A Comparison between
the Division of Environmental
Communication Study Areas
and an Actual Case

Information

Index

1. Abstract

This article compares the study areas of environmental communication delineated by Cox (2007) with interview results of seven civil servants and three politicians engaged in environmental policies and their implementation in the municipality of Växjö, Sweden. The research question is threefold; (1) which study areas of environmental communication tended to be emphasized, (2) which were not, and (3) which did not fit into Cox's divisions. Study areas most emphasized by interviewees were environmental rhetoric and discourse, public participation in environmental decision making, advocacy campaigns, and representations of nature in popular culture and green marketing. Less emphasized areas were media and environmental journalism, environmental collaboration and conflict resolution, and risk communication. Interview results also suggested a new study area, environmental experiences and knowledge sharing.

2. Background

2.1. Research motivation

Research with an environmental communication perspective is largely an unexplored field. My hope is that I will contribute to the field by comparing study areas, or categories, of environmental communication with the interview results of civil servants and politicians who are engaged in environmental policies. Therefore, my interest is in the environmentally-related work of interviewees within a target municipality and to discern environmental communication activities and processes that are part of that work and see if those activities and processes correspond to the categories defined by Cox (2007). Through my analysis, I was able to determine which of Cox's environmental communication study areas tended to be emphasized within the results, which were not, and which categories emerging from my research did not fit into Cox's defined study areas.

This research shows how environmental communication research can be extended further to fulfil needs in the field. It might contribute to environmental communication research by stimulating further research into the reshaping and usefulness of study areas.

Concerning environmental communication education for students, this research is able to show one example of the connection between academic environmental communication study and the work that occurs in field. Concerning environmental communication education for strategists who are engaged in environmentally-related work, this research gives them opportunities to know the existence of accumulated research about topics which they might not have considered

before or might not have previously considered a priority.

2.2.   Information of Target municipality and Shared Identity of Interviewees

In this part of the article, I describe the background information of the municipality of Växjö based on published materials and the result of interviews in order to specify the works they have achieved, and what kind of identity which interviewees share. The background of municipality became environmentally confident. In total, I've interviewed ten people who are 7 civil servants and 3 politicians. All of them are engaged in environmental programs and environmental policies in respective ways.

The target municipality is the municipality of Växjö in Kronoberg County, southern Sweden. It has a population of 81,074 (2009a, Statistics Sweden) as a municipal total; whereas the city has 56,000 inhabitants (2005, Statistics Sweden); with an area of 1,924.99 km2 (2009b, Statistics Sweden). The reason why I chose the city of Växjö is that they've been emphasizing that they've done a lot of work related to environmental issues since 1960s. Also, they have dealt with communication within the issue with actors travelling outside the municipality. Also, the municipality seems to be striving for communication between other actors, citizens, companies. In fact, they publish brochures, posters, web pages about their projects, pens with slogans, and other materials with messages concerning the environment.

The municipality of Växjö currently calls itself as "The Greenest City in Europe" and implementing environmental programmes which include environmental policy in three areas, "Living Life", "Our Nature", and "Fossil Fuel Free Växjö". (Växjö kommun, 2006) In terms of being a fossil fuel free area, the municipality has a goal which is that the emissions per capita shall be reduced by 50 % by year 2010 and by 70 % by the year 2025, compared to 1993. Växjö kommun (n.d.) said that since 1993, the emissions of fossil carbon dioxide have been reduced by 24 % per inhabitant.

Aside from current situation, the history of the municipality of Växjö plays an important role in supporting the current environmental movement in Växjö, according to ten out of ten interviewees. There were 4 common answers about the important circumstances in the history from interviewees which was restoration of the lakes, introduction of district heating from biomass source, building cooperation with the Swedish Society for Nature Conservation (SSNC) after the United Nations Conference on Environment and Development (UNCED) in 1992, and the political decision to be fusel fuel free/ to introduce the environmental programme.

First of all, every interviewee said in chorus that the start was the restoration of polluted lakes in the center of the city. There are 4 lakes in the center of Växjö city;

each of those lakes were described as "heavily polluted", "really smelly", or "totally green" (because of algal growth caused by human activity) by all of the interviewees. The restoration of the lakes started in late 1960s and three of them were completely restored. Nowadays people can bath, walk around, and spend time beside the lakes comfortably.

