but, soon after his arrival in the city, was nearly killed when discovered by intolerant humans and hungry dogs. He quickly returned to the country with the retort, "better barley and oats in peace than cheese and figs in fear." Despite the centuries that have passed, the fable still has contemporary resonance. Where hazards are not hungry dogs and angry barkeeps, but rather traffic congestion, energy dependency, pollution, alienation and crime - urban life continues to present many dangers. Indeed since Aesop's time, some of humanity's biggest challenges have been associated with cities, from spreading epidemics and deadly water contamination to the destruction of surrounding landscapes and depletion of natural resources.

As urban populations and concerns about global sustainability grow, many have argued that booming cities present great risks for the future. The 2007 State of the World Report noted that cities are "the direct or indirect source of most of the world's resource destruction and pollution" (2007:ii). Despite this, millions of humans are drawn to cities each year by the promise of economic advancement and a better life. Lefebvre (1989) recognized this duality, describing the city as a space akin to a whirlpool, actively streaming together elements of both promise and oppression. Today, approximately half of all the world's citizens live in urban areas (UN 2007). Many, despite the challenges to sustainability posed by urbanization, have come to argue that with technological breakthroughs, compact living, progressive environmental policies and economies of scale, urban life is increasingly sustainable, perhaps even more sustainable than rural living. Armed with life cycle analyses, carbon calculators, and a whole cadre of scientific tools, these proponents of urban living argue cities have the potential to be the "fulcrum" of sustainability (Yanarella and Levine 2011).¹

In the pages to come I tell a tale similar to, if more complicated than, Aesop's. It is also a story about competing claims to a superior lifestyle, but in this case, a sustainable lifestyle. During 14 months of fieldwork in and around Stockholm, Sweden, I spoke with 72 Swedish citizen-consumers living in the country, the city and in between who, in response to concerns about sustainability, were

trying to modify their lifestyles and consumer behaviors.² To understand their often contrasting views on sustainability and corresponding actions, I also explored the context of sustainability in Sweden via policy reviews and interviews with 31 representatives of 24 governmental and non-governmental organizations. In this paper I draw upon a small segment of that research to explore how conditions of urban alienation shape the ways that citizen-consumers relate to and act upon information about the environment. I argue that while the dominant urban perspectives shared by politicians and many urban consumer activists have the potential to link citizen-consumers into much larger movements and globalized concerns, they are dependent on expert-generated, highly technical sources of information and therefore risk an exclusion of alternative perspectives and the loss of democratic control over sustainability discourse and policy. These dominant views are contested by others, most notably rural participants, who argue that sustainability hinges on more than improved efficiencies. Despite these differences however, this research demonstrates that in Sweden even disparate conceptualizations of sustainable living often share a common concern for environmental rights and social justice. Sweden's long history of social democracy and cultural emphasis on equality, even if only in rhetoric, have fostered a concern for intergenerational and global equality among many concerned about sustainability. For many Swedes participating in this research, regardless of where they lived or how they attempted to practice it, sustainable living constituted an effort to use a "fair share of environmental space" so that people in developing nations and future generations could have a fair share as well. While sustainability is certainly an ambiguous and often contested concept, the Swedish case suggests that the "fair share" movement may help to reconcile these tensions, opening pathways for mutual cooperation.

I begin this argument with an examination of dominant urban conceptualizations of sustainable living, linking them to definitions that center on energy efficiency and thus support the idea that urban living is becoming increasingly sustainable. I argue that this conceptualization of sustainability

reflects complex global commodity chains and conditions of urban alienation. However, when combined with the contemporary discourses of consumer responsibility, this definition leaves urban citizen-consumers dependent on expert-generated information, risks limiting participation to consumerism, and discounts the importance of civic participation.

The greening of the city: on ecological modernization and urban eco-efficiencies

I begin my tale with Åsa,³ a 36 year old communications professional living in the heart of Stockholm. In November of 2007 Åsa answered my call for research participants who had modified their lifestyles in the interest of sustainability. She and her family, she wrote in her email, had recently undertaken a significant change, moving from their suburban villa into an apartment in central Stockholm.

