FAMILY PERSPECTIVES ON SUSTAINABLE LIVING:

AN ANTHROPOLOGICAL STUDY IMAGINING DIFFERENT FUTURES

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ABSTRACT

This project documents individual and family perceptions of sustainability, specifically addressing how this emergent trend has manifested and been enacted in the day-to-day behaviors within families. This information was gathered in a two-step process: first, semi-structured interviews were conducted with ten families. The information gathered during the interview phase of this project was then compiled to create scenarios, which gave a new set of participants a glimpse into other families and their engagement with sustainability. These scenarios elicited imagined solutions and challenges from this second group of participants. The goal of this project was to find methods which could address sustainability efforts in a salient way, and how this could inform current and future policy initiatives with the City of Santa Cruz.

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I. Introduction

This project was conceived to document the evolving trend of improved sustainability and "greening" within households and more specifically families, and how this shift could be furthered through an understanding of how policy could affect change. At the outset of this project, I was interested in seeing how individuals and families viewed their impact on the environment and how this caused them to reflect and act, demonstrating their commitment to a reduced impact through decisions to create what to them were sustainable practices in their day-to-day lives. The goal was to understand, specifically, how understanding these incremental changes toward a more sustainable lifestyle could be supported and furthered by the City of Santa Cruz to further their existing policies.

To elicit this information in an exploratory manner, semi-structured interviews were conducted with ten families from September 2012 to December 2012. The interviews included a tour of the subjects' homes and photos of specific objects that the participants highlighted on the tour. The interviews were then transcribed and coded in an effort to identify themes and understand the familial reasoning. These results were then developed into four scenarios meant to elicit the current solutions that these families were employing in their lives. These were used in a workshop to elicit more challenges and solutions that families were facing in trying to become more sustainable. The resultant project reflects the difficulty in creating overarching policies which will be salient, enforceable, and effective. But it also highlights that families are trying to become more "green," and that they are changing their behaviors and beliefs; the

implications of which indicate that we are situated within an unparalleled timeframe to begin new initiatives that will have a lasting impact on families.

Project Objectives

The objective of this project was to assess the current behaviors and attitudes of families of the Bay Area toward sustainable living, to understand the varying barriers, hidden costs, investments and benefits that they perceived and how these ideas necessitated certain resources. I hoped that more fully understanding the current paradigm would elicit room for improvement, and how family efforts could be more holistically supported by the City of Santa Cruz and its policies. Qualitative research methods were used, and the interviews were coded to provide a basis of comparison for the analysis. The information was in effect double checked through the workshop, which highlighted discords in my interpretation and new families' interpretations. This was both in an effort to make the data more readily accessible and salient to certain policies that the City of Santa Cruz has as a focus, and to further explore particular connections that were not explicitly stated within the interviews.

Project Description

This project began as complementary research to a project being conducted in New York on families practicing zealous sustainable living in their day-to-day lives. These extreme examples of families changing their entire lives to practice sustainable living were to be countered by a broader collection of 'normal' families who were incrementally growing to include sustainable practices in their daily lives. I decided to include interviews with children to garner their responses toward sustainability, which

created a delay in acquiring IRB approval, and this partnership was ended. I decided to proceed and my project became a standalone investigation of sustainability in the Bay Area. My decision to actively recruit a breadth of families in varying states of practice reflects the loss of this partnership: I attempted to find families who were more extreme in their incorporation of sustainable living in their daily lives, and complemented this with people who did next to nothing associated with sustainability. The resultant sample provides both extremes plus a broader sample of families experimenting or learning to live with a lessened footprint on the environment.

Semi-structured interviews were chosen as the initial methodology because they allow the analyst to explicate the underlying assumptions and activities associated with particular ideas, and allow individuals to express their rationale through a nonjudgmental research instrument and in an open-ended format (Schensul, Schensul and LeCompte 1999). Certain dichotomies emerged within the interviews which I felt highlighted the agency that families have in their practices surrounding sustainability. Some families talked about sustainability as a cost saving measure, while others viewed it as an expense. Another dichotomy that emerged was practices centering on individualized sustainability versus community vested sustainability; or that some practiced sustainability to create nuclear self-sustaining homes, while some created community-based safety nets outside the typical economic exchange. These dichotomies were often talked about in varying combinations with each other: people practiced more individual sustainability as a cost saving measure, or vice versa. The interviews exposed this diversity of understandings and practices of sustainability within families. And this project sought to find an intervention which would elucidate this

diversity and create usable results for public policy. The project was therefore expanded

to include more input from other community members through scenarios. These

scenarios were paired with three current problems that the City of Santa Cruz is

focusing on in current council meetings: the drought, reducing greenhouse gases, and

the bag ban initiative. My project therefore adapted to expose familial agency

surrounding the term sustainability, and how acknowledging this diversity could benefit

future initiatives for policymakers within the City of Santa Cruz.

<center>II. Literature Review</center>

Sustainability

Sustainability has become a term summarizing multiple current trends within the United States, including, but not limited to: organic foods and products, local production and consumption, seasonality of foods, reusable products, biophilic city planning (or a city which puts nature first in its planning), hybrid cars, and more (Beatley 2011). That so many emergent trends are encapsulated within this one term signifies not only its importance, but also its inherent complexity, and perhaps overuse within the common vernacular. The concept of sustainability has become an almost ubiquitous term (Randolph 2012; McDonogh, Isenhour and Checker 2011). The first widely disseminated definition of sustainability (Scoones 2007) was based on the 1987 report "Our Common Future":

> Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs (Brundtland 1987)

This definition continues to influence current usage of the term, including its use by the environmental and urban planners' definition of sustainability, which is also necessarily broad: "the paths of economic, social, environmental, and political progress that aim to meet the needs of today without compromising the ability of future generations to meet their needs" (Randolph 2012:4). Current environmental and urban planners

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acknowledge the necessity of including sustainability into planning decision making, although they also realize this requires a degree of commitment from citizenry. Bridging this gap has become crucial for planners (Randolph 2012).

The ambiguity and broadness of the term sustainability, coupled with the current trendiness of doing "more" for the environment is further complicated by the dichotomy between scientific understandings (climate change, material use) versus more humanistic determinations of sustainable living, like access to nature and social equity (McDonogh, Isenhour and Checker 2011). For example, environmental sustainability is defined as the "maintenance of natural capital," where output/input must be necessarily limited by existing capacity, and "the human economic subsystem should be limited to a level which, if not optimal, is at least within the carrying capacity and therefore sustainable" (Goodland 1995:10). The author, Robert Goodland, goes further by stating that "The second reason for unsustainability is related to the first: government failure to admit that pollution and fast population growth are doing more harm than good" (1995:13). Currently, policymakers are debating "the best kinds of technological or managerial fixes for environmental problems," which ultimately means engaging citizenry in salient ways (Checker 2011:214). For Ian Scoones, it is the very ambiguity of the term sustainability which allows it to "remain[ ] a useful unifying link. . . it is the more over-arching, symbolic role – of aspiration, vision, and normative commitment – that remains so politically potent" (2007:594).

One Bay Area, a joint initiative of four regional governmental agencies (Association of Bay Area Governments, Bay Area Air Quality Management District, Bay Conservation and Development Commission and the Metropolitan Transportation

Commission) has emerged to address growing concerns centering on our future growth in the Bay Area. This organization similarly defines sustainability broadly:

> Sustainability means doing things and using resources in ways that protect them so they will be available for current and future generations. . . Sustainability is all about helping support a prosperous and globally competitive economy, providing for a healthy and safe environment, and producing equitable opportunities for all Bay Area residents (One Bay Area website).

The question for this project becomes: Does the definitional broadness and encompassing nature of this term sustainability reduce its efficacy in prompting useful change and engagement with citizenry? And to take it even further, how has the term sustainability been transformed and owned by the families within this study? These questions are important for policy because they provide the impetus to incorporate this diversity into current and future initiatives.

Policy and Anthropology

Anthropology and public policy are complementary because anthropology allows us to elicit the underlying assumptions within complex and ambiguous behaviors that become the objects of change through public policies. This is further complicated by the fact that the focus of policymaking is uniquely situated within each community, and relies heavily on their own cultural bias and beliefs (Birkland 2005). According to Thomas Birkland, this agenda setting is a process by which powerful players define problems and propose solutions and attempt to either gain or lose public and elite

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attention for them (2005). For Birkland, this setting of the agenda is essentially, "persuad[ing] others that the problem is real or that the problem being cited is the *real* problem" (2005:126, emphasis original). Birkland argues that policy design must encapsulate five elements to be successful: the goals of the proposed policy must be outlined, a clear underlying model, effective tools for changing behaviors, a target group for the policy, and then implementation (2005). The problem becomes one of policymakers who are basing their design on "behavioral assumptions about the target populations" (Birkland 2005:178). This requires that research be completed to document the success or failure, and the internalization of policy initiatives after they have been implemented and to ultimately direct policy toward a more successful reception (Birkland 2005). Anthropologists are able to contribute to policy design in that they are able to identify assumptions, which can then be addressed before, during and after implementation (Wedel, Shore, Feldman, and Lothrop 2005). Furthermore, anthropologists are able to analyze complex social networks, or "the relationships between individuals, groups, and organizations and the changing, overlapping, and multiple roles that actors within them may play" (Wedel, Shore, Feldman, and Lothrop 2005:40). Policy initiatives are not implemented within isolation, and have effects between groups, families, and policymakers and affect multiple aspects of everyday life, creating assumptions and perspectives that are not easily communicated without the qualitative methods that anthropology provides.

Scenario Building

Within industry and the government, scenarios have become increasingly used to address many different possible futures, and to encourage long-term planning (Stollt

2014). Anthropology has grown to incorporate scenario building into its toolkit as a new way to link relevant but somewhat ambiguous information for participants and allowing them to respond through stories. Scenarios are especially useful in projecting behaviors for the future, as they can inform "decision making in the face of uncertainty" (Kowalczewska and Turnhout 2012:91). Kowalczewska and Turnhout continue, "by combining scientific validity and user relevance these tools [scenarios] are considered crucial in bridging the gap between science and policy and enhancing knowledge utilization" (2012:92). For this project, scenarios were used to elicit a response from participants about a possible behavior or action that was documented in the interviews. Scenarios use a story format to make information generalizable and are meant to elicit a response from the participant, in essence asking them to reflect on their own actions and imagine a future with or without a new behavior in their family. Scenarios further remove pointed and possibly biased questions, where participants would see a value attached to the response: i.e. does your family act in a sustainable manner? This could feel weighted toward a particular response, whereas, scenario building tells a story about a family acting in a potentially positive or negative way, and then asks for a response from participants. Scenarios must, therefore, be "interactive and participatory processes" to create valid policy-driven data (Kowalczewska and Turnhout 2012:102). Scenarios are further meant to "challenge people to understand the tacit assumptions they unconsciously make about the future" by asking them to imagine a different one (Lewis and Connors 2004:163).

III. The Project Site

In an effort to incorporate a diverse sample, my geographical research site was necessarily broad, including the entire Bay Area. This afforded me a broadly situated population, but it is important to note two things about the Bay Area: first, it is considered highly progressive, with a reputation for aggressively pursuing bellwether ideals. Second, its highly diverse population has garnered a reputation as a testing ground for legal initiatives that often support substantiated modifications to existing policy, ordinances, and law.[1] These factors situate the results of this study within a particularistic locale, but based on the Bay Area's reputation as a place where ideas get tested and exported elsewhere, the results could be expandable outside this area. Further, the methodology used within this project could be duplicated elsewhere.