Secondly, in 1980, a municipally owned energy company, VEAB, converted an oil dependent district heating plant to use biomass. This movement started because of the energy security perspective from oil shock in the 1970s. Later on, this coalesced into local climate protection movement based on Local Agenda 21 from the UNCED. In 1992, the Rio Summit, the UNCED showed results such as Local Agenda 21. Since then, the municipality started to investigate what they could do for the global environment according to the result of the UNCED. The municipality suggested collaboration with the SSNC. It turned out that the SSNC was officially looking for a municipality to work with them. According to an interviewee, the municipality of Växjö was chosen. They shared a learning process among the SSNC, civil servants and politicians. Several interviewees mentioned that a strong basis was built through the process. Therefore the Environmental Programme for the City of Växjö repeals and replaces the former Environmental Policy adopted in 1993 and the Agenda 21-strategy adopted in 1999. (Växjö kommun, 2005) In 2006, the Environmental Programme for the City of Växjö, which includes 3 areas, Living Life, Our Nature, Fossil Fuel Free Växjö, was adopted by municipal council. (Växjö kommun, 2005)

There is one more major aspect of their environmental programme which depends on communication; the environmental management system ecoBUDGET which is used to ensure that the goals of the Environmental Programme are achieved. This means that the goals are controlled and followed up in the budget process. (The following is such a long quote that you need to get rid of the quotation marks and indent it thusly):

> The goals to be achieved are steered with the help of budget indicators (B1, B2, etc.). Goals to be strived towards are followed up with the help of environmental asset indicators (T1, T2, etc.) and efficiency indicators (E1, E2, etc.) in the annual accounts. Committees and municipal companies are responsible, in their internal budgets, to describe the concrete measures that are to be carried out in order to realize the goals to be achieved. Follow-ups take place within the financial report for part of the year and the annual financial report, which provide an

environmental report in greater depth. (Växjö kommun, 2005)

Those activities led to the award of prizes. The European Commission gave Växjö a"Sustainable Energy for Europe Campaign" award in February 2007. In September of the same year, Växjö received the "Best Environmental Practice in Baltic Cities Award" from the Union of Baltic Cities (UBC). Additionally, the BBC London and Local Governments for Sustainability (ICLEI) been given the epithet, "The Greenest City in Europe". (Växjö kommun, 2008) Later on, the municipality itself decided to adopt that epithet as a slogan, and promote itself as the Greenest City in Europe.

Regardless of its pervious achievements, the interview results indicate that there are things still need to be done in communication with other actors in order to achieve further environmental goals. In other words, the municipality has the numerical technical goals and those goals won't be achieved without involving residents and local actors. Växjö kommun (2005) mentioned that the Environmental Programme for the City of Växjö will provide companies, organizations, authorities and inhabitants with inspiration and guidance.

