

**Using Information Ecology to Develop Strategies:
Policy Recommendations for the Nurture Nature Center**

A Report Submitted to the Nurture Nature Center

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Introduction

Information Ecology provides a unique perspective for designing communication and decision-making policy. In Lehigh University's Spring 2013 Information Ecology seminar, we studied and modeled information flows. This was a graduate-level seminar offered as part of Lehigh's Environmental Policy Design master's program. Our class project was to evaluate the information flow of the Nurture Nature Center (NNC) of Easton, PA, and suggest ways to improve communication both within their own organization and with the surrounding community. We analyzed the NNC within an information ecosystem in order to identify their leverage points for sharing their mission and goals with those around them. Our objectives were to use the information tools (such as framing, cultural models, propaganda, etc.) we developed in our seminar and apply these to the NNC's mission.

To create an effective plan, we analyzed demographic, social, economic, and environmental characteristics of the area and the Nurture Nature Center, so we begin this report by reviewing some of this background information. In order to identify how the NNC can communicate effectively, we distinguished between emic and etic perceptions of issues and concerns. We also identified important unifying themes that permeated reports and discourse. These include: walking, perception, communication, and social dissonance. Next, we identified the broader goals of the NNC. We then integrated the emic and etic perceptions with the NNC goals to recommend specific strategies to implement. These strategies are: prioritize partners; identify opportunities for reciprocity; and frame issues. We finish the report by proposing examples of ways to implement the strategies. These include specific programming, events, and advertising.

Background

The Nurture Nature Center of Easton, PA (NNC) was founded in 2007 by the Nurture Nature Foundation, based in New York City. The NNC is a science-based organization that uses science, art, and dialogue to help communities talk and think critically about environmental risk issues. The idea is to empower the community instead of using a top-down approach. Made up of a staff of only six employees (four full-time and two part-time), plus interns, the NNC aims to reach their local community within Easton as well as the greater Lehigh Valley. Their reach sometimes extends beyond this, and they are pleased when their programs are adopted by other organizations and used to help other communities. The NNC chooses the topics of their programs through a series of four questions:

- Is the suggested topic an environmental risk to the community?
The answer to this question should be “yes”.
- Can discussion on this topic be facilitated fairly?
The answer should be “yes”.
- Can an impact be made on the topic in terms of decision-making?
The answer should be “yes”.
- Is this topic already being addressed somewhere else?
The answer should be “no”.

Context

The NNC operates on the border of two wards within the city of Easton, PA. As a result, certain census data and other information regarding the community's profile are important to consider as we investigate ways the NNC can be more involved and influential. Easton is a small post-industrial city with a population of 26,800, but is located within the Lehigh Valley metropolitan area, which includes a population of about 800,000 (for expanded census data including population, poverty, income, education and housing see Appendix I). The trend in Easton's demographics has been an increase in the minority population, specifically those who identify as Latino/Hispanic, and a decrease in those who identify as white, non-Hispanic. Organizations and programs need to account for these changes in Easton's ethnic composition to effectively reach the majority of Easton's population. Materials and programs can no longer be catered to solely the white, English-speaking community.

An important issue we repeatedly encountered during our research is housing. The latest housing trend in Easton has been a decrease in owner-occupied housing units and an increase in renter-occupied units as well as a decrease in long-term residents. According to the 2010 Census, 44.5% of the total householders in Easton moved in during 2005 or later. A vast majority of the housing units in Easton are quite old with over 70% of them having been built during or before 1939. There has been a struggle with landlords not taking care of their properties. These housing trends have implications for emic and etic perceptions of the City of Easton, which will be discussed further throughout this report.

Issues

Perception gap: Emic vs. Etic

The Easton area can be viewed with different perceptions, which are either emic or etic in nature. These distinctions derive from the field of cultural anthropology (Harris 1968). The emic perception is determined by local custom, meaning, and belief and is best described by a native of a culture. An etic perception generalizes human behaviors that are considered universally true. It commonly links cultural practices to factors of interest to the researcher, such as economic or ecological conditions, that may not seem relevant to natives. Information received through interviews or surveys of community members describes emic perceptions. Information collected and perceived from outside visitors or researchers describes etic perceptions. Failing to distinguish these views penalizes an analyst's understanding (Harris 1968). Being able to distinguish between the two is important in understanding community perception and perception gaps. Problems should be contextualized by these distinctions to remove confusion on how to address stated problems (Rappaport 1979, Puleston 1979).

This report attempts to look at information from both emic and etic perceptions to find why a gap exists between the two. By understanding this perception gap the NNC can focus on breaking down barriers to create a more positive overall perception of the Easton area. The NNC could act as the bridge between understanding issues of both emic and etic importance. By understanding both the emic and etic perceptions of a particular issue, the NNC could improve their ability to properly approach education and encourage resolution.

Easton Resident (Emic) Perspective

We have found that the resident, or emic, concerns about Easton include several areas, such as transportation, entrepreneurship, food, crime, aesthetics, jobs, and environment. Our information comes from interviews with community leaders and from resident surveys. Becky Bradley, Director of the Easton Department of Planning and Codes, said that when they interviewed residents of the 600 block of Northampton Street recently, the residents all seemed to care about three main topics: Transportation (they want a light-rail system), Food (they love the farmers' market and community gardens and want more of that), and Entrepreneurship/Small Business Development (supporting local business ventures). She also said that since the Department has started their Facebook page and Twitter, they've gotten a lot of feedback from the Easton community as a whole, and these three themes, especially food, keep re-occurring. In fact, when asked what business you would like to see opened up on Main Street in the West Ward, the greatest number of respondents replied grocery store/produce. Electronic sources like Facebook and Twitter could be very helpful for the NNC, but should not be the only means of communicating with residents. One of the surveys we reviewed shows that the highest percentage of respondents use the newspaper for their source of information. Thus, newspaper advertising may be a good resource for the NNC to create more awareness of their organization.

Another recurring issue of concern for Easton residents is crime. In a 2009 survey of West Ward residents by the Easton Weed and Seed program (*West Ward Revitalization Plan*,

March 2009), the top concern was public safety (crime/violence/drugs). In surveys obtained from the West Ward Neighborhood partnership, crime risk was the common theme. People consistently brought up drug and gang related crime problems. In addition, there have been numerous articles written on violent crimes in the area, and what can be done to reduce violence. There was even a march against violence in the West Ward in the spring of 2012. Citizens that were interviewed at the march talked about the importance of adults setting an example for kids and a healthy family structure. They also thought more jobs would reduce violent crimes.