Stockholm was already dark as I walked to Åsa's apartment a few days later for our four o'clock interview. It was relatively easy to find my way to her building, despite the darkness, since she lived just a few blocks from a major transportation hub where the city's highly efficient bus, commuter train and subway lines intersect. I met Åsa, a petit woman, at her door. With a kind expression, she invited me in and, remarking that she knew I was interested in sustainable consumerism, began showing me around the family's fashionable apartment. She pointed out their new energy efficient appliances in the kitchen, a rug made from recycled fibers in their living room, and a low-flow showerhead in the bath. She was clearly proud of her family's green accomplishments. Åsa's daughter followed us as we made our way around the apartment, presenting a parade of toys along the way. Her son was playing an engrossing video game in his room. Their apartment was fashionable and comfortable, typical for a middle class, thirty-something Stockholm family. In fact, if Åsa had not pointed out their efficient appliances, showerhead or "green" rug, it would have been impossible to tell that the family was concerned about the environment or sustainable living more generally. As we sat down in the living room for coffee, I asked Åsa why they decided to move to the city. She responded,

We felt...if we wanted to make a better planet for our kids, we had to change. We started with the sorting (recycling) and the KRAV (organic foods) but then we read about the impact of driving...so we knew we had to make bigger changes. We were driving to work everyday, driving the children to *dagis* (preschool) and we had an old villa that was not very efficient. Now we are making a much smaller impact and we are very happy here.

Åsa's comments illustrate a perspective common among ecologically-concerned Swedes living in Stockholm - that sustainable living hinges on improving the efficiency of contemporary lifestyles. Åsa's comments also echo statements from Swedish governmental representatives who have frequently expressed the desire to lead the international shift to sustainability (Matti 2009) and have demonstrated their commitment to this goal via significant investments in efficiency improvements. Between 1998 and 2003 Sweden's Local Investment Program dedicated 6.5 billion SEK⁴ for the modernization of buildings, infrastructure and energy systems (Baker and Eckerberg 2007). The city of Stockholm has also invested significant resources to position itself as a modern, sustainable global city. It was, in fact, recently named Europe's first "Green Capital" by the European Commission (2010). From the city's model ecological community Hammerby Sjöstad, to its district heating, innovative waste system and congestion tax, the city government has worked progressively to improve resource efficiencies and reduce pollution. Due, in part, to these efforts, some research suggests that Åsa may be correct about the relative environmental impact of urban living in Sweden. According to the city of Stockholm, the city's 1.3 million residents have reduced their energy consumption at greater rates than the balance of Sweden's 9.4 million citizens - by more than seven percent since the year 2000. Further, Stockholmers release four tons of greenhouse gas per person annually, compared to the national average of 6.5 tons (StockholmStad 2007:3).⁵

However until recently the majority of Sweden's efforts to improve efficiencies and reduce emissions have been tied to large technological projects, primarily in urban cores. These projects operated on ecological modernization theory's assumption that ecological crises can be overcome by "technical and procedural innovation" (Adams 2001:110; Spaargaren and Mol 1992). In his report to the UN Johannesburg convention former Swedish Prime Minister Göran Persson clearly illustrated the acceptance of such thought, writing, "we must be able to produce more with less resources... This will require environmentally sounder and more resource efficient solutions" (SNCA 2002:4).

Despite significant gains, these ecological modernization inspired programs have been heavily critiqued for their technocratic approaches that excluded citizens from efforts to define sustainability, its practice, or appropriate policy (Rowe and Fudge 2003; Baker and Eckerberg 2007; Jörby 2001; Khakee 2003; Feichtinger and Pregernig 2005). Further, it is becoming increasingly apparent that the successes achieved by urban efficiency improvements are being quickly undermined by significant growth in per capita consumption levels (OECD 2004; Alfredsson 2004). As the result of this realization Swedish sustainability policy has recently transitioned from its focus on large infrastructural solutions to programs centered on consumer responsibility and the construction of sustainable lifestyles (Matti 2005). Sweden's Environmental Protection Agency (*Naturvårdsverket*) and Consumer Agency (*Konsumentverket*) are only two of the many governmental agencies that have designed programs urging Swedes like Åsa to take responsibility for their environmental impacts by improving the efficiencies of their lifestyles.

On consumer responsibility and the challenges of "knowing" sustainability in the city

Mainstream environmentalism is well documented among the Swedish citizenry and many Swedes have accepted the call to improve the efficiencies of their lifestyles without question. However - due to the complexity of global markets, urban separation from environmental feedbacks and the little control

that most urbanites have over decisions about the use of productive resources - most urban inhabitants find they have very little personal knowledge upon which to evaluate the “sustainability” of most practices and products. Åsa, like many participants in the study, had a hard time recalling the information she uses to determine which products, services and personal practices are most sustainable. She pays attention to eco-labels and origins in the grocery store, but attributes her rationale for most of the actions she considers sustainable to “common sense.” Despite this uncertainty and difficulty tracing the source of her knowledge, Åsa felt sure that her urban lifestyle was more sustainable than those of Swedes living in the suburbs or countryside. She said,

In the city, I think that people think more ... they are more informed. Oh my God, now I am really doing a stereotype...But when you live like this you save things. When you live in a house by yourself I think you only think about yourself and your own house. You heat the big house and drive yourself everywhere. It is just a different mindset. People who think about these things in the city are people who are well educated.