3. Purpose of the study and research question

My question basically is how does the organization of study areas within environmental communication contribute to analyzing a case in the field. Therefore, my purpose in this article is to describe the environmentally-related work of interviewees in the municipality of Växjö and investigate if there are work activities and processes related to communication which are more emphasized than others, and which do, or, do not correspond to categories based on Cox's (2007) division of environmental communication study areas which were described in the theory chapter. The research question is which areas of environmental communication tended to be emphasized, which were not, and which did not fit in the divided areas of environmental communication study, according to the interviewees in the municipality of Växjö. Those categories are shown in Figure.1.
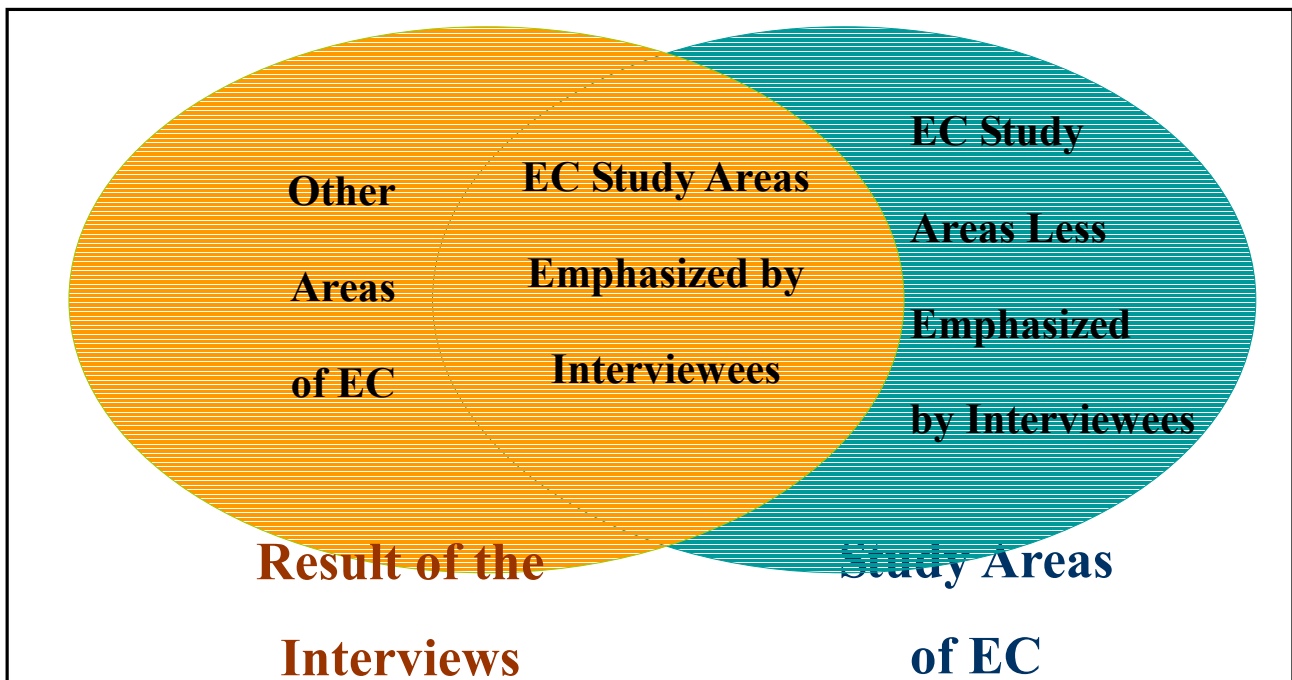
Figure 1. Three categories of environmental communication
for research question.

In other words, this article is the description of how interviewees in the municipality deal with environmental program planning, decision-making, and implementation from an environmental communication perspective.

According to Encyclopædia Britannica (2008), metatheory is defined as "a theory the subject matter of which is another theory. A finding proved in the former that deals with the latter is known as a metatheorem." In other words, this article can be called as a metatheory about environmental communication in a sense that it studies the study of environmental communication in a way to show which environmental communication questions are interesting for civil servants in an environmental confident municipality and which aren't for them.

4. Methods

The sources of information are interviews of 7 civil servants and 3 politicians, and printed materials and online materials published by the municipality which were recommended by interviewees and available at tourist information center.

Ten of ten interviews were conducted with a semi-structured approach. Nine of ten had almost the same structures with minor changes based on their specialties, except for the one which had difficulty to communicate because of lack of the common language; and one of them had question 1-3 only. It made sense that the main approach

was semi-structured, since I intended to have the material from the interviews to be rather comparable in order to get a picture of their work in a same structure, and to get understandings from different aspects. The semi-structured interviews yielded quite same results in terms of content, but yielded different results in terms of time amount and the ratio since all interviews had interviewees' different factors such as time limits, different interests and specialties. One difficulty with semi-structured interview was that I as an interviewer felt that it was harder coming to what I had stressed as main aspects formulated in the semi-structured interview questions (history, future, interviewee's feeling, etc.). In other words, it was hard to focus on taking in all information and at the same time fast come up with relevant follow up questions. It was challenging to do following 3 things in my mind at the same time: understanding the contents, coming up with relevant follow up questions and keep whole sketch of the interview.