The City of Santa Cruz, and County of Santa Cruz have grown to incorporate sustainable initiatives, or Climate Action Plans, due not only to the dwindling resources cited within most definitions of sustainability, but also based on public and/or organizational pressures. Moves toward mandatory sustainable living have emerged more recently through government initiatives and policies aimed at employing citizenry in the battle for the future. These initiatives have included mandatory insulation in homes to reduce energy costs (started in 1980), the "Bottle Bill" requiring consumers to pay a fee for bottles which is refunded once the bottle is recycled (started in 1981), mandatory recycling at the curb (started in 1983-4), reducing energy usage (flip the switch TV campaign), and, most recently, mandatory reduction in plastic bags (started in

1 According to Dr. Roberto Gonzalez, lecture in ANTH 144 Fall 2012.

2010) (Vallance 1980; O'Reilly 1983; Brown 1981). Many of these mandates begin

voluntarily to gauge citizen response, only later being implemented with either fines or

costs levied on community members (David O'Reilly 1983; City of Santa Cruz Chapter

6.49 Bag Reduction Ordinance).

To use the more recent example of the City of Santa Cruz Bag Reduction

Ordinance, this began due to pressures from a local nonprofit Save Our Shores, which

provided compelling statistics for the City on the amount of single-use plastic bags that

wind up on beaches and in the ocean (35,000 bags in the last 6 years), potentially

poisoning and ensnaring many local wildlife (Save Our Shores Website). The City of

Santa Cruz used these statistics, coupled with its own goals of a 75% waste reduction,

to implement this new ordinance, which removed single-use plastic bags from points of

sale around the county, with a full adoption of this ordinance in the county slated for

April 2013 (City of Santa Cruz Bag Reduction Ordinance). Again, however, the burden

of this shift toward environmentalism fell toward a business, grocery stores *must* charge

consumers a 25-cent fee for paper bags which were previously free, or consumers can

bring in their own reusable bags. This 25-cent fee goes to the stores to cover the cost of

complying with this ordinance and amounts to an estimated $1.8 million in annual

revenue in Santa Cruz County (City of Santa Cruz Bag Reduction Ordinance). This

could further be complicated by addressing the actual cost of reusable cloth bags and

paper bags on the environment, for example: "cloth bags need to be used 104 times

before there is any environmental advantage over [single-use] plastic bags" (Villarreal

and Feigenbaum 2012:8). These shifts toward mandatory compliance also spark fear in

some who worry about the growing power of a "nanny-state" and increased costs in

other ways, such as the new necessity to wash reusable bags based on the finding that they can harbor E. coli after use (Copelin 2013). In a way, complying with this ordinance is voluntary, you could potentially not use a bag for your groceries, but it demonstrates how government interventions are brought about and attempt to foster shifts in behavior in citizenry through modifications to existing structures.

This is not meant to be an exhaustive history of governmental interventions within Santa Cruz County surrounding sustainability, but instead highlights how very recent many of these mandates were instigated. The generation of "Millennials" born after 1980 is really the first generation to be inundated with this kind of information from early childhood on. Of the families I interviewed, half fall under this generational heading, which is considered heavily reliant on technology, and are "on track to become the most educated generation in American history" (Pew Research Website). This recent shift in attitudes towards increased sustainable living within Santa Cruz County has impacted the day-to-day lives of such Millennials.

IV. Project Chronology

Overview of Research

This project was designed to help understand the day-to-day practices and beliefs surrounding sustainability, and became focused specifically on the City of Santa Cruz. The City of Santa Cruz posits itself as forward-thinking and progressive in its initiatives, which I felt would benefit my studies' goals. Ross Clark, who works with the City of Santa Cruz Climate Action Team, specified three issues that the City was interested in better understanding: interpretations of the bag ban, reducing greenhouse gases, and efforts in connection to the drought. Because I wanted to understand the hidden costs, benefits and beliefs that led to the everyday actions associated with these ideas, I chose to begin this project with semi-structured interviews. Semi-structured interviews elicit these underlying assumptions and beliefs through their stream of consciousness data gathering, allowing people to expand on ideas at length, and probing further for more information. The interviews, however, were not specifically meant to address these three ideas (bag ban, drought efforts, or reducing greenhouse gases), but get a more general interpretation of the reasoning behind families' sustainable efforts. This meant that the project required a secondary method for data-gathering, one which utilized this more general data on sustainability, and created prompts to elicit data specific to the bag ban, drought efforts, and reducing greenhouse gases which would be salient for policy. Due to this, I decided to synthesize the information presented in the interviews into scenarios, creating stories which exposed the familial reasoning that became apparent through the interview instrument. This led to the creation of four types which were meant to elicit beliefs, and then using these

perspectives, to ask workshop participants to address the three ideas specified by the City of Santa Cruz. I believed this would create a more holistic approach to the three problems, in that it was being asked from multiple perspectives. What does the bag ban look like from someone who practices sustainability to reduce their overall costs? What does it look like from someone who practices sustainability to educate their children, or "save the earth"? The workshop was then analyzed to understand how these different scenario perspectives, coupled with the participant's perspectives, imagined varying barriers and benefits for each of these three broad City of Santa Cruz initiatives.

Sampling

The primary goal for this project was to develop a method to capture the diversity of perspectives on such a broad and ambiguous topic, sustainability, in a way which would be salient for public policy. This led to a sampling strategy consisting of two stages. First a sample was found for the interviews and then a second sample was found for the workshop. The applicability of the project results are further complicated by the sampling strategy, which would most readily be considered a convenience sample, or any group readily accessible to the researcher that reasonably might be assumed to possess most of the characteristics relevant to the study (Schensul and LeCompte 2013). Since this was a study of families in a certain geographical location, with relatively little or no other criteria, choosing participants was highly discretionary, and I essentially found participants through word of mouth or gatekeepers. In one instance a participant recommended another participant, or friends or family recommended families. Once a family was recommended, I tried to get a basic understanding of how much or how little they incorporated sustainable living in their

lives, although it was not imperative that they have a certain level of activity associated with this trend. In one instance, I chose a participant who did not engage at all with sustainable living (or at least stated that he did not initially). On the opposite extreme, I chose a participant who said she incorporated sustainable practices into every aspect of her life, including blogging about her newfound desire to decrease her impact on the environment, get healthy, and raise her child within this parameter. Other participants fell between these two extremes, and incorporated sustainable practices in different ways and at varying degrees. The cities represented within the interview sample were as follows: Ben Lomond, Brookdale, Campbell (2 participants), Felton, Hollister, Livermore, San Jose, and Santa Cruz (2 participants); or by county, Alameda, San Benito, Santa Clara (3), and Santa Cruz Counties (5).

For the workshop, the initial interview group from Santa Cruz County were asked to participate and then asked to refer other families that they thought might be interested in participating. Additionally, a freshman level Cabrillo anthropology course was invited to participate, as was an AmeriCorps group working in the area in the Volunteer Infrastructure Program. I also asked for participants from a local Orthodox church. Again, this was a convenience sample, and I was hoping to get at least ten participants in the workshop.

Interviews

The interviews were conducted in the participant's home, after receiving written consent and introducing the project. The interview included a tour of their home and photos of highlighted family spaces or items. Incorporating a tour of their physical

space, I hoped, would more easily elicit how their homes were utilized on a daily basis, exposing typical activities that were not necessarily associated with sustainability. However, since I spoke with participants prior to the interview, most highlighted what they considered sustainable practices within the spaces. The photos were more for me, to remember specific things that participants said, and to be used as examples if necessary. The interviews lasted between 25 minutes and 2 and ½ hours. All interviews were digitally recorded and then transcribed. The interview protocol had 32 questions separated into two broad categories: household/background and sustainable living (Appendix A). The tour was conducted between the two categories, again, in an effort to make the tour more about their family routines as opposed to sustainable practices, even though this did not work well. The interviews, therefore, provided demographic information and a broad understanding of how some inhabitants of the Bay Area perceived and incorporated sustainable living practices into their lives.

Interview Coding

Due to the exploratory and text-based nature of this project, coding the interviews was essential to expose the underlying assumptions that people were making about their choices and varying levels of participation with the concept of sustainability. It further exposed the differing definitions and justifications for, in some ways, making their lives more difficult through the adoption of more time consuming and/or expensive sustainable practices in their day-to-day lives. Constructing the codes stemmed from my desire to examine family reasoning surrounding this trend, including shifts in behavior and viewpoint, the initial spark which lead to these changes, definitions, practices, challenges and benefits, plus basic demographics of the families I interviewed (Saldaña

2013). Therefore, my codes centered predominately on the concept of sustainability as it was manifested in four broad categories: Demography, Personal Life, Household, and Sustainability (Saldaña 2013).

I began the coding process by reading the interviews and choosing four broad themes to focus on: Demography, Self-perspective, Household, and Sustainability. I then broke these themes down further into subsections, to highlight the information that I wanted to specifically address, and which grew to incorporate other concepts as the coding process went on and more codes became apparent within the interview text (coding subsections used are in italics, see Appendix C for more details on codes used). Within the theme demography, I was interested in five subsections: *age, gender, location, education*, and *work/volunteerism*. I was looking for two ideas under the theme self-perspective: *household composition* and *self-reflection*. *Household composition* was meant to expose the relationships the participant described within the home, while *self-reflection* was meant to cover how they reasoned and made decisions for themselves or their family.

The next broad theme was household which contained the subsections: *division of labor, gender roles, values and ideals for children, highlighted spaces/items*, and *money*. *Division of labor* documented how work was divided within the family, which was closely related to *gender roles* which was more meant to expose the reasons for the division of labor from the previous subsection. *Values and ideals for children* was important because it highlighted what families hoped to instill in their children, and exposed how they hoped to pass these ideals/values to the next generation. *Highlighted spaces/items* were anything the participant pointed out to me during the

course of our interview, providing important components of their household. *Money* was

a subsection that was added after the first round of coding because I noticed that

participants were creating a relationship within the interviews between money and

sustainability.

Sustainability was the next broad theme that was broken into subsections to

provide a basis for the scenarios which were generated at a later point. Sustainability

was divided into the following subsections: *definition, unsustainable, community,*

reactionary, practices, solutions, changes in behavior, spark, and *goals*. The subsection

definition was looking to find how each participant defined the term sustainability, both

explicitly and implicitly through their statements. I coded the subsection *unsustainable* to

show whenever a participant told me of a practice or behavior that they associated with

not being sustainable. *Community* was meant to understand any time they saw a

relationship between sustainability and more community engagement. The subsection

reactionary was another code that emerged later in the process, examining the timing of

participants' practices surrounding sustainable living. *Practices* examined the practices

that families associated with sustainable living, including the benefits and challenges

they associated with maintaining them. *Solutions* was a subcategory highlighting any

proposed solution that families discussed during the interview process. *Changes in*

behavior examined the changes in behavior that participants talked about surrounding

their engagement with sustainable living. *Spark* was a code which highlighted if the

participant discussed anything which instigated their move toward sustainability. *Goals*

examined how families wanted to more actively incorporate sustainable practices into

their daily lives.

To code each interview, I used my Code Descriptions (Appendix C), with a different highlighter color for each theme. I would highlight the text that I thought fit within each theme by the associated color (or multiple colors if it fell under more than one theme) and then wrote the subsections that I believed it highlighted in the margins. The coding process was difficult and time-consuming, especially since I did not use coding analysis software but instead hand-coded each interview transcription based on my categories. It was also complicated since many times a certain statement or story would elicit multiple codes, demonstrating the interconnectedness of these concepts within the participant's reasoning. However, as my research focus shifted, and I reassessed my coding strategy, I refined my code index to include an idea that began to emerge in many interviews, which I found surprising, I termed the code "reactionary," and it explored sustainability and its relationship to the economic repercussions of the Great Recession. I will discuss this in more depth later, but, in my opinion, the concept of reaction became one of the most provocative ideas that emerged in this project.

Interview Findings

1. Sustainability: challenges and benefits: Since this project was interested in the barriers, benefits, hidden costs, investments, and familial reasoning associated with living more sustainably, and how families are, in effect, expressing financially their beliefs about sustainability in their day-to-day lives, questions in the interview centering on their perceptions of the benefits and challenges associated with sustainable living were vital to fully understanding family perspectives. I also found it necessary to ask interviewees about challenges more than once, and it seemed to elicit different responses at different points in the interview (i.e. at the beginning of our discussion of

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sustainability versus toward the end); whereas the benefits were quickly addressed with seemingly little need to probe further.

In the interviews, participants were well aware of the challenges associated with more sustainable practices. For Britney, a single mother, "I would say [ ] the expenditure of energy, just like with [hand]washing clothes at home, or just having to try to be diligent about recycling, sometimes I get lazy and I don't feel like rinsing out the yogurt container." For Britney, the challenge was based on her ability to invest in handling the day-to-day expenditure of energy necessary to maintain these practices, her statement that "I get lazy" is telling; lazy signifies her sense of guilt. For Theresa, a mother who had become heavily involved with sustainability in her daily life, including blogging about her experiences, challenges for her family centered on three ideas: cost, dispersion of necessary items around the community, and social repercussions. Theresa stated, "I do go, literally, like 5-6 different places to get things that would be awesome if they were in one spot. . . I do hit the pavement a lot to get the things that I want." Theresa later explained:

> We don't get to participate in some stuff because we may not agree with it,
> or we may not, you know, feel comfortable. So, the social aspect has
> made it hard. . . So the names and the lack of understanding from even
> your closest family members is rough. When they kind of tease you or
> make fun of doing things from scratch and you know, Martha Stewart and I
> just, I take things a little too personally.

Theresa's last challenge is worthy of note. Socially, Theresa and her family felt they were being penalized for operating outside of what was an acceptable level of participation, they were doing too much in association with sustainable living practices, and therefore felt alienated from even their own family. Theresa mentioned family gatherings where she and her husband were unable to participate because they did not believe in eating out at certain restaurants. She further stated that in order to be able to participate in family gatherings, she was now expected to make all the food with no help because of her strict food standards.