Åsa’s comments illustrate a common sentiment among a subset of the study participants.⁶ Twelve research participants expressed negative views about the sustainability of either urban or rural living. While this is certainly not a large number, it emerged as a theme that is difficult to ignore, particularly given that it was unsolicited and unanticipated. Further, the urban assumption that rural residents are uneducated and unable to identify environmental risks or come up with adequate solutions is well documented in international sustainable development discourse (Fairhead and Leach 2003, Neumann 2005, Fratkin and Mearns 2003) and in Sweden where dominant urban discourses on sustainability often discount and exclude rural perspectives (Svensson 2009). My intent in pointing to these competing claims to sustainable lifestyles is certainly not to reify geographical differences. Like so many places, cultural geography is complex in Sweden. Due to relatively late urbanization and a highly mobile population, so called “urban” and “rural” values can be found in both contexts.⁷ There is also a great deal of variety in conceptualizations of sustainability among research participants, regardless of where they live. However, it is clear that there is some dispute about the relative

sustainability of urban and rural living. It is also clear that many base their claims for the superiority of urban lifestyles based on definitions of sustainability focused on energy efficiencies.

Yet Åsa's confidence in the improved sustainability of her urban lifestyle, despite her inability to clearly trace her knowledge about sustainable practice or calculate all the impacts of her lifestyle, raises interesting questions about how citizen-consumers come to know and understand what constitutes sustainable living. The science behind life-cycle analyses is incredibly complex and, given the global and opaque nature of most commodity chains, nearly impossible to determine in a grocery store aisle or when contemplating using an existing but inefficient washing machine or buying a newer model that will reduce the resource costs of future loads but take significant resources to produce.

As such, many Swedes like Åsa rely on advice from the government and environmental organizations as they formulate their strategies for sustainable living. One afternoon, while on my way to a meeting with the leader of Stockholm's Consume Smarter Program (*Consumera Smartare*), I noticed a brochure about the city's latest environmental program (Stockholmstad 2008). Inside it said,⁸

Environmentally friendly technologies have brought us a big step on the way, and one never stops admiring how many fantastic and good ideas are constantly being born in this field. Technology, however, cannot take care of everything... Several of the goals in the environmental program can only be reached if both the city and its inhabitants help.

Several pages later (ibid:5) the document provided specific examples of what Stockholmers might do to help achieve the program goals. They include:

- Change your car to one that uses less fuel – save money and care about the environment...
- Use less laundry detergent – good for you wallet and the environment...
- Change your light bulbs to low energy bulbs...
- When you buy a freezer, choose one from energy class A and save electricity...
- Sort your candleholders as metal...
- Use the right amount of pressure in your tires...
- Switch off all electrical devices...
- Recycle your paper...
- Leave your dangerous waste...
- Take your bike...

These pieces of advice, from the experts in the city's administration, are clearly concentrated on improving the efficiency of contemporary lifestyles and closely mirror the advice given in many other governmental and non-governmental publications. These dominant views about what constitutes sustainable living do not imply that Swedes need to change their lifestyles, but rather can make them "smarter" and more "efficient" with the use of technologies like energy efficient lightbulbs, hybrid automobiles and energy-savings appliances. They are certainly practical suggestions that are both easy to implement and can be effective when practiced in aggregate. They also clearly resonate with many Swedes living in the city, like Åsa's family, who want to reduce their impact without compromising their comfort or lifestyle. These strategies are uncontroversial since they do not require structural changes or encroach upon individual choice. However, these efforts encourage the rationalization of contemporary lifestyles, not any sort of critical reflection on the construction of needs or the factors that seem to "ratchet" global consumption levels each year (Shove 2004; Galbraith 2000). Hobson thus argues that "a discourse has been formed that does not threaten consumption as a form of practice but seeks to bind it to forms of knowledge, science, technology and efficiency" (2002:106).

Certainly without such knowledge many research participants experienced significant and stressful ambivalence (Halkier 2001a, 2001b). For people who want to make the right decisions but have little personal information on which to base their actions, simple things like shopping for apples can be stressful. During one occasion, when I was shadow shopping with one of my informants, a 29 year old student named Johanna, I watched, thoroughly entertained, as she talked her way through the process of choosing an apple at her neighborhood grocery store.

Okay, so this one (picking up a loose green apple), it says is from Argentina. That is a really long way from here so it takes a lot of energy to come to this store. But it is ecological (organic) and that is important to me because I don't want the chemicals and I don't think it is fair to farmers that grow these things to use chemicals on their land ... and for their health. These (pointing to a package of four plastic wrapped apples in a Styrofoam tray) say they are from Sweden but they are not *KRAV* (organic) and I cannot believe that there are apples on trees anywhere this time of year, even in Skåne (Sweden's southernmost province). Maybe they are not fresh? Can they grow apples indoors? (I replied I didn't know). If so, it is even

more horrible because it takes lots of energy to heat these houses. I don't know which one would be better. How can I know? Fuck the apples, I do not take any today.