The set of questions I chose was open in comparison to closed, in the sense that it was elaborative rather than yes or no questions. The reason that I conducted the open-ended interview was that I had less background information about that particular interviewee's role in the municipality and accordingly wanted to be open for the interview to take different courses of direction. The advantage of asking open questions is to minimize the affect of interviewer's assumption and frameworks for the answer of interviewees. The disadvantage is that it can get too large answers and make interviewees confused because questions can be too broad and make them feel if making long answer is suitable or not. It leads a lot of meta-communication which may lead slight tension in interview situation. In that case, I had hard time with interviewees' question to specify my question which I strongly hesitated. However, that was the time when I needed to specify the question and ask what made them hard to answer. The reason why interviewees confused was generally, they felt the question was too broad to answer with time limitation. The reason why I hesitated was that firstly I intended to reduce interference of my pre-understanding, assumptions, and secondly I intended to know what their interpretations of questions are, since people need to choose what they think important to answer if the time is limited. As a result, the confirming conversations were needed in some cases, but those weren't needed in others because some interpreted the question by themselves based on their preference or assumption about what I as an interviewer want to know. For those reasons, those kind of questions which bears confirming conversations may lead misunderstandings based on assumption of assumption. The way to prevent the misunderstandings is to compare the set of questions and the aim of interview, and check whether it suits or not, and ask

yourself a question "What do you mean?" about interview questions.

However, trying to reduce the interference doesn't always yield 'good' result as an interviewer have expected. Alvesson (1999) stated possible unexpected characteristics of interview techniques; "While an interview technique trying to maximize neutrality and minimize interviewer influence may lead to shallow, convention-guided and not very honest answers, closeness-maximizing approaches may lead to answers in which the orientations of the researcher more strongly guide responses or the specificities of the local context brings forward highly idiosyncratic responses."(p19). Therefore, attempt to get an effective distance between interviewees and interviewers is the key to gain result with the quality which an interviewer expected. It largely varies depending on the combination of interviewees and interviewers. In the interviews which I conducted, I tried to have closer distance by communicating with them out side of prepared questions since it was the first time to meet most of the interviewees and it might lead the result to be shallow.

Six of ten interviews, I used different method than semi-structured interview which are SWOT Analysis (SWOT) and Force Field Analysis (FFA). SWOT was used in five interviews whereas FFA was used in one interview. Time restriction yield some interviews are with those methods and others are without them. My aims to have those methods were to get information by different way than asking questions and getting answers verbally. Those methods allowed interviewees to see their answers for the question comprehensively on one paper. The advantages of those methods, so-called as PRA (Participatory rural appraisal) methods, in general are that it allows you to get visual result, ask questions in different way than interviews, make interviewees reflect while they are working on it, and interact with other respondent if there were more than one. The disadvantages in general are that it might take more energy for respondents than question-asking interview, and it has possibility to prevent interviewers from getting result based on the interaction, especially when there are not many interviewees.

In this case, the advantage to be able to make interviewees reflect turned out to be weak since there were no people to interact with on one-on-one level. As for SOWT, advantages were to be able to get easy-to-understand visualized results, and possibly to make interviewees reflect and gain more answers than asking/answering question just orally. Also, it was certainly one of the advantages in this case to have visual result since if facilitated interview. The disadvantage in this case was that it might made interviewees tired since I conducted SWOT in the end. It might be an alternative to conduct it in earlier step.

As for FFA, advantage which I observed was that to be able to get clearly prioritized articles in visualized result. Disadvantage was that the difficulty to make interaction within interviewee rather than SWOT, since FFA with single interviewee tends to be value-oriented and self-contained result. That is the reason why I chose SWOT in more interviews. My experience taught me that it's better to use SWOT for single interviewee. In summary, these methods proved to be an effective tool for illustrating people's different perspectives.

Concerning the fact that these methods are called as 'participatory' methods, in this article, I intend not to call them as 'participatory' since the level of participation is low. According to Arnstein's ladder of citizen engagement (1969), the boarder between participation and non-participation is identified with different level of power ownership. The reason for this decision is because there was one interviewee per an interview with less interaction and with my interest in understanding the current situation rather than helping interviewees facilitate understanding it.

I ended each interview by asking the interviewees how they felt about the interview, how they liked the questions and SWOT or FFA. The feedback I got was that the interviewees enjoyed the interview, that they felt that the interviewing approach was interesting, and that the questions and the methods had made them reflect. Several of the interviewees mentioned some of the questions were bit too open and confusing. I am not going to mention it since I have already mentioned it in above.