Cost was something that came up frequently in relation to purchasing more sustainable food sources or products. Claire provides a typical statement of families, "Sometimes going to buy, like going to Whole Foods to purchase that stuff, it's just more expensive." Or for James, "You want to buy this, you can buy this sustainable option for whatever product this is, or you could buy the normal version for 75% of the price. And like especially right now I'm so cost conscious that I'm just looking to save money and sustainability is one of the things that kind of goes by the wayside when you're doing that in a lot of cases." Alternatively, some families viewed sustainability as helping their family to save money, for example, Karen stated,

> At first it wasn't like anything having to do with greener practices for the planet and the health of all that or anything. I mean it was really budget driven for us. And just trying to have a living situation that fits within our budget, but not having to sacrifice what we consider a normal life. . . So figuring out how to still have a fairly normal life without spending all the money.

For Karen's family, sustainable living practices meant finding used items on community based websites like craigslist or freecycle, fixing things themselves by watching YouTube videos, and trading resources within their community. For Joseph and Elena, a family with a young daughter:

> Elena: If you're trying to be good in buying organic food. . . that's still a lot
>
> and really expensive too.

> Joseph: Yeah, and I mean, that's just sad, in order to buy stuff for your
>
> kids that doesn't have the preservatives and that other crap in it,
>
> that who knows what it's doing, you know what I mean? It's hard.

Most respondents recognized that they had to pay more for what they considered better options, and most were willing to do so. However, for some, like Elena and Joseph, this was not as possible and they viewed this as inequitable.

Another idea highlighted within families was the challenge to encourage their children to understand or participate. Natalia, a single mother, explained, "Putting in the time to deal with the recycling or to think about what I'm buying, and having to research stuff, and find what are the better products. . . And then dealing with a kid who has no understanding of what the heck you're talking about. Or why would that ever be important? That's a big challenge." Another mother of three, Mia, reiterated this sentiment: "Trying to get the kids to do it is, reminding, we have to keep reminding [them]." Engaging children with and enforcing sustainable living practices in the home were at times challenging for families.

Sometimes the more sustainable option is not possible, as expressed by Karen:

It gets hard sometimes when there are some things that it's like you really

try and you feel like you can't do it sustainably. There are just times when

we've just totally given up, usually it's because it's tied to my husband or I,

our work situation. Where it's more of a time crunch and so we don't have

the ability to tinker with something or like wait for something to come up

for free . . . it gets a little bit frustrating because you feel like, gosh if I

didn't have this time crunch I could totally conquer this situation, but now I

have to just go out and buy or pay.

For Karen and her husband, being able to fix things on their own or with the help of their

community was an important component of their choice to live more sustainably, as

were alternative forms of exchange, a "time crunch" meant that their family needed to

act quickly, which largely negated these more time consuming ways of solving these

kinds of issues within the household.

The benefits of sustainable living were also based on complex and divergent

familial reasoning, but I found most could be fit into four broader categories: saving

money, helping children understand broader ideals, personally feeling better, and

protecting the earth for the future. Britney commented:

I think recycling, conserving energy and water kind of [ ] helps my kids be

aware that yeah, I think it'll help at some point them realize like those

resources are for everyone and we don't need to be wasting things that

we don't necessarily need to be wasting.

For Britney, her daughters were learning from her example, by taking shorter showers or putting all the household appliances on power strips which were turned off every night, she was demonstrating for her children the need to think about these broader ideas of resource scarcity. Karen thought about the benefits of sustainability for her children in a different way:

> One of the obvious benefits is that we can live within our budget, but more than that I'm happy to see our children already being more creative with things and being less materialistic than I guess I would've expected. . . But they are already getting the concepts of having to work for something before you can enjoy, and sometimes I think because we have to wait for things for 2 weeks instead of just going out and buying it right away, or we have to fix it before they can use it, then they appreciate it more and give it a little bit more thought.

Because Karen's family would use these community based websites, going outside a typical consumer exchange, waiting was something that her children had become accustomed to, which, in Karen's opinion, had led them to become less materialistic and more thoughtful about their possessions. Theresa, similarly, espoused the benefits that a less materialistic lifestyle provided for her son:

> I do crafts with him [her son] because I don't want to buy new stuff, to teach him that it's okay to make things. And his [Christmas] gifts are actually all going to be used, I have a friend that's giving us a kid's kitchen, and there's this site, freecycle, and so I'm seeking out a playhouse

because he likes those little playhouse things that all his friends have. But I can't afford to go out and buy it used for one, I mean, I can't afford to buy it new, I don't want to buy it new because I don't want to contribute to new waste. And if I can show him that you can get something used and still get plenty of joy out of it, then, hopefully that would teach him something. So, just living a basic life and being happy.

Theresa's statement provides a further example of how sustainable practices were viewed as an important component of teaching children about larger ideals, like appreciating possessions and being less materialistic. This has further implications for policy: a lot of the participants and their families were making these seemingly insignificant changes in behaviors and actions to become more sustainable, but these small shifts in habit had a large impact on their identities as both individuals and families. This is important because it exposes how policies will need to appeal to these more consequential decisions about who families want to be, in order to create lasting changes in day-to-day practices.

A few families equated feeling better as one of the key benefits of living more sustainably, this can also be countered by thinking back to Britney's statement about feeling "lazy" when she is too tired to rinse out a yogurt container, the behaviors associated with sustainable living elicited both positive and negative feelings for participants. Rachel explained, "I think by doing it you just kind of feel better; it's like donating or doing something charitable, it makes you feel better."

Again, saving money was an important aspect of sustainable practices, one respondent, Peyton, exemplifies this idea, "It does save a lot of money, like we pay for less garbage to be taken out because we compost and recycle, and then with the wood burning stove we pay a lot less for heat. Like for the water heater we pay a lot less to heat the water and stuff like that, mostly money." Families highlighted their reduced energy bills, recycling cans for money, investing in reusable items which saved money over time, among others. The future was also an important aspect of sustainability, for example, Joseph said, "I think the world will go on for future generations. Otherwise, I think at the rate, if things don't change, I don't think it'll be [here]."

There were many challenges for families to live more sustainably, including taking longer to implement (i.e. cooking a meal from scratch versus a packaged dinner), costing more, social stigma, or the amount of energy required, which were more focused at the ground level or on the practical details. While the benefits discussed by families were more conceptual and very lofty, like protecting the earth, demonstrating important ideals for children, and feeling better themselves. Saving money was also highlighted as a benefit, but these grander ideas surrounding sustainable living embody why the term is so elusive and complex, even for the "experts" to pin down. Each of these families was engaging with sustainable practices at varying levels and with different goals and beliefs in mind, some viewed it as a cost-saving measure, others an expense. These often contradictory perspectives, differing challenges and benefits, all surround the same term: sustainability. Because the term is so ubiquitous, families have in a sense the agency to utilize sustainability in whatever capacity makes the most sense to them. Further, the benefits of sustainability were something that no family felt

the need to laboriously explain to me, the researcher, it was tacitly expressed that they felt better after they acted sustainably.

2. Building Relationships within Communities: When thinking about sustainability and their ability to practice more sustainable practices, many respondents highlighted the necessity of community support and relationships. For some respondents, it was the broader community and its more imprecise influence on their family, for example, Peyton stated, "I think Santa Cruz in general because they're so into it that it helps inspire us to be more sustainable, the people and like companies, stores and stuff encourage you to bring your own bags, stuff like that." Or Britney, "And I think probably just this community in general, it seems like everybody, I'm not going to say everybody, most of the people I've met since moving here recycle or are interested in the environment, or their local community, living locally, like buying things locally, that kind of stuff, supporting local farmers." This kind of community support helped foster more consciousness among families, exposing them to things that other community members were doing, or soliciting their help, like in Peyton's example of the stores encouraging bringing your own reusable bags.

For other families, it was specific relationships in the community which helped them in their efforts to live more sustainably. "We're talking with other people who are interested in it, that does help sharing ideas or helping with motivation" (Rachel). Similarly, Theresa explains how these relationships can be formed through a common interest in sustainability:

We were amazed when we first came to the community and started going

to the farmer's market, and we just started asking questions. And they

wanted to tell you the information, and they wanted to share. One of the,

Lisa, the woman I was telling you about with the chickens, she just would

give us stuff because she wanted us to try it and she, you know, spread

the word, and it was amazing the sense of community once you started

seeking out that information and opening up with people.

In Theresa's example, a unifying practice of attending farmer's markets helped her

family to build relationships with community members when her family moved into the

area. Sometimes these relationships were necessary to maintain practices, Karen

stated, "community really helps because with friends and family we've been able to like

do a lot more things than we would have if we didn't have any connections outside.

Yeah, that's probably the biggest thing honestly." Karen explained that friends and

family had been able to help them fix household items, like electrical issues that arose,

and they were able to trade skills since her husband was good at troubleshooting

computer problems. These specific relationships were necessary for many families to

practice sustainable living, either through general motivation, or providing or trading

resources outside a typical economic exchange.

Finally, respondents explained that they had either grown to rely on or hoped to

someday more heavily rely upon their community for more of their needs. For example,

Theresa's husband stated, "Like I said we just chose food as our battle, mainly. I mean,

it's seeping into other aspects of our lives, but food was the main battle that we picked

and you know, just really learning to rely on local people for more of our food needs."

The phrase "learning to rely on local people" exemplifies how many of the practices that families associated with sustainability were situated, they wanted to become more invested in their local economy. Or they expressed a desire for their children to become more invested in their community for their needs, Britney explained:

> I really think just being able to rely on your own local community and be able to be somewhat self-sustained, with gardening and hopefully with having a community that you can trade resources with. Yeah, and just hopefully they'll have an interest in being a part of their local community and actually being active members of a community. And not just going through life attempting to gain as much as they possibly can.

Even though this was not something that Britney was necessarily doing herself, she idealized this kind of situation for her children, hoping that they would someday exist outside of a typical economic model through trade. Elena's boyfriend expressed a similar sentiment:

> Like farming, just growing and raising your own foods for your family, even if you have enough land for your outside neighbors and then trading those resources for other goods, you know what I mean? Like if you raise cattle, and the neighbor down the way raises pigs, just trading and bartering instead of. . . I don't think, well I know, people aren't meant to live like this, you know what I mean?

Admiring these kinds of relationships, of having neighbors or community members that help you out, was a common association people had to sustainable living,

including homesteading/farming, and trading and bartering. These concepts were romanticized by many respondents, and may show an area where people feel vulnerable in their own lives, because they do not have many connections to their own community. Community was an important associated component of people's beliefs surrounding sustainable living, either through its broad influences on a family's consciousness, through specific relationships that had been formed in mutual support, or through idealizing a more connected existence for their children or the future of people in general.

   3. Alternative Forms of Exchange: As was briefly examined in the previous section, respondents emphasized a relationship between sustainable living and alternative forms of exchange. Most viewed this relationship as a solution, as something that positively fostered more sustainable living. Both Britney and Elena's boyfriend in the previous section highlighted an idealized return to trading and bartering resources, and both associated this with an increase in both farming and sustainability. For Theresa, this had become a reality for her family in their quest to become more sustainable:

   We took those chickens because she [local farmer] had no need for them

   anymore, and we harvested them, and now we have chicken meat, and I

   don't have to buy a 10-20 dollar chicken. An organic chicken, at the

   farmer's market, and that's because of the cost of organic feed and land

   maintenance and time but it can run you 15-20 bucks for one chicken and

   there's just no way [to] maintain that. That is not sustainable for us, even

   though it is a good quality piece of meat, so, we're starting to go back to

this system of bartering and trading, so, those chickens, I made her pies. I worked on her ranch. We actually harvested a goat. And same thing, I went out for a day and helped her tag, her tag and give copper, because I guess animals that live off the land and then you're producing them for fibers and meat, they sometimes develop a deficiency, so they get copper. Yeah, so I helped shove copper down a bunch of goats and sheep and she had like 300 of them. But I went out and worked with her for the day and in trade we got meat. And we're able to get past some of those financial challenges.

Theresa and her family had grown to incorporate this kind of bartering in order to provide healthier and more sustainable options, while also facing a limited income since Theresa had stopped working after having their son. Karen's family, also living within a limited budget, had grown to incorporate trading resources within their community, both through online forums and their networks:

Karen: So we've had like a friend come fix our electrical problems. Or my husband and my father-in-law will take care of the yard problems with the fence falling down and all that sort of thing, and plumbing. And we've been able to draw from our community to fix most of the problems that have come up in the house, which has been nice. It's a lot cheaper.

Interviewer: Is that how you typically fix things?

Karen: Yes. The first shot is always, trying to fix it ourselves and hopefully not make it worse. And then if we need to replace appliances or something

the first place I'll look is actually on craigslist or freecycle to replace it with something that's used but still working.