One of the next major areas of concern for the residents, and another recurring theme in the surveys about life in the West Ward is neighborhood conditions/aesthetics. Among the other top concerns of West Ward residents in the 2009 Weed and Seed survey were slum landlords and code violations, neighborhood conditions, such as lighting and sidewalks, road/street conditions, and garbage. This is interpreted to mean that residents are concerned about the appearance/aesthetics of their neighborhood and would like their home to be a more attractive place. There were a lot of comments about code violations by landlords and run down/abandoned buildings. Bad lighting and bad street/sidewalk conditions also contribute to the run down feel of the neighborhood. This resident concern for neighborhood aesthetics is supported by the fact that 22% of Easton residents are living below the poverty line (see Appendix I), which forces their emic perceptions of risk to revolve around immediate, visible problems. For example, West Ward residents are much more worried about being robbed and living in poor conditions than the quality of air that may actually be more likely to have a negative effect on them and their families. Low education levels might also be contributing to the higher concern about crime and neighborhood aesthetics over environmental conditions. In some surveys, less than 10% of the respondents had a college degree. Having no real awareness of environmental risk factors that are affecting Easton may bias the residents' risk perception towards more immediate, visible issues such as crime and aesthetics.

Some of the types of environmental risks that Easton residents are concerned with have been identified by the Nurture Nature Center's interactions with these residents. Environmental risks of concern to Easton residents include flooding, mold, invasive plants, and fracking. Mold may connect to asthma, especially seasonally. Another environmental concern, revealed by the 2009 survey of West Ward residents, is recycling.

Easton (Etic) Perspective

1. Crime

According to the 2007-2011 American Community Survey, the unemployment rate in the city of Easton is 7% (see Appendix I). Although from the emic perspective of people in Easton, unemployment is one of the main reasons for high crime rates, from the etic perspective, the unemployment rate is not relatively higher than other places with lower crime rates. In addition, as much as the citizens of Easton are concerned about violence in Easton, the actual statistics show that the largest portion of crimes falls under the

categories of theft, vandalism, harassment, and drug possession in that order in the West Ward. The actual number of violence related crimes may not be as high as the citizens perceive.

2. Education

Statistics show that the average education level is relatively low (see Appendix I). Although education is not on the list of Easton citizens' concern from an emic perspective, it is an important issue of concern from an etic perspective. The West Ward Revitalization Plan (2009) indicates that low education could cause issues such as:

- Economic deprivation
- Family management problems
- Early academic failure increasing the likelihood that a child will develop health and behavior problems in adolescence, including unsafe practices in adolescence, underage alcohol/drug abuse, teen pregnancy
- Lack of affordable health care or lack of access to healthcare and mental health care
- Prison recidivism / re-entry issues

3. Environmental Risks of Easton

The emic and etic perspective of environmental risks could be very different. For example, citizens in Easton believe that mold in houses is causing or triggering asthma while the greater risk may actually come from outside their homes. Standards for ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, and lead were established to protect public health, including the health of "sensitive" populations such as people with asthma, children, and older adults. Easton's air quality is poor. From an etic perspective, outdoor air pollution is also a very important cause of asthma but it does not receive attention from an emic perspective. See Table 1 (Potential Environmental Problems in Easton) for a complete list of potential etic environmental risks.

4. Broader Easton Agenda

The City of Easton Department of Community and Economic Development has an annual plan that focuses on economic growth (expansion), fixing existing infrastructure, helping low-income households, and using federal funding to help achieve their goals. In Easton's five year plan from 2011 they stated the following goals:

"...support activities and programs that provide a stable and balanced economic base. The City intends to develop a retail incubator to stimulate development in the downtown. Direct financial assistance will be provided to businesses that will employ low to moderate income persons. The City will provide for and support a variety of goods and services, including business recruitment and retention, commercial and industrial redevelopment, and business district improvements and programming through the Easton Main Street Initiative. The City's long-term goal is

to assist 20 businesses over the next 5 years through economic development initiatives.”

Also, Easton has a focus on promoting tourism. Easton Main Street Initiative encourages a variety of development in order to create a tourist-like center. In order to achieve this goal, the Easton Main Street Initiative is planning to “offer more venues and opportunities for families, artists, business owners, building owners, and residents, EMSI will create a more visible and livable Downtown Easton.”

The broader agenda of Easton should align with the concerns of citizens of Easton, as it will promote small businesses and transportation. The agenda could be more effective from an emic perspective if there are more emic concerns included like transportation and food. From an etic perspective, green job development seems like a good agenda to address both environmental and economic issues.

Nurture Nature Center (Emic and Etic Bridge) Perspective

The Nurture Nature Center straddles both emic and etic views. Being a local organization gives the NNC the opportunity to view issues both from the emic and etic perspectives, and help close the gap between them.

The NNC wants to bring the community together, but this is difficult to do for the immediate community because these areas, especially the West Ward, are among the more impoverished and marginalized in Easton, as demonstrated by the poverty statistics mentioned above. The NNC wants people to take information and feel empowered to use that information to make decisions on their own. Because of their science background, the NNC’s concerns and goals do not always align with the concerns of local residents. Resident concerns in the area are typically more focused on immediate problems like crime and neighborhood aesthetics so it has been difficult for the NNC to identify what environmental risks residents are concerned about. This is a common phenomenon in low income areas. According to a 1999 study by Diekmann and Franzen, people in poorer countries ranked environmental issues as less *pressing* than people in more affluent countries, but when ranking *severity* of different issues, pro-environmental issues always ranked high, no matter the economic situation of the country. “Ranking therefore reflects more the reality of scarce economic resources and not the lack of environmental concern of less affluent people” (Diekmann and Franzen 1999). One way to improve in this aspect would be for the NNC to address environmental risk by means of addressing more immediate concerns at the same time. For example, residents are concerned about neighborhood aesthetics like the local buildings that are old and neglected by absentee landlords. This connects to environmental risks such as mold growth, which then connects to health risks such as asthma. In linking issues like these together in a clear chain, the NNC may be better able to gain the attention of area residents for environmental risk issues.

Another difficulty that the NNC faces in communicating environmental risk to the community is that each issue attracts a distinct audience, and each of these audiences must be approached in different ways. Plus, the topics that interest the community do not always align exactly with the issues the NNC believes are important to present. The

fracking issue is a good example of emic vs. etic perceptions. The NNC realizes that this is a hot topic and the community of the Greater Lehigh Valley is concerned about it, but the NNC also realizes that fracking is not an immediate environmental risk for Easton, so instead of focusing multiple events on this topic, the NNC held an informational meeting to inform residents of the science of the issue. Audiences that the NNC reaches and wants to reach include residents of the Greater Lehigh Valley, residents of Easton, and residents within the immediate neighborhood of the NNC. As it has been explained by Rachel Hogan Carr, director of the NNC, the majority of the attendees of NNC events currently fit into the residents of the Greater Lehigh Valley audience. These attendees also seem to be more affluent than the average resident of the immediate NNC neighborhood (including the West Ward and Downtown Easton). Again, this relates to the economic situation: more affluent people notice and are able to attend NNC events more easily than people of lower income who are more focused on more immediate and seemingly non-environmental concerns. Attracting the audience of a less-affluent population, such as the people in Easton's West Ward, brings us to another goal of the NNC: building relationships with other local organizations.