1. Tell me a bit about your self?
2. How did you become engaged in environmental policy in Växjö?
3. How do you describe the current situation of environmental policy in Växjö?
4. Tell me the history that you think it important for environmental policy in Växjö?
5. Could you specify the actors who relate to environmental policy in Växjö?
6. How do you describe those actors?
7. Related to environmental policy in Växjö, what kind of situation did you feel satisfaction/ frustration?
8. Could you define the situation with satisfaction/ frustration?
9. Where do you place yourself in environmental decision making? What kind of role are you taking?
10. What are important things when you plan/manage environmental policies? / efficiency?
11. SWOT Analysis "What is SWOT of communication in environmental work in/around the municipality?" or Force Field Analysis "Goal: To construct constructive communication among actors who you adduced."

12. Please imagine you just woke up 10 years later and came to your office. What would you see?

13. In the end, please tell me what did you feel and think about today's session?

14. Do you have anything to add or something to ask me?

5. Theory

The reasons why I show the theory here are: to identify concepts, terms and theory that I use in following empirical discussion chapter; and to show the areas of environmental communication study which I use in the following chapter.

5.1. Environmental communication

First of all, what is communication? Charon (2007) remarked communication means sharing, and sharing is one very important way that society is held together. Very complex forms of cooperation occur because human beings are able to discuss with one another how to resolve the problems that they face. (Charon, 2007, p62)

　　　Cox (2006) used environmental communication to mean the pragmatic and constitutive vehicle for our understanding of the environment as well as our relationships to the natural world; it is the symbolic medium that we use in constructing environmental problems and negotiating society's different responses to them. (p12) Cox (2006) meant pragmatic since it educates, alerts, persuades, mobilizes, and helps us to solve environmental problems, and he meant constitutive because it also helps to constitute, or compose, representations of nature and environmental problems themselves as subjects for our understanding. (p12) Cox (2006) also meant constitutive since environmental communication helps to constitute, or compose, representations of nature and environmental problems themselves as subjects for our understanding. (p12)

　　　Not only the master programme of environmental communication in SLU but also other environmental communication studies cover quite broad area. According to Cox (2006), most research and public and professional practice fall into following seven areas:

5.1.1. Environmental rhetoric and discourse

Rhetorical studies of the communication of environmental writers and campaigns emerged as an early focus of the field. This is also one of the broadest areas of study; it includes the rhetoric of environmental groups, nature writing, business PR campaigns, environmental media, and websites. Generally, a rhetorical focus includes two sub-areas: (a) a study of the sources and modes of persuasion that individuals and

groups use to communicate about the environment; and (b) a study of critical rhetorics, or communication that questions or challenges the discursive framing of the relationship between nature and society. (Cox, 2006, p7)

5.1.2. Media and environmental journalism

In many ways, the study of environmental media has become its own subfield. It focuses on the ways in which the news, the Internet, advertising, commercial programs, and alternative media portray nature and environmental concerns, as well as the effects of such media programming on public attitudes. (Cox, 2006, p7-8)

5.1.3. Public participation in environmental decision making

Public participation itself has been studied in Some scholars have begun to work directly with government agencies such as the U.S.Forest Service to study the opportunities for–and barriers to–the participation of ordinary citizens, environmentalists, industry, and scientists in an agency's decision making (Depoe, Delicath, & Aepli, 2004). Other important questions have focused on the public's right to know about environmental information that is held by the government and private industry. (Cox, 2006, p8)

5.1.4. Advocacy campaigns

A less-studied but nonetheless important area of environmental communication is the advocacy campaigns waged by many environmental groups. Advocacy campaigns rely on communication to persuade key decision makers to act on certain objectives–from campaigns that mobilize the public to protect a wilderness area, halt a waste dump, or raise the fuel efficiency on cars and SUVs, to corporate accountability campaigns to persuade businesses to abide by strict environmental standards (for example, convincing building-supply stores to buy lumber that comes only from sustainable forests). (Cox, 2006, p9)

5.1.5. Environmental collaboration and conflict resolution

Dissatisfaction with adversarial forms of public participation and methods of settling environmental disputes has led practitioners and scholars alike to explore alternatives often draws inspiration from the success of local communities that have discovered ways to bring disputing parties together. (Cox, 2006, p9) At the center of these modes of conflict resolution is the ideal of collaboration, a mode of communication that invites stakeholders to engage in problem-solving discussion rather than advocacy and debate.

(Cox, 2006, p10)

        Daniels, S.E. and Walker, G.B.(2001, p.40-p.41) define the word, conflict, with describing fundamental assumptions about environmental conflict: environmental controversies involve both conflicts and disputes, environmental conflicts are complex than other setting because it has multiple parties, multiple issues, cultural differences, deeply held values and worldviews, scientific and traditional knowledge, legal requirements and "conflict industry".