Drawing on their community connections was something that allowed Karen's family to maintain their home when a problem would arise. Both Karen and Theresa utilized freecycle as a resource for finding used products for their families, which is an online community forum where members post items for free. Both families viewed this as a sustainable practice because they were rescuing items from the landfills, and they were not contributing to new waste through the purchase of new items. They also emphasized the benefits for their children, as previously discussed.

Sharing was another idea that emerged within some of the interviews, with respondents relating it to reducing waste in our society. Natalia provided an example,

Like in the Rose Garden they have a community so they'll share unused items within their community. And then here too, I think the Naglee Park community does the same thing, where they try to kind of share just unwanted stuff or unneeded resources with each other. And then sometimes on the computer, I mean I don't really go for the social media but I do see people asking, you know for support or for ideas and stuff and using that. I mean, I think it'd be a great way to get the word out but then at the same time I feel like people have, like they don't take it serious when it's on there, it's just like a post you read and then you get a feeling for a moment and then it's done. You go back to burning your heater.

Although online communities were not as salient for Natalia, she did appreciate the efforts of her current and previous community which shared resources. Natalia also believed, "I think meal sharing is such a good way to help people who work so much to alleviate that stress of and then also to get rid of wasting food. I see a lot of people, they're rushed, they make bad meals, and then they just throw it in the garbage and then they just go buy food." Within her family, leftovers never went to waste, if she and her immediate family did not plan to eat it, they would pass them on to her parents, and if they did not eat them, they gave them to their dogs. This was an important aspect of her sustainable practices, and represented her desire to invest in her support system.

Whether idealizing the economic model of bartering and trading, or actually practicing it, families viewed alternative forms of exchange as an important component of their desire and goals to live more sustainably. A solution offered by a few families, sharing, either through community groups or online forums, represented another ideal which was viewed in conjunction with sustainable practices. This represents two similar ideas: adaptation and ownership of the term sustainability by families and further exposes their desire to be more engaged within their communities.

4. Social Marketing: Almost every participant in this study discussed three components of sustainable living: recycling, turning off lights, or driving hybrid cars. These three concepts were strongly associated with sustainability and were all assumed to be wholly positive. These three practices had become internalized by the participants, including a participant who did not believe he practiced any sustainable behaviors. This participant, when he realized that these behaviors were something he did out of habit, explained the practice of turning off the lights: "None of us really started it. I think it's just

kind of a natural, normal impulse for people of our age. Like, we're so kind of taught to do that we kind of inherently practice that, it's kind of instinctual." When I probed further on this concept and asked him where this idea stemmed from in his life, James stated, "School and at home from your parents and advertizing, things like that, you know." His last avenue for new information, "advertizing" really struck me, and as I coded the interviews I began to note the impact of social marketing on the behavior of the study participants. For example, the advertizing campaign that James is talking about, which I vividly remember from Saturday morning cartoons, asked children to remember to turn off the lights when leaving a room, ending with a giant cartoon finger pointing at a light switch. That I can remember the image of this one commercial from my own childhood demonstrates the poignancy of these kinds of messages for children.

Recycling was another heavily advertized solution, and although it is now technically mandatory in the Bay Area with fines for noncompliance (since July 1, 2012), people emphasized that they had been invested in this system of waste management for many years, and for some since childhood (Woodall 2012). Again, this transformation is relatively recent, with cities beginning to charge more for nonrenewable waste as landfill space became an issue and offering blue bins for residents (Kleiman 1989). As recent as 1989 this idea of recycling was news, as Kleiman states:

> Regulations and procedures on recycling vary from community to community. . . [in] Austin, Tex., and Seattle, peer pressure and pride in civic duty have insured 85 percent compliance. Whatever the impetus, what was once a private and mundane chore is being transformed.

Now, recycling has become an integral way that members of the community engage in day to day sustainability practices, and every participant mentioned their recycling efforts at least once in the interview. In a typical comment from a respondent, Peyton explained, "The simplest [sustainable practice]? Probably recycling and composting. . . Because we just setup a system where we have a compost bin, and a recycling bin and a trash can and so it's really easy just when you have like a banana peel to throw it in the compost, it's just as easy to throw it in the compost as is to throw it in the garbage can." No one viewed this practice as anything outside the ordinary after only 20+ years of recycling practices and only recent compliance with it becoming mandatory.

Hybrid cars represent the third example of recent advertizing and social media that has had a strong effect on families' perceptions of sustainability and have impacted families' views of cars in general. When I asked: what would you say is the least 'green' or sustainable thing that you do? Driving a car that was not a hybrid was mentioned almost every time. For example, Theresa's husband explains:

> We're a constant walking contradiction, you know? I mean, we try and be
> so conscious in certain areas but then there's certain things that are really
> difficult to avoid, you know like she said, I drive 110 miles a day for work.
> And that's like what we're doing right now is trying to get into a much more
> economical vehicle. . . we'd like to be as sustainable as possible, we're
> constantly looking at things and areas in our life to improve to minimize
> the impact on people and places and all those kinds of things. But there's
> certain things that are unavoidable, and I mean just being a consumer of
> so much gas every day is one of them. But in order for us to be able to do

all this stuff I have to drive into the Silicon Valley to make the money that
allows us to do that.

Again, this demonstrates an internalization of ideals surrounding what is a good vehicle versus a bad one, and if Theresa and her husband had a more "economical vehicle" this commute of 110 miles would be more sustainable.

The reason these three concepts struck me as so poignant was the recent enactment of the single-use plastic bag ban in both Santa Clara and Santa Cruz counties where the majority of these interviews took place. Although this had featured very prominently in the news and had changed the participants' relationship with their grocery store, only three people even mentioned it. This example demonstrates again that there is an internalization of some values and ideas over others in relation to sustainability, which may be related to the social marketing we are exposed to on television and in print. Most participants viewed the big three as rational and positive. However, plastic bag usage and control, a more recent contender, has not been marketed the same way or with the same focus. Rather, this practice has been, in effect, legislated and demanded. It is interesting that the subjects either did not yet acknowledge its impact or perhaps they had not had time to internalize its value as a sustainable practice. By not providing families with the beneficial implications of this recent policy shift, the value attributed to the bag ban was not yet present or discussed by families.

5. Participation and Behaviors: As I hope has become increasingly apparent, each family participates at differing levels, and with differing goals, and there is no clear

cut path towards the adoption of more sustainable practices. Some practices have become somewhat mainstream, like recycling and turning off the lights to conserve energy, while still others remain relegated to only the staunchest practitioners of sustainable living practices. Some practices in families have been carried over from parents; others are new to the nuclear family but have become important nonetheless. Natalia explains how even just the realization of possible areas of improvement can become overwhelming:

> I think that is the part that's worse is becoming aware, of waking up. You know, it's nice to live in your bubble of nice clothes and you're nice car and even things like I would boil water to make tea, and then not go make the tea and then the water would cool down, and then I'd boil the water again. And then I would do that multiple times during the day, and I wouldn't think anything of it, and then now all of a sudden it's like, okay, I'm going to put on this water to boil, am I ready to sit down and have my tea? Where I'm having that process of constantly reflecting is sometimes challenging. And then sometimes just physically doing it, sometimes I don't want to get out of the shower, sometimes I want to give my kid a really deep bath and making those sacrifices and explaining them to a kid is difficult too.

Natalia felt that her family was in an initial stage of engagement with sustainability, and her comment: "constantly reflecting is sometimes challenging" demonstrates how this process can begin to change self-reflection and behaviors as families become more aware of their current practices.

For many families participation began with some initial spark, for some it was a documentary that sent them on a rabbit trail of information. Claire explains how one documentary encouraged her family to recycle, "We saw on PBS, there was a documentary called *Bag It* [2010], which discussed the whole plastic bag evolution and what a huge problem it is environmentally. . . But that was a really interesting documentary, I thought, that drew upon that idea that there's just so much waste and where do these things end up, you know, they don't just go away." Or for Theresa's family:

> But, I think for a lot of people the gateway thing was *Food Inc.* [2008]. And
> that was kind of our gateway. . .We already had an idea of some of the
> things that were addressed in the movie, but when you see the movie and
> you're like oh okay. And so he [her husband] was the one that kind of,
> forced, no I don't want to say forced, but we watched the movie, and then
> like I said, the information junkie he is, we started just looking into those
> things and he's the one who was like, oh we could do this, or we could do
> that. And so, it kind of started with him and then I kind of carried it on.

This documentary coupled with the birth of their son, had in a mere 3 years changed entirely Theresa's family practices, and they have become avid proponents of a more sustainable lifestyle, again through blogging and a very active life within their community. Theresa's husband explains how it began, "So for us, just choosing a battle and for us that battle was food and then seeing what, at first it was just simple things in our life that we could do without a lot of inconvenience and then the further we've gotten into it, we've decided that a little bit of inconvenience isn't necessarily a bad thing." Food

became Theresa's family battle, but other families focused on other aspects, like conserving or reusing, which again highlights the dexterity of the term sustainable, families were able to use it in relation to very different ideas and values.

6. Reactionary Benefits: Most of the findings in this study were somewhat expected, based on the amount of current exposure our society faces on information about sustainability. But this raised a question for me: Why have these concerns for families become so significant at this particular time, especially since they have led families to sometimes willingly change behaviors? The timing of this trend, coupled with the values that it ultimately represents, provides a rationale for those aspects of sustainability which are largely reactionary. Participants mentioned that they are looking to grow their own food, to be more involved in their communities through purchasing products at farmer's markets or building networks, and through their consumerism of organic and sustainable food sources. It may be a somewhat small monetary commitment, using food to send a message that represents larger values, but more and more people seem willing to do so.

This leads to the role of anthropology, and how it can possibly capitalize on this trend, helping to foster positive shifts in behavior as we attempt to really address 'smart growth' in the 21st century. Applied anthropology has a long history of utilizing methods which attempt to remove preconceptions and bias, while acknowledging the benefits of "more direct involvement with study subjects" (Kedia and van Willigen 2005). Applied anthropology, in effect, dismisses the objectivity that many disciplines believe they can achieve by acknowledging the role of participants and researcher in the co-creation of information that represents a particular point in time (Kedia and van Willigen 2005).

Historically, we can see how this perspective emerged by revisiting what is arguably the inception of applied anthropology: colonialism. Methods employed during this phase of anthropology mostly centered on ethnography, with a researcher situated within another culture, documenting their culture shock along with those of their study population for a broader governmental and/or academic audience (Rylko-Bauer, Singer and van Willigen 2006). These early efforts "seized on opportunities to prove the value of their fledgling discipline while putting their awareness of the fundamental importance of culture to good use in trying to protect the traditions and rights of subjugated peoples—albeit within an overarching colonial structure" (Rylko-Bauer, Singer and van Willigen 2006:180). Initial contact with the researcher represented a co-creation of ethnographic data, as we can see from examples which question the influence of the researcher on the resultant data, for example, did the male researcher only have access to the male population of a culture? Ethnography was unique in its acknowledgment of the researcher's existence and influence during data collection, and their direct engagement with the study population led to further work to preserve the cultures that they had come to understand. These efforts were still situated within the Eurocentric perspective, and were "largely unconcerned with how such communities themselves might effectively use this knowledge to meet the challenges of everyday life and ensure their cultural survival" (Kedia and van Willigen 2005:6). But this represents the first cognitive leap toward modern applied anthropology: acknowledging the anthropologist's influence to reject perfect objectivity and to question their inherent bias.

World War II became the next greatly supported applied effort by anthropologists, and they engaged in a variety of functions, from those highly respected to those that

received harsh criticism after the War effort. On the more negative side of the War effort was the anthropological work within the Japanese internment camps. These efforts were not well received after the war ended, but they represent a more hands-on effort by anthropologists, again engaging with the study population, and in some instances actively combating racism toward Japanese-Americans (Starn 1986). Anthropologists' unique ethnographic perspective was sought by the government "rather than penal authorities, military experts, or political scientists" because it could define the cultural differences that were arising within this microcosm (Starn 1986:716). Their efforts were meant to lessen "prejudice against Japanese Americans as a precondition to smooth resettlement" (Starn 1986:710). The advocacy undertaken by these anthropologists was limited, which has led to questions of the ethics of serving the powerful while claiming to advocate for the weak (Starn 1986). On a more positive note, the Department of Defense enlisted Margaret Mead along with other scientists during World War II to research how diets could be shifted toward less desirable proteins (Wansink 2002). Margaret Mead acted as Executive Secretary and organized the research around six themes:

> (1) the problem of food acceptability, (2) food preparation and serving methods, (3) sampling populations for food habit studies, (4) problems in the feeding of army and civilian populations, (5) regional versus national habits and nutrition, and (6) the relation between food consumption habits and nutritional status (Wansink 2002:91)

This research took a different tact than had previously been attempted by the government, which had initially relied on propaganda and patriotism to encourage

eating these strange meats (Wansink 2002). Mead and the other researchers

challenged this assumption, finding that there were other areas which needed to be

addressed before appeals to patriotism: reducing barriers to eating certain foods, and

enlisting gatekeepers as promoters (Wansink 2002). Through challenging these

underlying assumptions about food that families were making, like that certain parts of

animals were lower-class, "the Committee on Food Habits emphasized the importance

of removing barriers to consumption before trying to change food habits" (Wansink

2002:96). This research demonstrates the role of applied anthropology and how it

benefits these kinds of overarching, unspoken and hidden meanings in the day-to-day

lives of families by removing preconceptions and bias.