The Nurture Nature Center may consider building relationships with other local organizations in order to build rapport with the local community. For example, environmental risk may not be a top concern for neighboring organizations, but crime may be. Thus, the NNC may consider working with another neighborhood organization that addresses crime issues in order to acknowledge this community concern. By building relationships with other organizations in this way, the NNC may gain the trust of the residents belonging to them, and may build their own membership base/involvement with the community. Working with organizations that may share facts, values, and cultural models with the NNC may help define the problems/issues that these organizations are working to solve (See Appendix III for a general problem definition model). For example, the NNC emphasizes such values as teamwork, resiliency, respect, skill, and compassion in their mission, so partnering with organizations that share these values would be beneficial for everyone involved. This is further discussed below in the strategy section for "prioritizing partners". Working with partner organizations also helps avoid overlap so that the NNC does not use their resources to address issues that are already being addressed elsewhere by other organizations. Avoiding overlapping efforts is especially important in small organizations like the NNC because of their limited resources.

Themes of our Analysis

Four important themes emerged as we read reports, compiled data and spoke with people. Establishing themes is important to bridge emic and etic perceptions of problems. Because our themes permeate the discourse, they also allow us to set goals. Strategies were more easily developed knowing all stakeholders can identify with common themes. The dominant themes we identified include:

- walking
- perception of neighborhood, city and self
- communication
- social dissonance

Walking

The first theme of walking emerged from conversations we had as a group, prior conversations with Rachel, online reports, and the Easton neighborhood comparison (see Appendix 2). The NNC has a fantastic location in town surrounded by businesses, some prospering and others that could use some support. Walkability in communities has become a national standard for measuring safety and community involvement. According to walkscore.com, Easton has a walkability score of 70 and the immediate area surrounding the NNC has a score of 97. These high numbers indicate the possibility of making the area a true walker's paradise by changing emic and etic perceptions of safety and stressing the importance of sustainability. By developing implementation strategies which make people more comfortable walking around the area, the NNC has the ability to change the entire feel of the area surrounding its location.

Perception

It will be difficult for the Easton community, particularly in the West Ward, to become more resilient without changing the perception held by people living in the community, as well as those who pass through the community. A pleasant physical/aesthetic appearance would encourage more people to be outside and to be more neighborly. With more people outside there is more opportunity for creating a communal culture which would in turn help reduce crime. Because it seems that one of the biggest issues to Easton residents is crime, a decrease should help to create better emic perception which will create a positive loop towards growth. A localized community would also help improve perceptions that Easton residents have of themselves. A community full of positive self-perception (or self-efficacy) has more confidence and would enhance personal resiliency (Kollmuss & Agyeman 2002).

Communication

This focus is especially important for the NNC to grow as an influential organization in this area and within a much larger audience. Communication is paramount in connecting the NNC with possible participants and other organizations which could increase its reach. By improving advertising, the NNC will have more visitors and will be able to disseminate information easier. The NNC can also benefit from improving how they communicate

problems and concerns of specific groups of community members to other community members by using other methods in addition to live forums.

Social Dissonance

Social dissonance refers to socially constructed groups of people not interacting or getting along with each other due to conscious or unconscious judgments. This behavior makes social harmony impossible, but can be improved by applying the previous themes. Social harmony should be the underlying goal for all communities, organizations, and policies. By explicitly considering the importance of this theme, it is, and will continue to be, simpler to prioritize goals and negotiate resources accordingly.

NNC Goals

The following broad goals have been defined by the NNC:

- Increase participation in activity (framing through partnerships, topics)
- Encourage and improve awareness of environmental risks (frame through facts and analogies)
- Empower to make decisions and take action (propaganda)

The current, general goals of the NNC focus on becoming more recognized and involved within the immediate community to not only increase participation in activities but also create a feeling of resiliency and awareness among the citizens of Easton with the aim of empowering action and educated decision making. Having these general goals allows the center to create more specific targets with their regularly scheduled and one-time programs. The NNC's impact within the community will be most notable by responding to the specific concerns and prevalent problems within the local neighborhood (see sections on Issues and Themes). More specific goals that address the target themes include:

- Create a more walkable/bikeable community which will improve perceptions and relationships among citizens
- Create a better perception of the neighborhood as a whole and in turn a better personal perception for individuals
- Better communication between the NNC and the immediate community about community risks and problems and possible solutions as well as events and opportunities that the NNC offers
- Adapt to community needs and concerns as well as educate citizens about issues they might not be aware of as a means of reducing social dissonance

It is important for the NNC to build rapport around such themes with individuals and other organizations in the community. As previously stated, the NNC could target both the emic and etic perceptions of major community concerns to increase its impact.

Strategies

Strategies are better developed if they originate from a theoretical background. Theories on framing (Lakoff 2005) and propaganda (Ellul 1965), in particular, provide a step-by-step path for the development of new strategies. These theories help us understand how data becomes information, which becomes an issue, and how the framing of issues impacts behavior of the NNC audiences. To be clear: our model summarizing the theories and flow of information goes significantly deeper than just considering another perspective (See Appendix III).

If NNC data can be filtered through an epistemology that better aligns with the community's concerns, values, and interpretation of information, the NNC may be received more positively by the neighborhood. "Framing" includes influencing interpretation of data or information by purposefully using specific words, presenting specific data, creating partnerships, running certain programs, etc., as a result of understanding how the neighborhood views the data and how their cultural models and values create and transform information (Kempton et al. 1996). Lakoff (2005) summarizes many of these strategies. Changing the internal decision-making process could allow for different event formats, event locations, topics, and communication methods; infusing bigger picture connections (systems) and a sense of comfort using information learned/framed from the NNC; and partnerships with organizations where common issues can be addressed all could shift perception and increase participation in NNC activities. Two of these strategies are quite involved and are the next topics.

Specifically, since the main desire at this point is to have a greater impact within the physical neighborhood, we must first consider how the community sees reality – its epistemology. If we can understand how information is filtered through people's cultural models, interacts with their values and facts, and is transformed into sociological propaganda that people use, then we can see how each piece of information contributes to one's perspectives and beliefs. Interpreting data, information, and issues as an average person from the neighborhood provides a direct line to new opportunities. The NNC could consider each information-processing step in everything they do. For example, the NNC can alter the neighborhood's decision-making process and re-frame an issue simply by working with a partner who is more connected with the neighborhood. Additionally, the NNC could do what Chomsky believed to be critical: exploit the fact that others fail to critique the system by helping the community see the system, the failures of the system, and empower them to do something about it (Herman and Chomsky 1988). A last lesson inherent throughout information ecology that should be considered is from Lakoff, who argues that social change is possible by influencing the interpretation of data (Lakoff 2005).