        Hallgren (in press) states "conflict is social interaction during which the actors trust to the interaction decreases."(p.2-3). Since this definition is not self-evident, Hallgren (in press) discusses further the meaning and consequences of conflict. In terms of characteristics of conflict, Hallgren (in press, p.3) primary states that conflict is social action and secondary states that the actors of a conflict have taken notice of each other and they interpret and give meaning to each others actions. This is not a unique quality of conflict, but a common quality of all social action. (p.3) Hallgren (in press) doesn't directly mention the reasons why conflicts occur but he mentioned those as the characteristics: interest divergence (p.3), and as he mentioned above, social action with interpretation and giving meaning to each other's action. Although Hallgren (in press) discuss the trust decrease, I would not include this in the reasons why conflicts occur because it is about the process when conflict grows rather than occurs.

5.1.6. Risk communication

The study of risk communication includes three areas: evaluation of particular communication strategies for conveying information about health risks to potentially affected populations; impact of cultural understandings of risk on the public's judgment of the acceptability of a risk; narrow technical definitions of risk and have started to call for more democratic methods to involve affected communities in evaluation risk. (Cox, 2006, p10)

5.1.7. Representations of nature in popular culture and green marketing

The use of images of nature in popular music, television shows, photography, and commercial advertising is hardly new or surprising. What is new is the questioning of how such images of nature shape popular culture or influence the general public's attitudes toward nature. (Cox, 2006, p11)

6. Empirical discussion and interpretation -The communicative process analysis-

Following paragraphs are the result of interviews and discussion about areas of environmental communication which are tended to be emphasized and which are not according to the interview. In addition, I discussed about an area of environmental communication which was not covered in the division.

6.1. Environmental rhetoric and discourse

According to the interviews and other publications that I've gotten, the municipality has modes of persuasion to communicate about the environment which is the sub-area (a) according to Cox (2006). It's basically scientific knowledge based on larger scale decisions such as the UN and national levels. One interviewee mentioned that they wanted to take the right decision for environmental issues and clarified 'right' means what had been decided at the UN. Other mode of persuasion is that the municipality call itself as "The Greenest City in Europe". According to one interviewee, the intentions behind that are to stimulate actors with the slogan and encourage citizens to be engaged in the environmental programmes based on the fact what they've achieved already.

There are comparatively fewer results for the sub-area (b) which is about critical rhetoric or communication that questions or challenges the discursive framing of the relationship between nature and society. Three of ten interviewees mentioned the existence of critiques which make them frustrated. However, the action such as analysing critical rhetoric was not mentioned in interviews. I as an interviewer had impression that interviewee focused on the actions which they'd taken and they were going to take rather than this point.

6.2. Media and environmental journalism

Since the target of this article is a municipality, there is no prominent interview result about this area. There were remarks for journalism in general, that interviewees were disappointed of journalism because they are not on their side and don't provide constructive communication among actors.

6.3. Public participation in environmental decision making

I recognized emphasis on this area even it's not yet become standard for the municipality. In general, the environmental decision makings at the municipality are prepared by civil servants and done by municipal council. Therefore, there is not much

emphasis on public participation in current environmental decision making process. However, there is strong awareness about this issue according to one interviewee. One interviewee strongly emphasized how public participation in environmental decision making in the municipality is important since the actors of their environmental programs are citizens. The interviewee said that it is frustrating that there are not enough resources to have sufficient public participation. Also other interviewee mentioned that they used to have meeting with local companies to listen to their opinions for municipal environmental programs. Taking them into account, this area of study is not fully implemented in field but it has gotten strong attention from at least one interviewee and it is implemented in small scale. It can lead to emphasize the area from municipality in future

9 of 9 interviewees who answered the question about actors answered that citizens are one of the actors for the environmental programs but not all of them describes as remarkable actors for environmental decision making.

6.4. Advocacy campaigns

There is no result directly related advocacy campaigns. Answering to the question about actors who are related environmental programs in the municipality, every interviewee in chorus told me that they have currently have less effect from environmental NGOs or active citizens since they are not many or powerful. One interviewee mentioned that they don't have many of environmental organizations, active citizens since environmental work has become main stream. Rather, advocacy campaigns to decision makers changed the framework to an environmental communication between civil servants and politicians in this context. Therefore, this area of study is not directly emphasised in field but has a potential in different framework. It wouldn't be called as advocacy campaigns but it has similar communication framework.