Bringing these central tenets of applied anthropology into a more current

example; Alan Brown examines the influence of anthropology on the design of an mp3

player targeted toward athletes at gyms (2012). This very specific targeted subset was

brought into focus groups by market researchers to find out just what they might want in

a cheap mp3 player (Brown 2012). Based on these findings an mp3 player was created

by engineers, and no one used it. Confused, the firm decided to hire an anthropologist

to discover the discrepancy. Brown states: "unlike market researchers and designers,

anthropologists start with people rather than products (2012:32). The first research team

had missed the meaning of the mp3 player within the gym's culture (Brown 2012). By

removing the preconceptions and bias of the market researchers, and focusing on the

hidden and unspoken activities by conducting ethnographic research within the gym, the

anthropologist found that this population had designed an mp3 player that did not mesh

with their actual needs (Brown 2012). In focus groups they asked for small and sleek,

but in reality with sweaty hands they needed a larger interface (Brown 2012). The anthropologist also suggested reducing the functions on the mp3 player, and installing a quick kill button so that when a social situation arose within the gym culture, the user could quickly engage (Brown 2012). This example again highlights the benefits of applied anthropology, it can be focused on a targeted group or a broader population, but it acts to remove preconceptions, creating interventions based on what arises in the data, and working directly with the study population to elicit these hidden meanings. In my project, participants were reacting in socially positive and beneficial ways, and anthropologists are uniquely poised to analyze the broader social commentary they are making.

Admittedly, this connection between the economic crash of 2008 and the sudden surge in practices surrounding sustainability did not become apparent to me until I started looking at how people were talking about how they defined sustainability, and the "why" behind their commitment. For example, when I asked Theresa to define sustainable living she said:

> For us, I know there's just probably so many definitions. But for us, it's really, what we want to get to. The goal for us is to not be dependent upon unstable systems. When we have a power outage here sometimes, and it's actually been happening a lot lately where the power will just shut off, and it's a nice day! And you have no idea what's going on and the power just shuts off. And you are, I can't do anything. And I don't like that feeling. So, we just don't want to be dependent anymore. And conspiracy theorist was another name that we've been given, but we just don't, we don't

believe the way people are operating today in terms of just convenience

and the ease of accessibility of things and the abundance of waste and

the "I don't care" attitude, it can't keep on. And one, we don't want to be a

contributor of that, two, I want just a healthier life for my child, and

possible future kids and grandkids and, but the biggest thing is we don't

want to be dependent upon unstable systems. And, and so for us learning

to be self-sufficient, so learning how to grow my own food, harvesting

those 40 chickens, getting chickens of our own and having eggs, having

rabbits for meat, growing, you know, yeah, growing vegetables and

produce in general. And, and I don't want it to stop there, you know,

there's so many other things when you think about it. . . that's kind of

where we want to be, we just want to focus on living.

Theresa represented someone whose practices were the most extreme, she was the

most stringent about her family's involvement with becoming more sustainable, so even

though I found her definition interesting, including becoming "self-sufficient," not

depending on "unstable systems", and not liking the feeling of this dependence, I

dismissed her definition as unique.

Then I started rereading and coding the other interviews. Suddenly her

statements were not all that unique: many families were reiterating these sentiments of

independence or self-sufficiency and not depending on some "other" although they

emphasized dependence on their community and wanting to financially support certain

segments like local or organic products. For Peyton, "sustainability [is] the ability to

function independent of everything else around you, like independent of your economy

or your culture." For Natalia sustainability meant, "We want our kids to be self-sufficient where they do know how to grow food, where they know how to eat. . . I really do define it as not needing corporations to meet my very basic needs. So I shouldn't need somebody to feed me, even to the point of being able to, on some level, make my own clothes." For Elena's husband, "I mean, honestly, if we could do it and it was feasible right now, I'd like to go somewhere like Alaska or Montana or Wyoming. Somewhere we're really, where it's a simpler life and literally you have to depend on yourself." For Karen, sustainability meant, "I guess just with most things thinking outside the box a little, and not just going the consumer route for everything you need. . . [to] be able to make choices that are less dependent upon other people, far away, and their choices, and more dependent on what's happening in your family and community." She later added, "But then also just the community aspect of sustainability, of helping people out. I think that they [her children] are already learning when they see people come over here and helping us, and when they see us going over and helping somebody else with their projects, that sort of thing that they're learning that it's really difficult to live in isolation. And it's a lot easier and happier to live in some sort of community; but also just to be self-taught, learners who are trying to better themselves and then use that to [help] their community." Britney also used similar wording, "I think for me just really wanting them [her children] to understand and have the knowledge and the ability, it's not like I'm against the government but live as little connected to outside resources. Yeah, I don't believe in like an apocalypse or like overthrowing the government or anything like that, but, I really think like just being able to rely on your own local community and be able to be somewhat self-sustained, with gardening and hopefully

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with like having a community that you can trade resources with. Yeah, and just hopefully they'll have an interest in being a part of their local community and actually being active members of a community." She also defined sustainable living as:

> Well to me I would think it would have to do with living off the land and trying to cut as many outside sources for energy and gas and heat and food, finding some way of growing your own food, be it a garden or having chickens, those kinds of things. Or having people that you can trade resources with so if you have a garden, trading it for eggs and milk from someone else who has those products. I think just trying to cut as much, yeah as much reliance on outside things, so trying to get as much as you can from local resources and people that you know rather than supermarkets and things like that. And then just really trying to find a way to be somewhat self-sufficient and not be so reliant on outside resources.

Britney later commented on her goals, "I hope at some point I'll just be able to get back to quote unquote 'back to the land' a little bit more. . . I really hope to just not have any neighbors at some point and just really be able to live off the land and just enjoy doing that."

Still, I was not making this connection. I found their comments somewhat jarring, especially considering the familiar definition of sustainability, which does not include any reference to limiting reliance on an outside "other" while building relationships within your community, or becoming self-sufficient, but instead focuses on meeting the needs of the current generation without compromising the ability of future generations to meet

their own needs. Then, in my urban planning class, my teacher Dr. Ralston, a city

planner for Oakland, completely shifted my focus. He was talking about a vacant lot in

Oakland which was being pursued by an urban farming organization, but the city was

hesitant to let them use it even with a limited contract because they feared that the effort

was more a reaction to the economic disaster, an unsustainable surge in the citizenry's

desire to "get back to the land," which eventually fades as the economy bounces back.

This potential connection between sustainability and the economic crash of 2008 could

show that the concepts participants were highlighting had more salience to them

because they had so recently felt out of control. They were building safety nets in their

newfound need to become more involved with their communities. They were financially

supporting more expensive products like organic foods from local farmers during a

recession to demonstrate in a small way their values, which were in contradiction to

those exposed by the economic crash of 2008. They were hoping to reduce their

reliance on this "other" because they had been scared by their vulnerability after the

economy crashed. These families were reacting positively to a negative situation, and

these reactionary benefits can be explained more holistically by including some

components of structural functionalism. Their dependence on an "unstable system" was

exposed by the financial crash, and now these families are "fixing" the problems that it

exposed. They are trying to build alternative forms of exchange, networking within their

communities where previously they had relatively limited ties, attempting to become

more self-sufficient through returning to fulfilling their own basic needs. It also

represented their goals for their future; they wanted to more fully encapsulate the ideals

surrounding sustainability in their day-to-day lives. And if anything stands in stark

contrast to these ideals, it was the events preceding the economic crash of 2008. The continued maintenance of society was supported by these reactionary benefits, these emerging social processes (Radcliffe-Brown 1935).

Scenarios

Utilizing these coded interviews, I created scenarios which would elicit or "spark" a conversation about these broader themes, engaging a new set of participants to expose the underlying beliefs of individuals within Santa Cruz County about the three issues that were the focus of my research. Since the idea was to expose possible solutions, not current behaviors of participants, scenarios were the best instrument to elicit behaviors that families could see themselves employing in the future. Scenarios use a story format, which removes some of the stigma of pointed questions and removes the value attached to sustainability, by having participants imagine a different future, and how they could see themselves participating within it. This is especially useful for policy, as it provides knowledge of what citizenry find relevant, allowing policymakers to make policy decisions in an area of uncertainty. These scenarios were amalgamations of the ten families interviewed, again, highlighting common ways that these families were interpreting and practicing sustainability (Appendix F). The findings from the interviews were incorporated into the scenarios, creating four types of beliefs and practices based on dichotomies which emerged within the interviews: cost versus saving money, and community versus individual based sustainability. These dichotomies were present even within a single families' interpretation of sustainability: some aspects of sustainable living were viewed as saving money, while others cost more to do. Some practices were based solely within the family, while others required community based

solutions. These scenarios were meant to bring out these complications within

practicing sustainability in families' day-to-day lives. I created a very simple table to help

me identify the four "types" I wanted to create during my scenario-building, creating

imagined futures for participants to counter with their own behaviors and actions:

Agency/Individual

• High cost as inequitable • Amount of time required • Reduce reliance on outside agencies	• Independence through sustainable values • Growing own food
• Freecycle/craigslist or bartering, atypical economic exchange • Trading skills • Delayed gratification part of cost	• Ideal more important • Values projected to children • Farming/trading as ideal

Structure/Community

Some ideas fell within the chart on multiple points, but I tried to make each scenario

distinct from the other, so that participants in the workshop could imagine a family and

were (hopefully) able to interpret which two concepts I was highlighting. These two dichotomies became the central tenets of my scenarios, and I used the interviews to pull examples for the short stories I was creating. Due to the fact that I wanted them to be so distinct, they became caricatures of the responses of actual families but were based wholly on examples from the coded interviews.

I used letters to represent each scenario (also present in the chart above), and after creating each scenario titled them somewhat more aptly based on the story which emerged. To highlight the convergence of independence and cost, I created a story titled "situational sustainability," where a fictional family was increasing their independence from services and reducing their cost by teaching themselves those same skills, like a haircut from YouTube. The second scenario depicted the convergence of independence and values, and was titled "expectant sustainability," with this family focusing on farming and incorporating solar power to increase their independence, and instill values of self-reliance and sustainability to their children. The third scenario was titled "safety-net sustainability" and focused on cost coupled with a community focus. This story was also based on interviews and showed how sharing within extended family was this scenario's solution for our uncertain future. The fourth scenario was the merger of values and community, and was called "community exchange sustainability." This scenario focused on how bartering was integral to this family's sustainable practices, increasing their relationships within the community while demonstrating their values to their children (i.e. trading work with an organic farmer for organic meat). Creating these seemingly simple stories was very time consuming, and

looking back they were also a little long for the workshop format, especially since I read them to participants.

Workshop

For the workshop, I rented a meeting room at the Downtown Santa Cruz Public Library. The room included chairs and tables, and a screen to project my PowerPoint presentation. To find participants, as stated earlier, I requested original participants recommend or invite friends/families; I invited a freshman level anthropology class from Cabrillo College, an AmeriCorps group serving in Santa Cruz, and I invited a local church (my church).

Once everyone was settled at tables facing the PowerPoint, I introduced the project to the group of eleven participants, which included a brief history of the project, where the data for the scenarios came from, and the plan for the workshop. The PowerPoint contained as much from the scenarios as possible and they were very text heavy (I wanted to make sure they could reread the scenario as they were thinking of ideas), I then read each scenario to the participants (see Appendix G for Workshop Agenda and Appendix H for PowerPoint). Each scenario was lettered, and I put up very large post-it notes on the walls with each letter, split into the three "problems" that were highlighted by the City of Santa Cruz. The three key problems highlighted were greenhouse gases, the drought, and the bag ban. Participants were then given smaller sticky notes and markers and told to think of as many challenges and solutions as they could that fit within each problem under each scenario's conditions.

This seemed very straightforward to me, but after the first scenario, participants asked questions about what exactly they were supposed to write on the sticky notes. I explained the three "problems" again, and that I was hoping they could think of challenges and solutions. This was partially successful: participants wanted to get something written and posted, but some wrote about all three "problems" together, or only wrote about challenges they saw. This led to some incongruent results, which will be discussed later. There was also no oral feedback from the participants during the workshop, until at the conclusion of the workshop, I asked for any closing remarks, which launched a discussion among the participants surrounding sustainability, also discussed later. I wrote down as much as I could recall at the conclusion of the workshop so that I could add it to my findings.