Ellul (1965) claims that modern society, with mass media and modern transportation, requires propaganda to exist. Propaganda is neither good nor bad, but can be considered a natural requirement of modernity. It is scientific. It requires scientific studies and knowledge, a set of rules, and deep analysis. To start, specific population density and urban concentration are the two demographic requirements for successful propaganda. Propaganda must target both the individual (isolated and within the minority) and a mass

society, where public opinion—the exchange and influence of opinions on values and attitude—exists. Ultimately, individuals must feel like they have an individual choice even if they do not in terms of the source of the information they are receiving. Ellul argues that people have both a need for propaganda and a willingness to be influenced by propaganda.

Strategic Theoretical Concepts

The following is a summary of the theoretical concepts that the specific strategies (found below) will address.

Use epistemology to steer initial impressions

Based on the data we have reviewed, it is very likely that the low-income, less-educated population of the neighborhood cannot relate to the environmental mission of the NNC. To them, their daily concerns regarding finances, employment, transportation, food, etc. are more pressing. As a result, the general purpose, strategies, and activities of the NNC are lost on the neighborhood. From the beginning, there is a disconnect—the epistemology and cultural models filter the NNC data and information in a way that appears irrelevant. This could be addressed by choosing topics that may cross local concerns and environmental issues (i.e. green jobs), partnering with business and organizations successful in the neighborhood, etc.

Shape programming to fit cultural models, values, and existing facts/knowledge

NNC activities have traditionally revolved around science, art, and dialogue. This approach may not mean as much in a low-income, low-educated area. Experts sharing science data and using technical terminology may be intimidating. It is possible the neighborhood finds dialogue about science confusing and demoralizing. It is also possible that art is seen as pretentious and meaningless. A more effective approach may be to consider a different way to communicate data from the scientists and generate discussion: have experts use less technical language, provide "cheat sheets" for more commonly used technical words and phrases, offer hands-on learning opportunities, or hold sessions in Spanish to allow for a more inclusive discussion.

Frame facts and/or information within the context of morals/values

Regardless of how similar or different the values are between the NNC and the surrounding residents, there is always a way the NNC could present factually correct information through the moral lens of the community. Lakoff argues that "idealistic beliefs carry more weight," making a connection to community values more valuable than random data. That identity has a stronger connection than self-interest, meaning what they may say they care about is not as important as how they see themselves. It is considered a myth that rational people act in their own best interest. Lakoff's studies found that instead they act based upon their morals. (Lakoff 2005)

Facts, or truth, can also be framed from the NNC perspective

Consider what their truth is, and present facts from that angle (Lakoff 2005). Statistics and data can be used in many different ways; consider what they want to hear, and present the data that may correspond to what they currently see as "the truth."

Focus on “the system,” risks within the system, and the ability for individuals to manage risk

Many people intuitively see themselves as a part of multiple systems, and use phrases like “she was a victim of the system” (Casagrande and Peters 2013). In order for there to be resiliency or risk-readiness, the neighborhood must understand how they are part of bigger natural and social systems. This thinking frames what kind of solutions one can see. Use facts as a tool to show the neighborhood they are part of a larger system. Consider designing programs in a way that demonstrate connections, impacts of changes to any part of the system (i.e. diminishing bee population, flowers and food, but also the distribution of capital, underdevelopment, education and crime).

If neighbors understand the greater system, the idea of risk can be introduced. Use facts to shape their understanding of risks within the system. The NNC can frame risks by using facts and analogies that compare the actuality of a risk neighbors think is likely to an environmental risk that is actually more likely (i.e. crime rates for non-offenders compared to risk of health issues from air quality).

Once the neighborhood understands their role within a greater system and is comfortable using information learned, the NNC would then be able to minimize anxiety about risks by helping people see how individuals can manage risk within a system. The ultimate goal is to influence a change in behavior and to create political propaganda (Ellul 1965), or information they can frame and use for the purposes of influencing policy-making. This can be done by having participants use the information before they even leave an event (inviting responses to, “what have you learned” or “what will you take away from tonight?”) and then encourage continued use through follow-up (direct mail, phone calls, advertisements, etc.). It may sound as just a measure of effectiveness from the participants, but it would internalize the information. As Ben Franklin said: “Tell me and I forget. Teach me and I remember. Involve me and I learn.”

Change verbiage in naming events, advertising, topics, and perhaps even the very name of the organization

Language is key in every step of the information process model – whether it is trying to build an audience or incite an action. Lakoff describes the importance of language in propaganda best by saying, “language activates frames, [so] new language is required for new frames. Thinking differently requires speaking differently”(Lakoff 2005). Historically, one side typically argues that new environmental protections would cost jobs. However, the NNC could present risk management ideas in a way that would discuss the creation of new jobs. Use “language that fits your worldview....language carries those ideas, evokes those ideas” (Lakoff 2005). Avoid language that the other side (perhaps those who may benefit from a lack of preparedness) would use—speaking their language gives them credibility—or is easily criticized. The very name of the organization is just this; for some, seeing “nurture” in the name of the organization would suggest liberalism and turn them off (Lakoff 2005).

Specific Strategies

Strategy 1: Framing

Framing is an important way to refine the NNC's mission to become more involved and effective in the community and to adapt to the needs of the community by creating flexibility in their own internal decision making process. It is important to begin focusing on issues the community views as high priorities in order to build a larger audience.

The NNC can accomplish this by showing that they are part of the community. Hosting events is not enough—the NNC needs to be out in the neighborhood in order to build relationships that will encourage the public to come to the NNC. By using framing concepts, the NNC can: start to *appear* to be part of the community, actually be part of the community, be a reliable source of information for the community, and perhaps even be a place the community will visit. Events could range from street cleanups to "green" block parties (with entertainment but environmentally friendly food stands—perhaps a traveling mini farmer's market, products, information, etc.), community gardens to tree plantings, and science demonstrations for children in parks.

Strategy 2: Strategically develop reciprocity with partners

Reciprocity is fundamental to human nature and forms a core basis for social cooperation. In the case of the NNC, reciprocity is important 1) for maximizing use of limited resources, 2) gaining social capital within the neighborhood, and 3) to adapt to changing conditions through personal interaction with community partners.

Reciprocity is about building social relationships, not just trading resources. The key for successful reciprocity is complete clarity. For reciprocity to be effective both parties must be sacrificing something in order to gain something else—be it prestige, social capital, goodwill, or resources of production. The power lies in both partners understanding what the others are sacrificing to create a stronger bond (Vasquez and Jenkins 1994).