The call for more sustainable⁹ lifestyles among Swedes places increasing responsibility on consumers who are expected to make rational choices on the market. Yet despite this devolution of responsibility, consistent with neoliberal sustainability policy, citizen-consumers have little choice but to rely on external sources of information like labels, life-cycle analyses, and impact projections. Certainly many Swedes rely on governmental advice about sustainable living or industry-sponsored ecolabels designed to give consumers more information about the environmental effects of a given product or service. Indeed, Swedes have been particularly responsive to environmental and social product labels (Micheletti and Stolle 2004; Micheletti and Isenhour 2010). The Nordic Swan is among the most successful regional ecolabels in the world, with 97 percent recognition among Swedish citizens (NCOM 2009) and the organic food label KRAV enjoys more than 98 percent recognition (KRAV 2010).

However, despite the significant support for sustainable consumerism, as a whole Swedes are living far beyond sustainable limits. On average each Swedish citizen has an ecological footprint of approximately seven global hectares and emits 5.6 tons of carbon dioxide every year (Naturvårdsverket 2007). While these levels do not compare to the footprint of the average American citizen (9.5 global hectares and 20-25 tons of carbon dioxide annually), they are far above what is believed to be sustainable (GFN2009). Further, alternative consumers continue to constitute a small minority of Sweden's population and the market share of organic foods and drinks is less than 5 percent despite rapid growth and significant consumer approval (KRAV 2010). These statistics raise important questions about how much change can be achieved by focusing on increasing the efficiency of contemporary lifestyles and consumer-driven, market-based change. This is not to say that research participants like Åsa and Johanna are making changes to their consumer behaviors in vain. Certainly their efforts are important and should not be discounted. However, contemporary sustainability policies

and rhetoric that focus on lifestyle efficiencies place the responsibility for ensuring sustainability on consumers yet solidify the power to define sustainable living with industry and the calculation experts.

Simmel once described modern life as a world of “unrelenting calculations,” the product of a monetary economy. In this world, problems are envisioned as a series of mathematical equations to be solved, daily life filled “with weighing, calculating, and enumerating,” and qualitative values are reduced to quantitative formulas (1950:411). In the contemporary context of calls for more sustainable living, calculation experts are bestowed with the power to identify and assess risk and to define concepts like sustainability. Yet these “privileged narratives” (Hobson 2002) and the power relations that enable their production are hidden in highly scientific, technical and managerial discourse. Thus power is located in the institutions that produce scientific discourse (see Allen 2004) including governmental agencies or research institutes dependent on tax revenues and external research funding. Scientists and experts, despite their best intentions, are often tangled in webs of capital and a system with significant interests in sustained economic growth.

Halkier, drawing on her extensive work with consumers in Denmark and throughout the EU, has argued that efforts to make lifestyles more efficient, dependent on experts and market mechanisms constitute a “loss of collectivity” and “democratic control” of the sustainability agenda (2004). Certainly by encouraging individuals to participate in the construction of more sustainable cities in their private roles as efficient consumers, these perspectives do not encourage people to act in their public roles as citizens and exclude more radical and politically unpopular ideas related to increased market regulation or degrowth. As such, the dominant sustainability discourse, commonly accepted among many urban participants, has failed to include civil society and therefore potentially sacrificed the potential to achieve more radical changes (Feichtinger and Pregernig 2005).

Further, empirical observations have demonstrated that when Swedes do attempt to actively engage in the sustainability agenda as citizens rather than consumers, experts and politicians often

undermine their initiatives “by referring to economic restraints” (Eckerberg and Bjorn 1998:340). The recent focus on more efficient consumption is thus consistent with the contemporary neoliberal policy frame. It does not force the government to impose tougher regulations on industry, or to limit consumer choice. It thus allows the government to maintain its “janus face” as it simultaneously pleases environmentalists by encouraging sustainable lifestyles while satisfying business interests by promoting increased consumption (Sanne 2006). Yet given the conditions of urban living, many citizen-consumers have very little choice but to rely on expert-generated information about sustainable living - information that often prioritizes the rationalization of lifestyles. Given these sources of information, it is no wonder that many urban residents like Åsa and her family claim that the grass is now greener in the city and view their more efficient urban lifestyles with pride.