Workshop Findings

The workshop revealed the complexity of the three concepts focused on (greenhouse gases, bag ban, and the drought) and how different perspectives tend to focus on particularistic solutions, or how different futures expose the underlying assumptions of participants. After my workshop was concluded, and I had thanked everyone for their input, I asked the participants if there was anything they wanted to highlight or discuss from the workshop. I was surprised when this launched quite a lengthy discussion, where the participants commented on how much sustainability encompasses, and how this makes it seem overwhelming at times. They further discussed how the government can impose restrictions on businesses quite easily, but households, for the most part, have free reign when it comes to their day-to-day decision making surrounding their contribution to sustainable efforts. They pointed out

that each of the scenarios demonstrated that families are interpreting the best way, or the reason to do so, and there is no one way to practice sustainability. This was also demonstrated in their responses to the scenarios and the three subheadings. Since they did not have to address each problem each time, some were discussed much more frequently. But overall, the group did try to address as much as possible under each scenario.

Scenario A

"Situational Sustainability"

For some families, sustainability means creatively enlisting technology to reduce household costs or provide solutions to everyday problems. For example, "Karen" uses her computer tablet to access freecycle™, an online community forum/board offering various "used" goods that someone wants to get rid of but does not necessarily want to discard. Karen says she often finds items her family needs for free from other members of her immediate geographical community, and although the items are used, Karen indicated that the items are usually salvageable. Karen has also enlisted YouTube as a means to learn new skills, like giving her children haircuts, which Karen taught herself by watching how-to videos, in order to reduce her family's dependence on car travel for services they previously paid for. Karen associates the following activities and choices with becoming more sustainable as a family: reusing items, repurposing items that would be discarded by other families, and reducing environmental impacts by limiting trips outside the home. However, Karen candidly views this shift toward a more

sustainable existence as representative of her "have-not" status, and believes that these practices would most likely not continue if her income were to increase.

This first scenario drew the fewest responses. This may have been because participants did not clearly understand what I was asking for initially, or they may have been uncomfortable at first. The participants picked up predominately on the income disparity, that Karen believed that her actions were related to her limited income, and would be reduced as their family situation improved. Responses were somewhat judgmental, saying things like she "was obviously not committed" or "if income increases, reusable bag use decreases." A common solution for Karen's family was to repurpose water and start a garden, this was something not highlighted in her scenario, and seemed to be a common solution that participants viewed as wholly positive. For example, one respondent wrote, "Karen could reuse water from bathing her kids to water plants in a vegetable garden. By growing food she limits trips to the store, teaches her children about sustainability and does not increase water usage. By growing vegetables she also lowers the amount of bags needed for the store." This exposes a common sentiment that gardening equals sustainability, without question. They were able to criticize these fictional families rather easily, but the solutions did not seem to be as forthcoming. This may reveal a problem with the way I set up the workshop or with the scenarios I created (they may have been too extreme).

Scenario B

<div align="center">

"Expectant Sustainability"

</div>

Other families have embraced a more precautionary outlook, interpreting sustainability as a way to lessen their reliance on the government and larger corporations thereby increasing their self-sufficiency. "Theresa" believes that her children will benefit from her choices, including incorporating farming, solar power, and other alternative solutions into their lifestyle. Imparting the philosophical underpinnings of sustainability to their children was a common sentiment among families, and most hoped that these values would eventually manifest themselves in subsequent generations in very rigorous ways. Theresa viewed her overall decision to be more sustainable as a basis for providing organic food for her children. Theresa started an urban garden and bartered with local farmers for meats and produce. Even though Theresa felt that it was essential for her children to internalize sustainable lifestyle practices, one of her current challenges was finding age-appropriate teaching materials that would convey these concepts. Theresa hoped that her children would become less materialistic and that through education and awareness, each generation would make better choices for the planet. Several other parents shared Theresa's goal of helping their children adopt more sustainable lifestyles and the hope that subsequent generations would build on the concept of sustainability. "We want our kids to be self-sufficient where they do know how to grow their own food, where they know how to eat it."

This scenario received more responses in each of the categories, but participants seemed to focus on her child's education and again gardening. In response to her complaint that it is hard to find materials that are age-appropriate, a few respondents said she should home school, which would reduce greenhouse gases by reducing trips

outside the home, and allow her to tailor her child's education to include sustainability. Although, one participant stated, "Her challenge would be that it is difficult to get future generations to choose this lifestyle because it is more difficult," highlighting that expecting more action from future generations is not always plausible. The garden was also mentioned as both a problem and a solution, gardening was a challenge for the drought, as many commented that urban farming can require large amounts of water to succeed. One response stated, "The project of growing your own organic produce has a price tag. A home farm would use significantly more water than a regular home and possibly incur fees for over-use." Solutions of instituting a drip system, or recycling water were suggested. However, gardening was also talked about as a solution in regards to the bag ban and greenhouse gases, by limiting trips to the grocery store (GHG) and removing the need for so many bags when you do shop. This demonstrates the often contradictory nature of sustainable efforts within households, and how individual solutions are specific to what a family values. It also shows that the scenarios were able to expose underlying assumptions. Gardening was most often cited as a solution; however, when in practice within a scenario, criticisms emerged, showing that although largely viewed as a positive behavior, people had doubts about its practicality in reality.

Scenario C

"Safety Net Sustainability"

Some families have embraced more wide-ranging goals and look to sustainability practices as a means to decrease waste and build multi-generational ties. One

participant, "Natalia", shared food purchases and leftovers among her extended family in an effort to save money and reduce the amount of food their families ultimately discarded. Natalia argued that food waste is an area where busy families are often negligent due to time constraints and other challenges. And even though sharing meals greatly reduced the amount of food their families threw away, Natalia admitted that sharing would be difficult for most families to embrace. Natalia's families sharing schedule included joint responsibilities with her sister's family and their parents. Natalia declared that sustainability cannot be practiced in isolation, and she hoped that her daughter would learn to value family connectedness through these expressions of sustainability. She further believed that the overarching ethos of the Santa Cruz area was supportive of her efforts. Her main concern was that other families were not as ready to accept these solutions, and some viewed her sharing practices as a sign of dependence as opposed to her view that this created important safety nets. "I want my children to be self-taught learners who are trying to better themselves and then use that to help their community."

This scenario elicited a contradiction for many participants; they stated that in order to feed a large family, living in multiple locations, more bags would need to be used from the grocery store, unless Natalia brought her own reusable bags. One respondent commented, "While Natalia seems to want to avoid food wastage, she needs to focus more on greenhouse gasses as that is the most pressing concern." While another stated, "Bag ban complicates large purchases. Sharing meals and leftovers will be harder due to lack of bags. Unless Natalia's family lives close together the carbon footprint will not be changed by pooling food. Driving to meals will affect any

gain." Overall, sharing food was not a popular solution, although one respondent included a different sharing solution, "Although sharing food is useful and a great idea for building family ties, this seems like a difficult thing to maintain over time and it is not addressing where the food comes from. Doing more gardening together would be a great way to save on food (family garden) and save on water and gas and would still build family ties." Again, we see that gardening is a common solution, and in scenarios where this was not present, it was seen as wholly positive. Other solutions included enrolling in a produce box program with a local farm, and composting or feeding the food leftovers to chickens instead of traveling to share food between families. Challenges also included the time spent on creating these large meals. They also assumed that Natalia was driving between locations, so many wanted her to either walk or take public transportation as a solution.

Scenario D

"**Community Exchange Sustainability**"

For some families, bartering has become a way to spend less money, build relationships within the community, and participate in sustainable living. The concept of bartering was idealized by other families in the study, but "Britney's" family was one of the few who actually put it into practice. Her trades included working on a neighboring goat and chicken farm in exchange for fresh, organic chicken meat. She also traded services among her friends, and used social media to find second-hand Christmas gifts. Britney's actions were not based solely on finances, but also on her desire to build relationships with like-minded people in her family's community. Britney's extended

family was not supportive of her sustainable living practices, so building a network of community members with which she could trade and interact became an essential component of her sustainable efforts which also reduced overall costs for her family. "I mean I guess the sustainability stuff would just be then when we need new stuff we go first to reused items instead of brand new items. We'll go thrift store shopping, craigslist, freecycle, those sorts of things. Yeah, or hand-me-downs. We do not spend a lot of money on stuff. Honestly, like the few times that I haven't been able to find stuff online, I've put on Facebook what I need, and somebody's like, oh I'm getting rid of that. Okay, sweet."

Again, a contradiction was focused on by many of the respondents. They pointed out that while reducing waste in landfills was important, driving to acquire all these items may end up costing more overall. Bartering was also seen as a challenge, as some items may not be readily available within a small community. One participants also pointed out, "Reusing is good but it is not always a good way to live sustainably, it doesn't put more stuff in the landfill but it will eventually get there." Another participant commented, "Used items equal no new manufacturing waste, [but] she will probably have to drive out of her way to get used items. Is the gas money/GHG trade-off worth it?" Again, showing the often contradictory nature of these concepts, and how different aspects of sustainability are highlighted by participants. Solutions included planning trips to acquire these used goods in one trip to reduce the cost in Greenhouse Gases, finding a used bicycle and using this as a form of transportation, and supporting local farmers by making one trip for her food needs to the farmer's market. One participant

offered this solution, "She needs to focus more on using public transportation. Global warming is the number one concern of our times." This again shows the preferences of different individuals, and how this can alter their values surrounding sustainability. It also demonstrates a value assumption with many of the ideas highlighted within the scenarios, and how they create a neutral environment to reflect and imagine different solutions and problems within each scenario.

Findings

The workshop had some aspects that worked very well, while other parts did not seem to go as smoothly as I would have hoped. For example, after reading the instructions for the sticky notes, which seemed very straightforward to me, no one had any questions. However, once we launched into the first scenario and participants were asked to utilize the notes, questions arose about what exactly they were to write. After explaining the goals a few times based on the questions, participants began writing down their ideas. The first scenario, again, garnered the fewest responses. Participants seemed hesitant to put their answers up for this first scenario, possibly because they thought we would be discussing or reading them aloud to the group. Once we had moved forward to the second scenario, participants seemed more eager to write down ideas, and the questions now centered on the families contained within the scenarios. I was asked how realistic the families were, I had to defend certain actions in the scenarios, and I was asked to give more details on the families. I responded as honestly as I could to each question and comment, even though some of them seemed pointed (i.e. the sharing scenario was somewhat controversial and multiple aspects of this

scenario were questioned: how close do they live to each other? Does the sharing involve driving? Do they use reusable bags, etc.).

The conversation at the end of the workshop emerged organically, which was something I did not expect, and I realized that this may have meant that participants wanted more opportunities to talk about the scenarios. The questions that came up during the workshop were also very telling, as they exposed that the participants wanted to understand the families within each scenario more fully. They were curious who these people were, they wanted to know how many kids they had, how they did things; they wanted to know if they were real. Due to the fact that they were amalgamations of the interviews, they were not "real," but I answered as many questions as possible as honestly as possible. I thought this demonstrated an interest in the stories within the scenarios, which I took to be a success, but, again, I felt it highlighted that the participants almost wanted to debrief after each scenario before moving forward.

Furthermore, participants readily pointed out the contradictions they saw within the families highlighted in the scenarios, but they did so with their own underlying assumptions. They assumed things about the families, and voiced concerns about the feasibility of some of these imagined solutions long-term. For example, within scenario D, Brittany bartered for items, and workshop participants voiced concerns about the impact her driving for "free" items would be, and whether this actually cost more in terms of GHG than just buying the item at a nearby store. It also became apparent that certain concepts that fall under the broad heading of sustainability were more important to certain participants. For example, gardening was highlighted often, but in the scenario where one family was practicing gardening, many counterarguments emerged.

This exposes the complexity of the behaviors that families internalized as sustainable: even some of the solutions had underlying costs that participants highlighted in their responses. This was important, as it led to the conversation that followed the workshop which demonstrated the complexity of sustainability for many individuals and participants.

During this discussion, one participant commented that when she went to a community meeting to save a park, the problem and solution were straightforward: the group was getting together to protect the park. But sustainability was an overwhelming concept for her, and she saw so many different problems and solutions that knowing what to do or where to start became the problem. Other participants agreed and offered that this can justify a lot of different actions, and it's all about what works for you. The discussion also included the idea that some solutions have costs which make it unclear which outweighed the other, in essence creating a zero-sum game (or that the gains and losses are equal). For example, Scenario C seemed to elicit this response the most in the discussion afterward, and the post-its from participants. Natalia's food sharing was viewed as canceling itself out by her possible use of a vehicle, overuse of bags from the store, and the fact that she did not grow the food. The workshop highlighted how sustainability has been internalized by participants, and how complicated it can be for families to find realistic solutions. This makes finding universal policies that will be beneficial for families difficult, but as the participants pointed out during the conversation, businesses have emerged as the best way to affect overarching change. They commented on a current example: the bag ban, which is a recent initiative levied within this arena versus the home.