For developing productive relationships of reciprocity, the NNC could consider the following:

- Identify what it is willing to sacrifice and what it hopes to gain in exchange. Per the goals above, what it hopes to gain might be a broader integration in the local community. What it may have to "sacrifice" might be one of their core missions (like the environmental focus on risk)
- Identify how what it is willing to sacrifice will benefit the reciprocal partner
- Engage in a candid conversation about what each partner is compromising and how both partners will benefit

Strategy 3: Prioritize partners

The Nurture Nature Center building has both a great location and size for partnering with other Easton groups to improve different aspects of community issues or concerns. While the NNC focuses on environmental risks, it is clear that these are not the only direct risks with which people of the area are concerned. Because of the amazing space, the NNC has

the opportunity to invite other related groups to use their building for programs with non-environmental focuses, or have other environmental groups from the area co-sponsor events, forums, and awareness campaigns. Possible partners in the area could be prioritized based on relatedness of their values, mission, tools, issues addressed, and most importantly the potential to create common framing strategies.

The City of Easton would be a great partner because of its variety of departments and its connectedness with the community. The Easton Planning Department in particular would be a beneficial partner for the NNC because of its ability to make changes to the physical community. The Planning Department's offer to help improve social media efforts through their large following can be used as a positive partnership for advertising programs and events. A positive relationship with the department could lead to a stable line of communication between the city and the center, as well as with people who have learned through the NNC and want to take action. This relationship could be built and fortified by opening up their space to planned city meetings and events.

The local police department could also be a beneficial partner. The police should be tightly connected with the community, as their role is supposed to be providing consistent protection from crime and advocating safety measures. Although the current perception is not fully understood, the police department does seem to be viewed negatively by the surrounding community. The NNC has the ability to help improve public opinion of the local police department by holding events such as Cops n Kids, defense classes or other safety programs in their building. The police department could support the NNC by participating in discussions relating to environmental risk and their role in creating a resilient community or by holding open forums with community members about their direct concerns.

Partnerships with more specifically focused groups could possibly benefit the NNC by breaking down silos of focus. The Weed and Seed program, with a focus on eliminating risk (as related to crime, drugs, and poverty), is a good example because it is already seemingly well-known in the community. Although they have a different strategy to combat these risks, their goal relates to the NNC's mission of creating a more resilient community. The Weed and Seed program is most notable in the West Ward community, likely because of a greater need for the program in this lower income area. The perception of the group is a positive one that could benefit the NNC through word of mouth advertising and planned visits for both Weed and Seed related programs and NNC events held in the building.

The West Ward Neighborhood Partnership (WWNP) could also improve NNC visitation from West Ward community members. The WWNP previously facilitated transportation of a group of people from the West Ward area to the NNC for a forum and tour, which was a success for the NNC and community members involved despite an unforeseen language barrier. Community improvement is an obvious overarching pattern and these general connections are important for positive partnerships.

A number of sustainability-focused non-profit organizations and businesses exist in the Greater Lehigh Valley with foci that range from general environmental concern to specific

goals and services. These groups can be found in detail in a directory created by the Alliance for Sustainable Communities entitled "Sustainable Lehigh Valley" which is updated annually. Contact with these groups would gain advertising potential for the center in general and for specific events. Partnering with these groups would allow the NNC to grow and possibly help discover a clearer direction for the NNC to go relating to specific issues. The partnership with Buy Fresh Buy Local of the Greater Lehigh Valley has already broadened the NNC's range of topics covered in regards to the local food economy. The NNC could evaluate potential relationships with all of these groups to get a better feeling of which partners to prioritize. Relationships begin with research. Most groups have a website and contact person, which provides the ability to discover what focus patterns exist between a group and the NNC. In a meeting with Rachel Hogan Carr, CAT (Coalition for Appropriate Transportation) was identified as a group the NNC could be interested in partnering with because of their focus regarding sustainable transportation and their willingness to expand this focus.

Implementation

The following section focuses on how the Nurture Nature Center might apply these strategies. It is important to remember the goals and themes previously discussed when considering suggestions for programming and how the ideas relates back to accomplishing the NNC's missions.

Communication

Every aspect of communication must be considered due to the role propaganda can play in one's consideration of participating in an NNC event. This starts with careful consideration of the words used in any promotional materials.

The NNC could consider the concerns among residents and find ways to connect them to the topics they are addressing. If the NNC does not make the connection for them, it may not happen. Avoid words or phrases that those without higher level degrees will not understand—for example, any event that mentions "flood mitigation" may have reduced attendance from the surrounding residents if these are not the words the neighborhood would use to discuss the same thing.

Further, the methods through which the NNC communicates can be crucial in getting the word out. Social media, like Twitter and Facebook, are inexpensive ways to spread the word about events. Live tweeting from events can both spread the word to those who cannot attend or to those who did not realize what the event was about and change the opinions of those who had pre-conceived notions about what the NNC does. The NNC could also provide tips, mention neat new products about which their followers would appreciate learning, share contrasting viewpoints on issues from local politicians (not advocating either), and more. Partners like the City of Easton would be helpful in re-tweeting information out to their larger audiences, so such opportunities could be considered and then planned in advance. Posts involving kids are more likely to go viral and photos are an incredibly effective tool because they are promoted more often than text and can overcome language barriers more easily.

While social media is free, newspapers are still an important communication source to consider. Since the neighborhood still uses this medium, stories about upcoming or past events and advertising space could be valuable.

Lastly, the NNC could consider language and semantics in their advertising and programming. The NNC can also develop propaganda messages that can be used in advertising, at events, and in publications. According to the 2010 Census, over a tenth of Easton's population speaks Spanish at home. It would be beneficial to carry out advertising and programs that are in Spanish or bilingual.

Frame through programming outside building

Currently, the NNC's activities are primarily held inside of their building. This inward focused strategy may be easy, but if the NNC wants to increase participation and education within the neighborhood, it needs to be part of the neighborhood. By offering

events outside of the building, the NNC would be framing itself as part of the neighborhood. From increasing the programming in the schools, to nature walks in the neighborhood, to green projects in parks with playground equipment, the NNC can be seen as a valuable part of the neighborhood which would encourage residents to go into the center itself. A great example of this framing would be through Easton's National Night Out.

National Night Out is a program run by the non-profit organization, National Association of Town Watch, aimed at reducing crime by bringing neighborhood residents together once a year to get to know each other and the local police. Easton has typically celebrated this event each August by throwing block parties. This event would be an excellent opportunity for the Nurture Nature Center to get to know the neighborhood residents, and convey their message about environmental sustainability as community enhancement within the frame of crime prevention. Therefore, we suggest that NNC co-hosts a party. Co-hosting a party with local businesses will not only build relationships with those businesses, but with their patrons. It might be especially helpful to partner with the Easton Neighborhood Block Watch (eastonblockwatch@yahoo.com), as they organized Easton's National Night Out last year, in 2012. Plus, costs for the NNC could be reduced by partnering with local businesses and organizations, especially if some partners are restaurants and provide food for the party. Some of these restaurants may even choose to provide food including locally-grown ingredients.