Limits of rationalization: questioning the experts in the city and beyond

This is not to say that all Swedes, regardless of where they live, readily accept the neoliberal logic of expert-led technological efficiencies or the prescribed duty to rationalize their lifestyles in their private roles as consumers. When asked to list all the things an individual could do to live more sustainably as well as the sustainable practices they personally engage in, the men and women participating in this study exhibited great variability. Some had clearly adopted dominant perspectives linked to technological improvements and greater efficiencies around the home and in the products and services they choose. These participants mentioned things like taking shorter showers, buying “green,” “energy efficient,” or ecolabeled products and turning out lights. Others, however, had made more significant lifestyle changes by selling cars, growing their own food, or limiting their consumption of durables to second-hand goods. In fact, 66 percent of the respondents suggested that they were not only trying to use less energy and water or buy products that were better for the environment, but they were also

making a significant effort to reduce their consumption of embodied energy by buying fewer things overall.

When exploring this strategy, it soon became apparent that it was based, at least in part, on a generalized distrust of expert-led solutions and technological improvements among some Swedes trying to live more sustainable lives. Jens, a 42 year old environmental educator living with his wife and two children, for example, took issue with the carbon footprint calculator I had asked him to complete. I had anticipated the challenge, particularly after spending several days completing 16 internet-calculators in an attempt to locate the most comprehensive and culturally appropriate version given the Swedish context. I knew that the version I had chosen had some major weaknesses, but they all did. The calculator I chose was most appropriate for the Swedish context because it gathered information about country cottages, boats, and other factors like district heating and geothermal power, that are often relevant for members of Sweden's privileged well-educated middle-class environmental movement. Jens said about the calculator,

I think it is basically useless because my wife and I both took the calculator and we had the same, 4,2 tons of CO2 each year. But that is crazy. We live in the same house but I do not do so much shopping. She (his wife Cara) seems to think that people will not like her if she is not wearing high boots this year and ankle boots next... Look at me (gesturing to his wool shirt), I don't care. But she replaces that wardrobe over there every few years. And she'll stand in front of it and say she has nothing to wear. I just don't understand that. And there are always new things around the house... And where are they coming from? You know where they are coming from. They are on sale and advertised on the television. They're cheap and probably made in China. What about the energy that it takes to make these things and ship them all over the world? What about the labor? What about the pollution?

For environmentalists like Jens, who question our ability to calculate all environmental and social costs, the precautionary principle, exercised in his case by refraining from consumption, is more reliable. While he can never be sure that carbon calculators are correct or if the new green technologies are actually sustainable, he can be sure that by removing his demand for new products, no additional resources will be used.¹⁰

And indeed Jens touches on an issue relevant in the Swedish context. Many Swedes are concerned about the environment and the potential for global climate change and have made significant efforts to reduce their direct use of energy, fuel, and water. However, my research suggests that while those interested in sustainability are becoming increasingly aware of embodied energy and resources, the majority have not made this connection, or are unconcerned. Indeed it seems most Swedes do not make the connections between the tangible, material goods they buy and the human labor, natural resources and energy it took to produce and distribute them. This omission is significant in Sweden where living standards, consumption rates, and environmental impacts are relatively high. Certainly Stockholm is unique in many ways, but as a capital city, it is a hub of commerce in a global economic system, providing widespread access to the world's products and services. Consumer culture is strong and sustained economic growth is a national priority. In 2007 the nation hit an all-time record in spending over the holiday season (DN 2007) and popular holiday presents like clothing, footwear, and recreational equipment all have significant indirect environmental costs (Carlsson-Kayama et al. 2002). While efficiencies might significantly reduce the environmental costs of many products, sustained increases in per-capita consumption often outweigh gains (Throne-Holst et al. 2007; Alfredsson 2004). Further, many scholars have warned of potential rebound effects, or the occurrence of Jevon's Paradox (Greening et al. 2000). For example, even though cars may be more efficient, drivers often rationalize driving more often and further because of these fuel-efficiencies, essentially offsetting any gains. Further, the increasing affordability of energy efficient vehicles drives demand for the resource extensive production of new cars, regardless of the functionality of existing automobiles or consideration for the use or disposal of functional cars already in existence. Therefore, better fuel efficiency per vehicle is increasingly offset in the short term by replacement production and in the long term by a growing number of cars on the road and miles driven. Rita Erickson writes,

Reducing direct energy consumption will only partially alleviate energy supply and environmental problems as long as there is no reduction of consumption of material goods and energy intensive

services. We need to look at material goods in new ways, to acknowledge the true energy and environmental costs of their manufacture, advertisement, distribution, maintenance, and disposal (1997:168).¹¹

Many of the men and women concerned about sustainability who took part in this research questioned dominant sustainability narratives centered on resource efficiencies. Their growing mistrust of technological solutions and life as usual is not surprising given that even highly regarded sources of environmental knowledge are often forced to retract or revise their recommendations. Consider, for example, the bio-fuels debate. It was only a few years ago that many policy makers thought ethanol would resolve our energy challenges. Not long afterward, it became apparent that the production of some biofuels has serious consequences for food security, deforestation and climate change. While the Swedish state is aware of these issues, it remains committed to becoming the world's first "oil free" economy and is actively pursuing alternative biofuel technologies. Technology and sustainable policy are constantly evolving but we often find that well intended new technologies have unintended and sometimes disastrous consequences. Beck (1992) reminds us that knowledge about the environment is always uncertain, particularly because it involves such interwoven and multidirectional chains of causality, stretching across space and time.