V. RECOMMENDATIONS AND CONCLUSION

The term sustainability has become ubiquitous; its broad use in the common vernacular has caused challenges for the researcher. As a result, certain methodologies would not lend themselves to this kind of project. The method needed to allow for multiple definitions, solutions and actions within families surrounding sustainability, and allow the researcher to capture families' stream of consciousness to understand both their spoken and unspoken understandings of this term. The methods I selected were applicable because they did not impose any preconceived definitions on the families, but some of my methods needed refinement.

The first overarching problem within this project was my sampling. Not only was my sample size small, but my sampling strategy was biased. I conducted ten semi-structured interviews, and had eleven participants attend a workshop, so it was by no means representative of the whole of the City of Santa Cruz. Because I did not intend to find the end answer to solve sustainability, but instead experiment with methods which could be expanded into a more robust study, my sampling was by word of mouth, and participant recommendations. I felt this was appropriate for a student research project, and for my project goals.

Overall, semi-structured interviews worked well, using open-ended questions reveals the underlying assumptions and actions of participants, which was essential to this project. The tour within the interviews revealed important material items within the home that families viewed as sustainable, but since it was conducted in the middle of the interview it broke up the questions and rapport, and it might have been better to

move it to the end. Also, because of how this project took shape, the tour and photos taken during the tour were not utilized further, so it unnecessarily broke up the interviews and could have been removed. Coding the interviews was essential, some of the ideas that were highlighted by participants were not blatant and required multiple readings of the interviews, and it also allowed for more easy comparisons between the families.

Further, the coded interviews yielded so much data and crossover between families, that I wanted to be able to apply these findings further to create an intervention that would expose how another group of participants would react to my findings. Again, I did not want to impose any of my views on this new group of participants, and I wanted them to imagine a different future for their family centering on sustainability. I spoke with my advisor and became aware of a methodology, scenarios, which would present my findings from the interviews in a format that would engage another group in an unbiased way. Scenarios at their basest level are stories. These stories asked participants to look at amalgamations of the families from the interviews, and then voice their ideas for solutions and challenges they could imagine for themselves. The stories were created from the data I had gathered, creating two dichotomies: community versus individualized sustainability and value versus financial justifications for sustainability. These dichotomies emerged during the coding process, and allowed me to situate the stories within definable categories.

These stories seemed to engage the new group of participants, they asked questions about these families and wanted to understand them further. However, my workshop format was lacking in some areas, as I did not allow conversation between

scenarios, and it may have been useful to complete a practice scenario since participants seemed to be more reserved at first. My methodology incorporated these more open-ended research tools, as opposed to something like a survey which would have necessitated exact definitions and oftentimes biased answers. This term, sustainability, is so broad that it has implicit and explicit meanings for families. Sustainability also allows families to have a lot of agency surrounding the actions that their families take. Accordingly, my methodology was appropriate for this type of research.

My recommendations to the City of Santa Cruz based on this project are also necessarily broad. I really see two arguments: either the City of Santa Cruz could pinpoint an aspect of sustainability to focus legislation on, or they could focus on support and education. On the one hand, the City of Santa Cruz could find a small piece of the definition of sustainability, a piece that everyone would agree with and stand behind, and create policies based on this more pinpointed facet. The predicament this project found was that sustainability is so broad; legislation within families might not address their version of sustainability. Finding one aspect of the term that is widely accepted and lends itself to a particularistic solution could solve this problem.

Conversely, legislating sustainability may not be as successful as supporting organic expressions within families and communities in the long run. If the City supported these actions that are rooted in people's actual lifestyles, like freecycle, it could be more effective than trying to find a policy that will fit everyone. A further recommendation would be to find what is geographically appropriate, or implement what works and resonates with a certain population, rather than forcing solutions. The City of

Santa Cruz has to feel "cooler" than other cities, staying outside of the norm, and even embracing solutions which feel somewhat anti-establishment. Essentially, I think this project should reveal that the City of Santa Cruz should encourage and support current citizenry action, possibly embracing a more educational versus legislative approach. We need to support families in their endeavors to become more situated, self-sufficient, and in building social capital. They may fail, give up, become less invested in their community later, but their kids may not. And I believe that's a cause worth supporting.

Further, this project had a few aspects which are generalizable. The methodology worked well for this kind of far-reaching research. It encapsulated many different views and actions within families, and could be recreated on a larger scale for more demographically sound results. The finding that the term sustainability has become ubiquitous in our culture, including so many products, actions and definitions that it has lost some of its effectiveness for policy is expandable beyond this project. If sustainability becomes merely a buzzword with no political potency behind it, we will lose the ability to apply it within a policy context. Another aspect of this project which can be generalized is that families have made sustainability work for them: essentially, they have the agency to make it whatever they need it to be for their family.

The next steps after this project would be to implement a sizeable research project, increasing the demographic reach to include more ages, family sizes, and ethnicities to create a representative sample for Santa Cruz. Next steps should also include research into solutions that families are already practicing within their homes and communities, and supporting those efforts and encouraging their expansion. This project also lends itself to increase targeted education, possibly levied at children.

Children represent the future, and it can be very compelling for families to hear their

child's disappointment, as an example, when they forget their reusable bag at the

grocery store. Participants' conscious decisions to financially demonstrate their values,

their agency in their sustainable practices, and their hopes for a more idyllic situation for

their children should be encouraged, regardless of how long these sentiments or the

trendiness lasts.

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VII. Appendices

Appendix A: Interview Instrument

Interview Protocol: Family Perspectives on Sustainable Living

Introduction:

This research project aims to understand how families and individuals make day-to-day decisions concerning their impact on the environment. The ultimate goal of this project is to provide familial reflections on their own decision-making processes surrounding sustainable living practices. There are no right or wrong answers to any of the questions I'll be asking. The interview will be tape recorded and transcribed so your words are accurately captured, and transcribed interviews will be read by members of the research team.

Your name or identifying information about you will not be used in any report, and only members of the research team will read the interview.

Questions:

Household and Background:

1. Who lives in your household? (ages, relationships)

2. Tell me about your education, what did you study? Why?

    Probe: Where did you go to school?
    Probe: What about the other people in your household?

3. What do you do for work?

4. Do the people in your household have jobs?

> Probe: What about volunteer work? Work for pay? What about jobs within the family?
>
> Probe: How did you choose your current job?
>
> Probe: What other kinds of work have you done?
>
> Probe: What do other people in the home do for work?

5. What are the five technologies that are the most important to your family?

6. What technologies in the household are the least important and/or easiest to give up?

7. How do you stay in touch with people?

8. What kinds of activities does your family like to do together?

9. How long have you lived in this house?

10. Where did you live beforehand?

11. Why did you move here?

12. Tell me about a problem that arose within the household and how you and your household handled it.

13. Tell me about a typical day for your family.

14. Where would I see you going in a typical day?
    Probe: How do you travel?

15. Tell me about a typical day of eating.

      Probe: What does breakfast look like in your household? Lunch? Dinner?

      Probe: Which meals do you eat together?

      Probe: Describe some meals that your family eats. How do you typically prepare these meals?

16. Who chooses the food for the household? What impacts which foods you choose?

      Probe: Do you have any food priorities for your household? Are there any special food considerations within your family (i.e. preferences, food allergies, health concerns)?

17. Who is responsible for the food shopping?

      Probe: Where do they shop? Why? Any other places you go to shop for food?

      Probe: Where does the food come from for your household? Any specific shopping preferences?

      Probe: Do you make special shopping trips?

18. What values and/or priorities do you try to uphold in your home?
      Probe: Do you hope to pass any of these values/priorities on to your children?

Grand Tour:

      This project is interested to learn more about areas of your household that are shaped by everyday family routines. Please give me a tour of your home,

showing me places where your family spends time together, or areas where specific members of your household spend time. Or items that are important to your household and specific features of your home. Essentially, tell me about how your family interacts with these spaces.

For areas/items shown:

Probe: What do you do here [or: What do you do with this?]?

Probe: Is there anything you would change about how your family interacts with this area and/or item? Why? What keeps you from doing that?

Probe: How did your family decide on these routines? How did you teach your kids to adopt these routines?

Probe: How do you clean in this area? How do you keep this area stocked?

Now that we have toured the spaces within your home, can you think of ways that you incorporate sustainable practices into your daily routines? What about within specific rooms (kitchen, dining, living, bedrooms, etc.)?

Sustainable Living:

1. How do you define sustainable living?

2. What does sustainability mean?

3. What are sustainable practices?

Probe: What are the specific activities associated with it? How would I know it if I saw it?

Probe: What does it mean for you?

4. Give me a list of the top 10 things you do for sustainability?

Probe: Who started this practice?

Probe: What benefits do you foresee?

Probe: What challenges do you see for your family to maintain this practice?

5. What have been the simplest sustainable practices that your family has adopted?

Probe: What were they?

Probe: Do you think they were changes for the better? Worse? Why?

6. Was there a sustainable practice that was important for your family to adopt?

Probe: What was it?

Probe: Why was it important?

Probe: Do you think they were changes for the better? Worse? Why?

7. What have been the biggest challenges for you in regards to living sustainably?

Probe: Why?

8. Tell me about the things you do everyday to practice sustainable living?

9. What is the least "green" thing you do?

> Probe: Why do you view that as not being associated with sustainable living [worded weirdly]?

10. Do any groups or communities contribute to your choice to live sustainably?

> Probe: How?

11. How does your family get new information about sustainable living practices?

> Probe: Do you ever encounter difficulties finding the information you are looking for?

> Probe: Do any online communities and/or social media sites help you in this respect?

12. What kinds of things outside the home really benefit your family's ability to live sustainably?

> Probe: What are they? How?

13. In five years, what differences will I see in your household practices? 10 years?

14. Are there particular family ideas/reasoning that are important to get across to your children?

> Probe: What are they? Why are they important for your family?

Appendix B: Family Perspectives on Sustainable Living Final Coding Index

1. Demography

    1.1 Age

    1.2 Gender

    1.3 Location

    1.4 Education

    1.5 Work and/or volunteering

        1.5.1 Self

        1.5.2 Spouse/Other

2. Self-perspective

    2.1 Household Composition

    2.2 Self-reflection

3. Household

    3.1 Division of labor

    3.2 Gender roles in household

    3.3 Values and ideal for children

    3.4 Highlighted spaces and/or items

    3.5 Money

4. Sustainability

    4.1 Definition

    4.2 Unsustainable

    4.3 Community

    4.4 Reactionary

4.5 Practices

       4.5.1 Benefits

       4.5.2 Challenges

4.6 Solutions

4.7 Changes in behavior including change in view

4.8 Spark

4.9 Goals

Appendix C: Code Descriptions

1. Demography:	
1.1 Age	This code allowed me to document the age range of participants, and was used to track the ages of participants' children as well.
1.2 Gender	Coding for gender allowed me to more fully understand how the values associated with sustainability are differently internalized by gender. For the few interviews where both the husband and wife or the girlfriend and boyfriend were present, it was important to note divergences between their perspectives within the same family.
1.3 Location	Place became an increasingly important component of this project, as participants specified their connections to their community through farmer's markets, social media, etc. It was also an important influence on their actions as some participants felt supported by their location.
1.4 Education	This category was important to emphasize the educational level of the majority of participants and how this may have impacted their beliefs surrounding sustainability.
1.5 Work and/or volunteerism	Work and volunteerism were important to again highlight some of their perspectives irrespective of their views on sustainability. It also provided data on how much time they and their partners, spouses, or roommates were able to dedicate to household activities.
2. Self-perspective:	
2.1 Household Composition	This code elicited the composition of the home as the participant saw it, including their relationships to others in the home.
2.2 Self-reflection	Self-reflection exposed how they viewed themselves, including within their family, and this helped to determine how they thought about and made decisions for themselves or their family.
3. Household:	
3.1 Division of Labor	This sub-category revealed how work was divided within the family, essentially who did what.
3.2 Gender Roles	This concept was closely related to the previous sub-category, but sometimes elicited other broader ideas within the family; this was more the why behind the division of labor versus the previous category.
3.3 Values and Ideals for children	Each family had unique values and ideals that they hoped to pass down to their children, and this code exposed these concepts within the family, including how they hoped to pass these ideas down to their children.