We also suggest that the party be held outside to feel more welcoming to the community. This should be a family-friendly party, attractive to both adults and kids. For the adults, food and drinks are suggested. For the kids, we suggest an outdoor movie. It would also be possible to play music while the movie is not playing. The pre-show to the movie could be a short slide show featuring the services and events that the NNC offers in order to stimulate conversation with the present community. A text/Tweet to screen service could also be offered throughout the night for neighborhood residents and businesses to voice their comments/opinions. Personal tours of the NNC building could also be offered to the community, so that they would feel more comfortable coming to the center for future events and to share concerns. The NNC National Night Out party would be promoted through multiple avenues, including the newspaper (as survey results show that this is the news source for many local residents), and social media (as the Easton Department of Planning and Codes has volunteered to help with event promotion through their Facebook and Twitter accounts).

Frame through different style/structure of events

As previously mentioned, the science, art, and dialogue strategy at the NNC is oftentimes in the form of a panel of experts holding discussions with the visitors. However, the NNC can frame itself and the events differently if some events appealed to different audiences. If there are more people in the neighborhood who would respond better to hands-on learning, perhaps dialogue about science becomes more effective if they were learning to create a small home garden by planting seedlings. NNC can then be considered more welcoming to such an audience just by framing an event in a slightly different manner than it has previously. Non-environmental topics, like "Nature versus nurture: the

science and psychology of gangs", may also help the NNC be seen differently within the neighborhood. Most significantly, the consideration of how to program to younger audiences may change how the neighborhood and the greater Lehigh Valley thinks of the NNC. Such attention could possibly help increase funding to support more programming for children and teens. While the NNC is a science center focusing on education resulting in action, it cannot ignore the needs of the community it is serving and the varying ages of this community. By creating events which educate and entertain children, the NNC will be gain more returning members.

Based on a conversation between our group and a NNC employee, the 'kid friendly' movie shown already was popular with the community. This makes us think that community relationships could be fostered better by bringing members together via their children. If a movie or other event was to take place at the same time as a more 'adult' focused educational forum parents with small children would be more likely to attend and participate in important conversations about environmental and general community concerns. Kid activities should be simple and could be coordinated and planned by high school interns. Creating a monthly "kid's night" or "teen night" could be a successful strategy for getting older community members into the center. A teen night could also be helpful with early education and interest in environmental issues for students who are not familiar with the problems the planet and the community are facing.

Hands on activities for kids/teens could include:

- projects that show large scale environmental concerns on a small scale
- community gardening
- tree/flower planting
- consistent weekly after school events (such as on Fridays)
- connecting with higher grade levels to do semester-/year-long research projects
- mural painting
- walking tours of the area
- guided "tour" of farmer's market vendors

Connecting with older students in these ways will help to make them more comfortable walking in the area and coming to the NNC for more education-based presentations or discussions. The importance of educating the youth on environmental issues cannot be emphasized enough because environmental issues will soon be theirs to deal with and solve.

Frame through Intern Projects

Allowing students to gain experience working with an organization like the Nurture Nature Center would benefit both the community and the center. Giving students responsibility in areas they care about will set them in the right direction for current and future studies. Even if an interested intern does not have much or any background in environmental resiliency or sustainability they will learn the importance of accountability and work ethic and likely understand the importance of environmentalism. The center would benefit from the work of interested students because they could have more projects/events going on at the same time and it would be done by people who understand the interests of the

designated group. Interns could range from high school to college students, but their roles should be different based on desired levels of responsibility and education. Possible projects interns could be in charge of:

- Plan events for people their own age and younger so they do not feel too out of their comfort zone in the planning
- Setup information displays at already planned events (such as the farmers market)
- Interview/survey community members about immediate/noticeable concerns
- Working with the NNC scientists to simplify seemingly complex issues or dissecting data from surveys; college-age interns would benefit most from this experience of working with technical discussion and understanding
- Calculate relative probabilities of different risks to explain importance
- Marking drains with “No Dumping” signs and creating an easily understood map of these locations/ planning a walking tour
- Work as liaisons between the NNC and high schools/ colleges to find possible ways to collaborate
- Research on non-profit organizations and businesses for possible partnerships, specifically those listed by the Alliance for Sustainable Communities in their “Sustainable Lehigh Valley” directory
- Evaluate perception of NNC in local community through surveys
- Evaluate NNC programs using Results Based Assessment Program (program of United Way of the Lehigh Valley)

It is important when hiring interns to have specific tasks, whether it is one special project/event or consistent office activities. Interns should feel needed and important, but not overwhelmed by work. Positive internship experiences could give the NNC a new influence with local high schools and colleges.

Frame through the very name of NNC

While we understand how important consistency of an organizational name can be, we believe that NNC could at the very minimum discuss the role their name has in framing their events, role in the community, and purpose.

By using the words nurture and nature, the surrounding neighborhood may not relate to their assumed purpose. If the biggest concerns in the area are economics, transportation, and food, the name of the center does not provide any enticement. What use is "nature" when the residents perceive their neighborhood as dangerous? It may not appear to the West Ward that the center is there to help them.

Further, despite wanting to provide an objective or balanced dialogue during their events, for those who want a more fatherly approach to life, policies, etc., using "nurture" in the name inherently biases the mission and intended dialogue. A name that more accurately reflects the dialog they intend to create and action they hope results may be more appropriate AND draw more participants from the community. The higher priority is economic - job opportunities.

Conclusion

In working with the Nurture Nature Center, we were able to apply Information Ecology concepts to examine the epistemology of the organization. We adopted an emic/etic perspective, which allowed us to see the NNC as a bridge between neighborhood and broader perspectives. Modeling information flow highlighted potential ways to frame issues and identify areas of opportunity and collaboration. This helped us identify challenges, clarify goals, and develop strategies.

Encouraging an organization to be self-aware or cognizant of its epistemology affords a more objective view. An objective view is necessary to define the scope of challenges, organizational capabilities and identify loci of intervention. In our case, this allowed us to identify framing as a strategic locus of intervention. Information ecology can clarify goals and strategies for organizations in general.