Distrust of technological solutions and conceptualizations of sustainability limited to increased efficiencies were shared by many participants, regardless of where they lived. It was interesting however, that the rural participants were particularly vocal in their mistrust of technological solutions and definitions of sustainability focused on efficiencies. These men and women argued that sustainable living has less to do with the best, most efficient technologies available, and more to do with self-sufficiency and working in cooperation with "nature." On rural participant, Marianne noted,

Many people talk about technologies that will solve these problems. But it is bullshit. They hope that the technology will save all the problems but it is a matter of changing the system. As I see it, this is the only way but there is great resistance to that. The politicians all want growth, economic growth. I am very much against this technical fundamentalism. We must work according to nature's rules, not our own.

The roots of difference: on urban alienation and views of nature

As part of this research, I asked all participants questions designed to tease apart exactly what they meant when they spoke about nature and sustainability. There was surprising diversity regardless of location. However, interesting patterns emerged. Stockholmers were much more likely to refer to nature as something “out there,” the forests, the mountains and the streams far away from human influence. Price (1999) has argued that this conceptualization of nature has helped many urbanites to counteract the anonymity, alienation, commercialization, technological control, and complexity of urban lifestyles. But perhaps more important given the recent focus on sustainable consumerism, the conceptualization of nature as “out there” may also help to shelter consumers from the realities of natural resource consumption all around them.

This romantic view of nature has roots dating back to the late 19th century when the rising middle class constructed a vision of nature different than the peasantry or the elite to which they opposed themselves (Frykman and Lofgren 1987). Rather than thinking of nature in a very utilitarian and production-oriented way as the peasantry did, or as something chaotic and wild that must be controlled and colonized as the 17th century elites had, the rising middle class relegated nature to two distinct spheres. On the one hand nature was seen as the rational landscape of industrial production. But on the other, a romantic view of nature associated mountains, forests and waterways with recreation, contemplation and romance. Birding and mountaineering clubs became plentiful during this time as urban residents sought to escape the city and get back to nature. It was through this alienation that nature itself became a place apart (Lofgren 1995). The prerequisite for such a romantic view of nature was the withdrawal from a productive and extractive relationship with nature (Frykman and Lofgren 1987:78). Salomonsson writes, “the bourgeois appreciation of nature as a scenic backdrop ... became widely spread during the course of this century ... it has since become deeply rooted in the Swedish mentality” (1996:158).

Today, urban separation from productive relationships with natural resources perpetuates this conceptual alienation. As such, many middle class urban residents continue to hold both romantic and rationalist views of nature. Nature becomes both a place for reflection and relaxation and a resource to be used to fuel development. The rationalist perspective is predominant in the official language of sustainability. Swedish policy documents reflect a weak anthropocentric orientation and a focus on the instrumental value of nature; as natural resources valuable for human development (Matti 2005). In instrumentalism's most extreme form, nature comes to be seen as "bundles of goods and bads to be managed in the name of risk management" (Hobson 2002:98). Technological improvements are seen as necessary to use resources most efficiently and enable future growth, overcoming natural limits. Extreme anthropocentric perspectives are underwritten by the capitalist system which tends to conflate all value with exchange value (Hornborg 1992). Trees, water, and land are viewed as commodities. While Sweden's approach to sustainability is not this extreme and the nation does not prioritize the right to private ownership over the collective right to resources essential for survival, it is certainly common in many nations with capitalist economies and strong neoliberal political orientations.

In contrast, the rural residents participating in this research were united in their insistence that humans are part of nature. No doubt due to their closer engagement with productive resources, they refused to recognize separation between human welfare and the welfare of the entire ecosystem. For them the point of sustainability was not to further rationalize nature, manipulating it through technology for human benefit, but rather to work within nature's limits. These rural participants argued that localized understandings of nature are paramount for sustainability. Nature and sustainability are no doubt contentious terms, generating significant tensions as different social groups stake competing claims to their proper definition. And certainly urban and rural residents find that their circumstances and geographies give them unique perspectives on both nature and sustainability. Yet, despite these differences and competing claims to a sustainable lifestyle among some urban and

rural Swedes, my research suggests that, in the Swedish case, there is ample ground for mutual cooperation and affinity-based activism that spans geographical difference.