3.4 Highlighted spaces/items	During the home tour families highlighted spaces and items that were important to them, either associated with sustainability or with their family in general, which further exposed important components of their household.
3.5 Money	I added this term later in the coding process, as it became obvious that many participants saw a relationship between money and sustainability, either it was more expensive to include sustainability in their day-to-day lives or it was a money saving measure. These different perspectives became related for me to the sub-category of reactionary discussed below.
4. Sustainability:	
4.1 Definition	The definition that participants gave to sustainability, every participant had a unique and varying definition of the term.
4.2 Unsustainable	This code was used whenever the participant highlighted something, either practice or belief that they associated with not being sustainable.
4.3 Community	This sub-category was similar to location, except that it specifically related to their understanding of a relationship between becoming more engaged within their community and the subsequent rise in their own sustainable practices.
4.4 Reactionary	This emerged later in the process, and examined the timing of participants increased interaction with the practices surrounding sustainable living, including changes in behavior, and changes in viewpoint and was related to the code for money.
4.5 Practices	This code examined the practices that families associated with sustainable living, including the benefits (4.5.1) and challenges (4.5.2) they associated with maintaining them.
4.6 Solutions	This subcategory highlighted any proposed solution that families discussed during the interview.
4.7 Changes in behavior	This code examined any changed in behavior that participants' talked about surrounding their engagement with sustainability, including change in view which led to a change in behavior.
4.8 Spark	If the participant discussed anything which instigated their move toward sustainability.
4.9 Goals	This code examined family goals for the future and how they would more actively incorporate sustainable practices into their daily lives, including how to encourage their children to become more actively engaged (or not) with the concept of sustainability.

Type A: Nuclear Family-Reactionary: "Situational Sustainability"

For some families, sustainability means creatively enlisting technology to reduce household costs or provide solutions to everyday problems. For example, "Karen" uses her computer tablet to access freecycle, an online community forum/board offering various "used" goods that someone wants to get rid of but does not necessarily want to discard. Karen says she often finds items her family needs for free from other members of her immediate geographical community, and although the items are used, Karen indicated that the items are usually salvageable. Karen has also enlisted youtube as a means to learn new skills, like giving her children haircuts, which Karen taught herself by watching how-to videos, in order to reduce her family's dependence on car travel for services they previously paid for. Karen associates the following activities and choices with becoming more sustainable as a family: reusing items, repurposing items that would be discarded by other families, and reducing environmental impacts by limiting trips outside the home. However, Karen candidly views this shift toward a more sustainable existence as representative of her "have-not" status, and believes that these practices would most likely not continue if her income were to increase.

Type B Reactionary-Nuclear: "Expectant Sustainability"

Other families embraced a more precautionary outlook, interpreting sustainability as a way to lessen their reliance on the government and larger corporations thereby increasing their self-sufficiency. "Theresa" believes that her children will benefit from her choices, including incorporating farming, solar power, and other alternative solutions into their lifestyle. Imparting the philosophical underpinnings of Sustainability to their children was a common sentiment among the study participants, and families expected that these values would eventually manifest themselves in subsequent generations in very rigorous ways. Theresa viewed her overall decision to be more sustainable as a basis for providing organic food for her children. Theresa started an urban garden and bartered with local farmers for meats and produce. Even though Theresa felt that it was essential for her children to internalize sustainable lifestyle practices, one of her current challenges was finding age-appropriate teaching materials that would covey these concepts. Theresa hoped that her children would become less materialistic and that through education and awareness, each generation would make better choices for the planet. Several other parents shared Theresa's goal of helping their children adopt more

sustainable lifestyles and the hope that subsequent generations would build on the concept of sustainability.

Type C: Extended Family-"Safety Net Sustainability"

Some families have embraced more wide-ranging goals and look to sustainability practices as a means to decrease waste and build multi-generational ties. One participant, "Natalia", shared food purchases and leftovers among her extended family in an effort to save money and reduce the amount of food their families ultimately discarded. Natalia argued that food waste is an area where busy families are often negligent due to time constraints and other challenges, such as buying organic and making meals from scratch. Even though sharing meals greatly reduced the amount of food their families threw away, Natalia admitted that sharing would be difficult for most families to embrace. Natalia's families sharing schedule included joint responsibilities with her sister's family and their parents. Natalia declared that sustainability cannot be practiced in isolation, and she hoped that her daughter would learn to value family connectedness through these expressions of sustainability. Natalia also spoke of her volunteer efforts with community organizations, and her active community building via the trading of services among her friends/family. She further believed that the overarching ethos of the Santa Cruz area was supportive of her efforts, as most of her values were encouraged by the larger community. Her main concern was that other families were not as ready to accept these solutions, and some viewed her sharing practices as a sign of dependence as opposed to her view that this created important safety nets.

Type D: Global-"Community Exchange Sustainability"

For some families, bartering has become a way to spend less money, build relationships within the community, and participate in sustainable living. The concept of bartering was idealized by other families in the study, but "Britney's" family was one of the few who actually put it into practice. Her trades included working on a neighboring goat and chicken farm in exchange for fresh, organic chicken meat. She also traded services among her friends, and used social media to find second-hand Christmas gifts. Britney's actions were not based solely on finances, but also on her desire to build relationships with like-minded people in her family's community. Britney's extended family was not supportive of her sustainable living practices, so building a network of community members with which she could trade and interact became an essential component of her sustainable efforts which also reduced overall costs for her family.

Appendix E: Community Problem Solving Agenda

Introduction and expectations (5 minutes)

Last year, I endeavored to learn more about sustainability within our community through open-ended interviewing. I wanted to elicit the creative solutions that are being used within Santa Cruz County as we work to become more sustainable. I wanted to understand how families incorporated everyday solutions into their daily lives. Taking this research, I found that families have varying reasons for *why* they become more sustainable. Most of the behaviors associated with sustainability are not easier, in fact, most of the time they make day-to-day life more complicated. So the *why* for different families became really intriguing to me. Another thing I discovered, as most of you know, is that no two families are the same (thanks anthropology!). This workshop will attempt to take some perspectives that seemed consistent across families and apply them to problems within our community. The goal of this workshop is to work together to find solutions that are salient and unique to our city.

Demographic Survey (5 minutes)

Pass out one-page survey gathering basic information: age/gender/family size/etc.

The 3 Problems (5 minutes)

1) Bag Ban

2) Reducing greenhouse gases (define)

3) Drought (define)

Bag Ban – The Bag Ban, a recent ordinance passed by the Santa Cruz City Council, has as its main goal the overall reduction of litter that ends up in landfills to protect our unique marine habitat. Another part of the argument for this ban was that families were unaware that plastic bags are recyclable, and so only around 5% were being recycled, with the majority ending up in landfills (City of Santa Cruz website). This move is meant to increase use of reusable bags, with paper bags as an alternative for a fee. The City Council has removed plastic bags as an option, but how could the City better encourage families to reduce using single-use bags overall?

Reducing greenhouse gases – The city of Santa Cruz joined the Cities for Climate Protection (CCP) in 1998, which has as its main goal the reduction of greenhouse gases within their *communities* to increase sustainability. Measures in place include: encouraging alternative means of transportation, using renewable energy sources, and encouraging families to recycle and compost. What specific solutions do you think would appeal to families within Santa Cruz? What else could the City of Santa Cruz do to help families in this area?

Drought – We are currently in a stage 3 water shortage emergency, with water rationing going into effect at the beginning of May 2014. This means enforced rationing for single family residences, and for water allotment overages, penalties will be added to water bills. The City of Santa Cruz is offering some water reduction solutions, like only taking 5 minute showers and not planting any new plants in the summer of 2014. What are some other solutions that are more specific to families? What measures would encourage a family to reduce their overall use of water in a time of drought?

Questions about the three proposed problems we will be addressing?

I will be passing out post it notes that we will use to think of solutions for families within Santa Cruz. We will start by reading a short scenario of how each of the four families is already practicing sustainability, and then we will try to think of specific solutions to these three problems that Santa Cruz City is facing.

Scenario A/Family One (15-20 minutes):

"Situational Sustainability"

For some families, sustainability means creatively enlisting technology to reduce household costs or provide solutions to everyday problems. For example, "Karen" uses her computer tablet to access freecycle™, an online community forum/board offering various "used" goods that someone wants to get rid of but does not necessarily want to discard. Karen says she often finds items her family needs for free from other members of her immediate geographical community, and although the items are used, Karen indicated that the items are usually salvageable. Karen has also enlisted youtube as a means to learn new skills, like giving her children haircuts, which Karen taught herself by watching how-to videos, in order to reduce her family's dependence on car travel for services they previously paid for. Karen associates the following activities and choices with becoming more sustainable as a family: reusing items, repurposing items that would be discarded by other families, and reducing environmental impacts by limiting trips outside the home. However, Karen candidly views this shift toward a more

sustainable existence as representative of her "have-not" status, and believes that these practices would most likely not continue if her income were to increase.

(Have ^ up on ppt)

Butcher paper will be labeled on the walls with the four scenario types: A/B/C/D, and split down the middle with hurdles vs. solutions. Large post-it notes will be passed out as well as markers. Participants will be told: For the next 10 minutes, please write down any ideas that hurdles and solutions for this family for each of our three problems, and then we will talk about them within the group.

Post-its will be placed on appropriate butcher paper

Scenario B/Family Two (15-20 minutes)

"Expectant Sustainability"

Other families have embraced a more precautionary outlook, interpreting sustainability as a way to lessen their reliance on the government and larger corporations thereby increasing their self-sufficiency. "Theresa" believes that her children will benefit from her choices, including incorporating farming, solar power, and other alternative solutions into their lifestyle. Imparting the philosophical underpinnings of sustainability to their children was a common sentiment among families, and most hoped that these values would eventually manifest themselves in subsequent generations in very rigorous ways. Theresa viewed her overall decision to be more sustainable as a basis for providing organic food for her children. Theresa started an urban garden and bartered with local farmers for meats and produce. Even though Theresa felt that it was essential for her children to internalize sustainable lifestyle practices, one of her current challenges was finding age-appropriate teaching materials that would covey these concepts. Theresa hoped that her children would become less materialistic and that through education and awareness, each generation would make better choices for the planet. Several other parents shared Theresa's goal of helping their children adopt more sustainable lifestyles and the hope that subsequent generations would build on the concept of sustainability. "We want our kids to be self-sufficient where they do know how to grow their own food, where they know how to eat it."

(Have ^ up on ppt)

For the next 10 minutes, please write down any ideas that hurdles and solutions for this family for each of our three problems, and then we will talk about them within the group.

Scenario C/Family Three (15-20 minutes)

"Safety Net Sustainability"

Some families have embraced more wide-ranging goals and look to sustainability practices as a means to decrease waste and build multi-generational ties. One participant, "Natalia", shared food purchases and leftovers among her extended family in an effort to save money and reduce the amount of food their families ultimately discarded. Natalia argued that food waste is an area where busy families are often negligent due to time constraints and other challenges. And even though sharing meals greatly reduced the amount of food their families threw away, Natalia admitted that sharing would be difficult for most families to embrace. Natalia's families sharing schedule included joint responsibilities with her sister's family and their parents. Natalia declared that sustainability cannot be practiced in isolation, and she hoped that her daughter would learn to value family connectedness through these expressions of sustainability. She further believed that the overarching ethos of the Santa Cruz area was supportive of her efforts. Her main concern was that other families were not as ready to accept these solutions, and some viewed her sharing practices as a sign of dependence as opposed to her view that this created important safety nets. "I want my children to be self-taught learners who are trying to better themselves and then use that to help their community."

(Have ^ up on ppt)

For the next 10 minutes, please write down any ideas that hurdles and solutions for this family for each of our three problems, and then we will talk about them within the group.

Scenario D/Family Four (15-20 minutes)

"Community Exchange Sustainability"

For some families, bartering has become a way to spend less money, build relationships within the community, and participate in sustainable living. The concept of bartering was idealized by other families in the study, but "Britney's" family was one of the few who actually put it into practice. Her trades included working on a neighboring goat and

chicken farm in exchange for fresh, organic chicken meat. She also traded services among her friends, and used social media to find second-hand Christmas gifts. Britney's actions were not based solely on finances, but also on her desire to build relationships with like-minded people in her family's community. Britney's extended family was not supportive of her sustainable living practices, so building a network of community members with which she could trade and interact became an essential component of her sustainable efforts which also reduced overall costs for her family. "I mean I guess the sustainability stuff would just be then when we need new stuff we go first to reused items instead of brand new items. We'll go thrift store shopping, craigslist, freecycle, those sorts of things. Yeah, or hand-me-downs. We do not spend a lot of money on stuff. Honestly, like the few times that I haven't been able to find stuff online, I've put on facebook what I need, and somebody's like, oh I'm getting rid of that. Okay, sweet."

(Have ^ up on ppt)

For the next 10 minutes, please write down any ideas that hurdles and solutions for this family for each of our three problems, and then we will talk about them within the group.

Conclusion (5 minutes)

Look at all the great ideas we have found for the current issues facing our City! Thank you all for taking the time to participate in this workshop. I believe we satisfied our goal of finding multifaceted solutions to some of the problems facing our city in its plans to become more sustainable. Are there any closing thoughts/remarks?

Thank you again.