Literature Cited:

- "About National Night Out." *National Association of Town Watch*. n.d. Web. 18 Apr. 2013.
<<http://www.natw.org/about-nno/>>.
- Casagrande, David, and Charles Peters. 2013. "Eco-myopia meets the longue durée: An information ecology of the increasingly arid Southwestern USA." In *Future Directions in Environmental Anthropology*. H. Kopnina and E. Shoreman, eds. New York: Routledge.
- Diekmann, A., & Franzen, A. 1999. The wealth of nations and environmental concern. *Environment and Behavior*, 31(4), 540-549.
- Ellul, Jacques. 1965. *Propaganda; the Formation of Men's Attitudes*. New York: Alfred A. Knopf.
- Harris, Marvin. 1968. *The rise of anthropological theory*. New York: Thomas Y. Crowell Company.
- Herman, Edward S., and Noam Chomsky. 1988. A Propaganda Model. In *Manufacturing Consent: The Political Economy of the Mass Media*. Pp. 1-35. New York: Pantheon.
- Kempton, W., J. S. Boster, and J. A. Hartley. 1996. *Environmental Values in American Culture*. Cambridge, MA: MIT Press.
- Kollmuss, Anja, and Julian Agyeman. 2002. Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research* 8(3):239-260.
- Lakoff, George. 2005. *Don't Think Of An Elephant! Know Your Values And Frame The Debate*. White River Junction, VT: Chelsea Green.
- Lindsey, Zach. "West Ward, South Easton residents march against violence." *The Express Times*. 21 Apr. 2012. Web. 23 Apr. 2013.
<http://www.lehighvalleylive.com/easton/index.ssf/2012/04/hundreds_march_against_violenc.html>.
- "Main Street Initiative." *Main Street Initiative*. Sitecats Web Development, n.d. Web. 07 May 2013.
- U.S. Census Bureau. *Easton city, Pennsylvania*. 3 March 2013.
<http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml>.
- U.S. Department of Housing and Urban Development. "HUD State of the Cities Data System (SOCDS) Quick Link Retrieval: Easton, PA." 3 March 2013.
<<http://socds.huduser.org/quicklink/screen3.odbc?citystring=4221648>>.
- Vasquez, Miguel, and Leigh Jenkins. 1994. "Reciprocity and Sustainability: Terrace Restoration on Third Mesa," *Practicing Anthropology* 16:(2) 14-17.

“West Ward Revitalization Plan” *Easton Weed & Seed Program*. Mar. 2009. Web. 10 Apr. 2013. <http://www.easton-pa.gov/geninfo/westwardrevitalizationplan2009.pdf>

Table 1: Potential Environmental Problems in Easton

Issue	Reason	Reference
Flood	Easton has flood risk because it is located in the basin of the Delaware River.	See <i>Focus on Floods</i>
Loss of Natural Area	<ol style="list-style-type: none"> 1. Population growth and economic development 2. Loss of forests: 27,479 acres of forest land were damaged in 2012 because of weather conditions, pests including invasive insects, and diseases. 	Department of Conservation and Natural Resources of Pennsylvania
Indoor Air Quality Problem	Mold has been a big concern for the citizens in Easton	Surveys done by NNC (Rachel)
Child Lead Poisoning	With a population with a high proportion of children under 7, low income families and older housing, Easton is listed as one of the targeted cities, which experience higher lead poisoning than non-targeted areas.	2011 Lead Surveillance Annual Report from the Department of Health of Pennsylvania
Groundwater Contamination	From the Industrial Lane superfund site, brownfields, landfills, and underground storage tanks (UST). Industrial Lane, which is identified as a national priority site, is located at INDUSTRIAL DR, WILLIAMS TOWNSHIP, PA, 18042. It was discovered through water samples from a private well. A five-year review of implemented remediation was completed in 2008. The review indicated that the contamination in the groundwater had not reached the required cleanup levels yet. There are seven brownfields.	epa.gov
Drinking Water Pollution	Hydraulic fracking. Easton’s water source is the Delaware River, which could become polluted by hydraulic fracking	Easton Suburban Water Authority, Easton’s water provider

Air Pollution (PM)	Traffic and power plants. Currently, there is a coal power plant operating near Easton: Northampton Generating Plant. Easton is also located on a major interstate trucking corridor.	
Air Pollution (chemical)	According to the Toxic Release Inventory Program (TRIP), there are 8 polluters in Easton. The complete list and their released chemicals can be found at their website. TRIP provides communities with information about toxic chemical releases and waste management activities in an effort to support informed decision making at all levels by industry, government, non-governmental organizations, and the public.	http://www.homesfacts.com/environmentalhazards/Pennsylvania/Northampton-County/Easton.html
Invasive Plants	<p>There are 538 species of invasive plants reported in Pennsylvania (411 species reported in Northampton County) with the top ten reported species being Japanese stiltgrass, Japanese barberry, watercress, multiflora rose, garlic mustard, redtop, big chickweed, bittersweet nightshade, barnyardgrass and ladythumb.</p> <p>Department of Conservation and Natural Resources of Pennsylvania reported 28 Herbs and Forbs, 11 Vines, 9 trees, 23 Aquatic Plants, and 7 Grasses as invasive plants that are threatening the natural and urban lands of Pennsylvania in 2012. Besides, there are 25 species listed on the watch list of invasive species.</p>	<p>Early Detection & Distribution Mapping System at http://www.eddmaps.org/tools/statereport.cfm?id=us_pa</p> <p>http://www.dcnr.state.pa.us/csgroups/public/documents/document/dcnr_20026634.pdf</p>

Appendix I: Selected Easton Data

Population:

Total Easton population (2010 Census): 26,800

According to the U.S. Department of Housing and Urban Development (HUD), Easton's population has remained relatively stable (26,000-27,000) while other areas of the Lehigh Valley have experienced an increase.

Demographics:

According to the 2010 Census, Easton citizens identified as the following race:

71.4% White

20% Black or African American

2.9% Asian

1.1% American Indian or Alaska Native

Between 1980 and 2000 there was a decline of about 4,000 non-Hispanic whites, a rise of about 1,000 non-Hispanic blacks, a rise of about 1,000 who identified as being another race and non-Hispanic, and a rise of about 2,000 people who identified as being Hispanic. 19.9% of Easton's total population consider themselves Hispanic or Latino out of which 7.3% identify as Puerto Rican and 4.5% identify as Mexican.

Citizenship

89.2% of Easton's population identified as being born in the United States. Out of the 10.8% born outside of the United States, 31.5% have become a naturalized US Citizen while 68.5% do not have their US Citizenship.

Language spoken at home

81.4% of Easton's population speaks only English at home. 13.7% of Easton's population speaks Spanish at home with 5.7% identifying themselves as speaking English less than very well.

Housing

According to the 2010 Census:

Total number of housing units: 10,356

70% built in 1939 or earlier

10% built in 1980 or later

89.9% are occupied

10.1% lie vacant

46.5% are owner-occupied

53.5% are renter-occupied

Homeownership rate:

Easton: 51.4%

Pennsylvania: 70.6%

United States: 66.1%

44.5% of total householders in Easton moved in in 2005 or later.

Employment

22,005 people in Easton are at least sixteen years of age.

Out of those eligible for work, 50.1% are employed while 7% are unemployed.