Calculating potential

While rural and urban research participants held different views on nature and sustainability, there were also considerable agreement among those trying to change their lifestyles in response to concerns about sustainability. I was surprised when interviewing people about their motivation for sustainable living, how many responded not only with the anticipated answers about the environment, but with seemingly sincere, well-reasoned, and informed concern for global social and environmental justice. Many participants in rural and urban locales spoke about their actions in terms of reducing their consumption so that people in the developing world could have access to their fair share of world resources. They spoke about their actions in terms of morality, rights and responsibility. So while many urban participants often spoke about their actions in terms consistent with dominant urban-inspired sustainability discourse (efficiencies and rationalization through technological advancement) their motivations were not necessarily linked to a desire to achieve sustained economic growth. Rather, these research participants were much more concerned with using less so that people in developing parts of the world could use more. Similarly, while rural inhabitants tended to be much more skeptical of ecological modernization efforts and defined sustainable lifestyles in terms of self-sufficiency and cooperation with nature, many of them also expressed deep concern for social equality. Felicia's comments illustrate this perspective:

I'm not at all worried about me, and I don't think that I'm worried about the future ... more that we are sitting here and consuming a lot and destroying while people in other parts of the world can't get enough to eat. We are taking their resources and we are making them grow crops that we need instead of food for them. I think that is my biggest concern, but I don't feel any risk to myself.

What is perhaps most interesting given our discussions here, is that regardless of the assumption so common in sustainability policy and discourse, that people are motivated to change their lifestyles by perceptions of immediate and personal risk (Giddens 2009), this research suggest that the Swedes who have made the most progressive lifestyle changes are driven by concerned for equality and the fair distribution of environmental risks and benefits (Isenhour 2010).

Hobson came to a similar conclusion in 2002 arguing that alternative discourses of sustainable consumption and critical social science research suggest that the issue of social justice has more resonance with the public than dominant sustainability discourse centered on the rationalization of lifestyles. This orientation is not surprising in Scandinavia where the Lutheran church and social democracy have resulted in a pervading sense of morality, solidarity and the need for equality within Nordic culture – at least in rhetoric if not always in practice. Yet for many this sense of solidarity and equality was not confined within the region’s geopolitical borders. Swedes place great value on a cosmopolitan mindset. Knowledge of foreign affairs and international travel are, in fact, key symbols of cultural capital in Sweden. Swedes are among the world’s most well-traveled citizens (WTO 2010), are highly educated (UN World Development Index 2005) and have one of the highest levels of newspaper readership in the world (WLAN 2008). Awareness of and concern for global inequalities are thus heightened in Sweden, although certainly not among all.

Ecological modernization programs have clearly failed to generate significant change, warranting the need for a new approach to sustainability. Feichtinger and Pregernig note,

critical assessments of global change since 1992 indicate that the prevailing politico-administrative system seems not to be fully capable of implementing the goals of sustainable development in a comprehensive and substantial way. Genuine and far-reaching policy change often requires the status quo to be put in jeopardy (2005:237).

Certainly the discourse on sustainability that many rural residents share, centered on self-sufficiency and a closer connection to natural resources has the potential to counter dominant sustainability narratives. However, as Escobar (2001) writes, local efforts to appeal to the moral sensibility of the

powerful rarely work. Further, they fail to address environmental issues on a scale adequate to the task (Allen 2004).

The concept of a “fair share of environmental space” resonates well with Swedes concerned about sustainability, regardless of where they lived or whether they defined sustainability in terms of self-sufficiency or energy efficiency. It thus seems to have potential for challenging contemporary sustainability and democratizing notions of sustainable living. Drawing on an “ethic of care” (Barnett et al. 2004) so meaningful in the Swedish context, the concept has the potential to create networks that extend over both geographical and temporal space and “effectively reduce physical, psychological and cultural distances” (Goodman 2004:906).

While the government’s official position and focus on ecological modernization are consistent with the growth-based imperative and the interests of global competitiveness, the Swedish state is not unaware that sustainability hinges on more than improving efficiencies and the protection of the Swedish environment. Jörby argues that many governmental measures “not only aim at reducing impacts in order to improve the environment locally; the local governments try to take on their part of the responsibility for the global environment as well” (2002:239). This language is often difficult to find in official policy documents. While I was in the field I found very few examples of discourse centered on de-growth in official policy, discourse and programming. However, more recently – in early 2010 - the Swedish Environmental Protection Agency released a report entitled “The Climate Impacts of Swedish Consumption” which moves beyond discussions of emissions reductions in Sweden to examine the total effect of Swedish consumerism in other nations. Thus instead of claiming that Swedes have reduced carbon emissions by nearly 12 percent since 1990 (Naturvårdsverket 2010), the government is now taking an active role investigating and calculating emissions in other lands that can be attributed to Swedish consumer demand. This new focus is not only consistent with the popularity of life-cycle analyses in Sweden, but it also reflects a concern with global equity and