Mean travel time: 28.6 minutes

Median household income

Easton: \$39,488

Pennsylvania: \$51,651

United States: \$52,762

Poverty

Percentage of people living under the poverty level from 2007-2011:

Easton: 22.4%

Pennsylvania: 12.6%

United States: 14.3%

Education

Percentage of the total population over twenty-five years of age that has attained a high-school graduate degree or higher:

Easton: 77.3%

Pennsylvania: 87.9%

United States: 85.4%

Percentage that have attained a bachelor's degree or higher:

Easton: 18.5%

Pennsylvania: 26.7%

United States: 28.2%

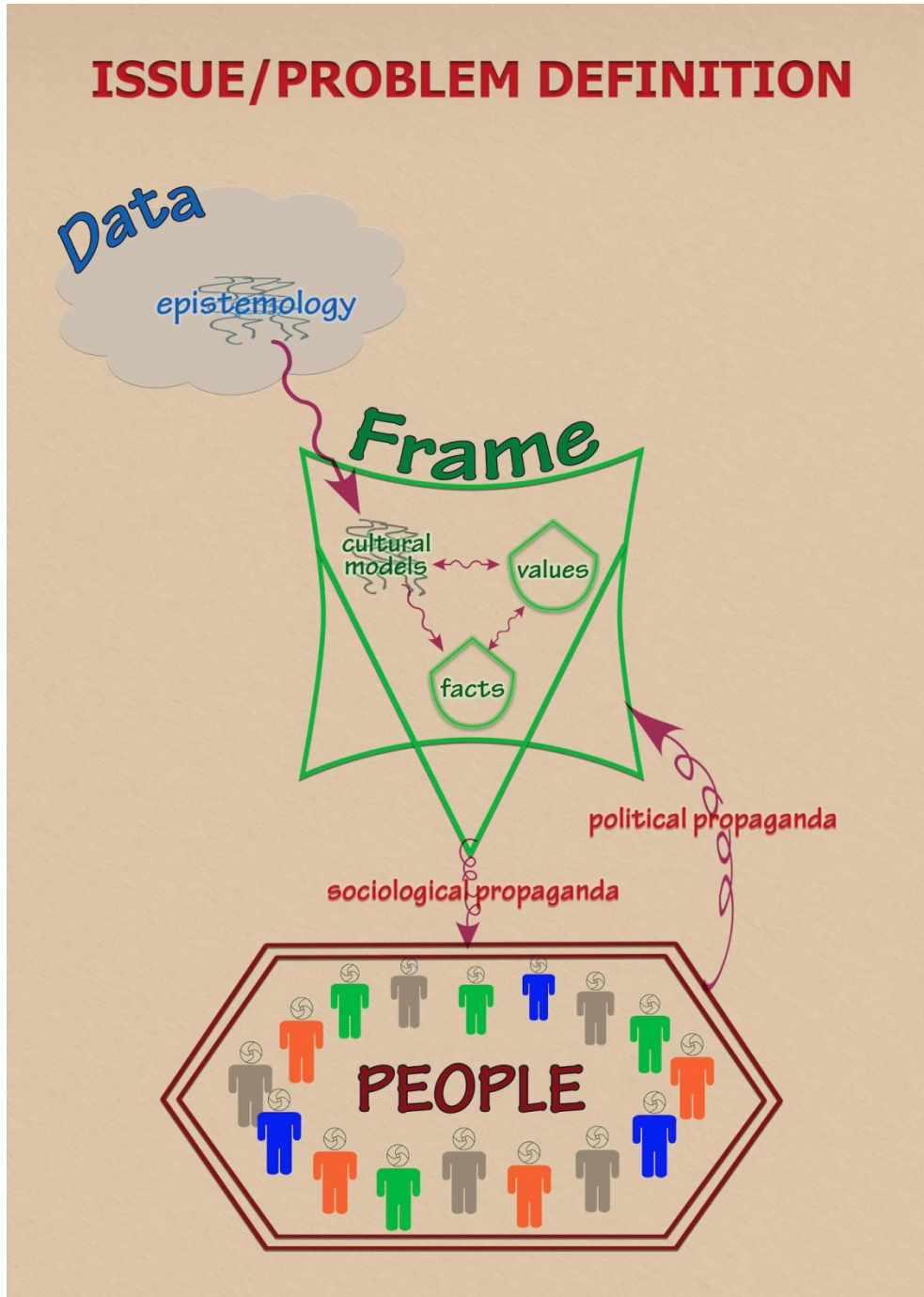
Information compiled from the United States Census Bureau and the United States Housing and Urban Development.

Appendix II: Neighborhood Comparison

According to a contact at the Easton Planning Bureau, Mike Handzo, the following are the general perceptions of Easton:

- **Downtown:** This neighborhood is being gentrified to some extent in the sense that it is drawing in new people but at the same time no one is really getting pushed away. There have been some concerns with new businesses not matching up with the residents' incomes; however, the new businesses have been good for building up the tax base and they are also helping change people's' perceptions of the downtown area. People are starting to see it as a safer, artsy neighborhood.
- **West Ward:** This neighborhood has not experienced major changes. There is very little evidence of gentrification in certain parts. Most houses could be purchased by an individual with a median Easton income (~\$38,000) but the concern with housing has to do more with housing quality than expense. Residents complain of absentee landlords. The City of Easton is trying to ensure landlords are held accountable for property conditions. According to Mike, the West Ward has greatly benefited from the Elm Street Project over the past 10 years through community gardens, housing facade renovation grants, and connections to other local services and agencies.
- **South Side:** Mike described the South Side as a quiet neighborhood disconnected from most of Easton by the Lehigh River. It has a strong middle-class African American community presence. It is primarily a residential neighborhood with not too many businesses present other than strip malls and an industrial site.
- **College Hill:** This neighborhood has become more gentrified over the past ten years. Many former New Jersey residents have moved in to College Hill because of its proximity to the Pennsylvania-New Jersey border. Property values have increased and this area is expected to remain in a higher socioeconomic bracket than the rest of Easton. Mike describes this area as more suburban in character than other neighborhoods and the "most desirable" of neighborhoods.

Appendix III: Issue/Problem Definition Model



This model illustrates a step-by-step path of how information is created and transformed. Theories on framing (Lakoff 2005) and propaganda (Ellul 1965) explain the development of issues/problems by helping us to understand 1) why certain data is chosen as information, 2) how it is transformed through framing, and 3) how it flows as propaganda to and from the general population. Each of the icons in the model represents a specific theoretical concept. See symbol key below for explanation on the meanings of icons used.

Icon Key:



Information Source, in this case: all existing data



Information Pathway/Flow



Storage of Information



A Transformation, in this case: transformation of information



Organized Group of Consumers, in this case: general population



Data/Information Filter



Portal, in this case: entrance to a model of individual cognition (see Casagrande and Peters 2013, Figure 8)



Propaganda