responsibility. There are also a few other governmental documents that advocate consuming less so that people in impoverished areas around the world can have more. One document produced by Sweden's Consumer Agency entitled "Environment for Billions" (Konsumentverket 2001), points to research which suggests that wealthy industrialized countries like Sweden would have to reduce consumption by a factor of ten for every human being on the planet to have equal access to the world's resources.

And while a focus on sustainable consumerism and sustainable lifestyles imagines individuals in their roles as consumers and thus "neglects any recognition of the motivations of citizens oriented towards rights or social justice" (Berglund and Matti 2006:559), a fair share movement has the potential to reactivate individuals as citizens. My research indicates that many environmentally-concerned Swedes do not limit their actions to the market realm. When listing their own sustainable actions, 47 percent of respondents in this study mentioned cooperating with others, 28 percent mentioned citizenship activities including voting, contacting political representatives, and political demonstrations. Others (28 percent) mentioned supporting environmental and social-justice groups and participating in community-based sustainability initiatives. They clearly see their actions as a political exercise and are eager to participate in sustainability initiatives in their roles as citizens, if given the opportunity.

If fair share calculations can not only encourage reduced consumption but also inspire individuals to act in their roles as citizens, there is potential for these calculations to produce more significant change. Escobar argues

In constructing networks and glocalities of their own, even ... in their engagement with dominant networks, social movements might contribute to democratize social relations, contest visions of nature, challenge current techno-scientific hype and even suggest that economies can be organized differently from current neo-liberal dogmas (2001:166).

I suggest that a rights-based discourse can provide a positive source of external pressure in Sweden.

Such pressure has the potential to move the sustainability discourse beyond its technocratic, rationalist,

and apolitical focus. Further, this human-rights orientation allows us to question the political-economic relations that perpetuate environmental inequality and to push the sustainability discourse towards more participatory solutions. It certainly seems to have promise given that sustainable solutions not only require technical improvements, but also political and economic systems which can remedy power imbalances and ensure that all people, regardless of geography and generation, are able to consume at levels sufficient to meet their basic needs and achieve human dignity.

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¹ Note that these discussions are common on blogs and social media sites. See for example, <http://www.gather.com/viewArticle.action?articleId=281474976811916>

² Because the population of citizen-consumers concerned about sustainability was unknown, I drew upon Haraway's (1991) concept of affinities to identify five organizations working on sustainability. A call for participants was sent to their members and nine to 14 volunteers from each participated in a semi-structured interview for a total of 58. Twelve of these participants and 14 of their family members were also selected to participate in case-study household research which included a review of household expenditures, consumption inventories, and a series of iterative interviews.

³ Åsa's life details have been modified to protect her identity and confidentiality. All research participants have been given pseudonyms.

⁴ According to OANDA, the average exchange rate for the five year period between 1998 and 2003 was 8.9 SEK to 1 USD

⁵ There is some data to suggest that when the impacts of all the products Swedish consumers buy from abroad are considered, these figures are significantly altered (Naturvårdsverket 2010), a point to which I will return momentarily.

⁶ Fifty of the individual research participants lived in the city or its suburbs and eight lived in the countryside within a two hour train/bus ride of the city.

⁷ Seven of the eight rural participants lived in an urban area at some point in their life. Three of them moved to the country once they were financially stable or retired. These participants are also a bit older than the average age for the sample. All eight have deep roots in the environmental movement but several became disillusioned when more significant changes failed to materialize. As such, many of the rural participants now focus on self-sufficiency rather than activism.

⁸ Translation by Matilda Ardenfors

⁹ Note that the concept of sustainable living is vague in practice, often slipping, as if unproblematic, between environmentalism, concerns for social justice or even the assertion of the need for economic growth. In Stockholm, as in many other global cities, the concept is often centered on ecological sustainability, without concern for environmental justice or social sustainability.

¹⁰ All households were asked to complete the carbon calculator built by the Swedish Environmental Research Institute (<http://www.climate.ivl.se>). When Jens calculated his footprint the calculator did not account for how often one shops. Since then the calculator has been updated to account for how much one spends annually on items like home furnishings and clothing.

¹¹ Since completing my research, recognition of embodied resources and emissions has improved. In fact, Sweden's environmental protection agency is studying not only emissions in Sweden's borders, but also those in other nations driven by Swedish consumption (Naturvårdsverket 2010)