Additionally, according to the interview results, I found that environmental communication between the municipality and companies can be one derivative of hitherto known advocacy campaigns. They haven't done exact advocacy campaign but they have potential to try to change company's actions. For example, one interviewee mentioned that one of his/her frustrating situations is the situation with incoherent remarks about more strict environmental regulation from one company. The interviewee said it is frustrating because s/he thought that attitude of companies would affect decision makers and it is important to change the way companies think.

6.5. Environmental collaboration and conflict resolution

According to the interview, there are several emphasis on public participation in environmental decision making whereas less emphasis on this area, environmental collaboration and conflict resolution.

In terms of local communities, the municipality strived for participation of some actors such as local companies which I mentioned before. However, this is different from environmental collaboration and conflict resolution. One interviewee mentioned that there are conflicts such as construction of new residential area which some of residents in surrounding area showed objections. According to him/her, no prominent conflict resolution approach was implemented so far. Therefore, this area of study is not emphasised in field whereas it is recognized as one are of study in environmental communication.

This result shows wide gap of interest for environmental communication questions between researchers and people in field. Hallgren (in press) stated that the actors of a conflict have taken notice of each other and they interpret and give meaning to each others actions. Therefore, facing conflict means facing their recognition for each other and building some kind of relationship among them. During them facing conflict, the process has potential to contribute building trust among actors. This point is emphasized in environmental communication research, whereas it is not emphasized in field. Conflict is something people try to hesitate or avoid to deal with since it has characteristics such as emotionally tiring, possibility to clarify or escalate conflicts. Therefore, it is the area with less emphasis in field.

6.6. Risk communication

There is no relevant result related to this area, according to interview. The reason behind can be explained by the absence of prominent risk of the environmental programme since main focus of the programme is improving the environment and the risk of the programme is not focused.

6.7. Representations of nature in popular culture and green marketing

Images of nature especially photography are frequently used in media between the municipality and other actors. The municipality has been publishing various materials to inform what they have been doing in environmental area and what they are going to do to actors such as inhabitants, local companies, visitors, politicians, etc. Many of brochures, calendars, and proposals which I've got have photograph of nature. Frequently used photographs are the one of lakes in the city and the one of the earth. It

reflects its slogans such as "The Greenest City in Europe" or "Fossil Fuel Free Växjö" and gives greener impression.

I had two interesting findings. First one is that I didn't have chance to see any photographs of polluted lakes; that means there were no materials available with photographs of polluted lakes or polluted nature. Although they mention the lake restoration in the text, it may have possibilities to give readers impression to take current situation for granted because of the strength of beautiful nature. Second one is that I found one brochure about the environmental programs without any photographs of nature. Although the photographs of nature have power to give people certain image and enforcement of the contents, it might lead unification of readers. The exceptional brochure might be made with this kind of background.

6.8. Extra area: Environmental experiences and knowledge sharing

Five of ten interviewees mentioned the role of the municipality in existing local network, or in future networks, to take leadership and share its knowledge and experiences. According to the result of interviews, there were interviewees who were passionate to share their knowledge and experiences.

When it comes to the way to implement the idea, they mentioned existing technical visit program which they offer for visitors from different part of the world. They offer visitors technical seminars and study trips in four categories: Sustainable City Development, Education, Democracy and Business Sector. The category of Sustainable City Development has sub-categories: Fossil Fuel Free Växjö, Strategic Environmental Issues, Ecobudget, Forestry, City Planning, Water Management, Waste Management, and Sewage Management. The visitors are mainly civil servants and politicians, 1/3 are media. Formerly, majority was from China, but majority is currently from Japan and France, according to one interviewee.

Two of five relevant interviewees about this topic mentioned that they are thinking about providing their experiences and knowledge as commercial service in other way, which is consulting. The way to share its environmental experiences and knowledge has not yet become an area of environmental communication study. Growing number of environmentally-friendly policy in organizations suggests new area for environmental communication study.

7. Conclusion

Based on Cox's (2007) division of environmental communication study areas, I investigated which aspects of environmental communication tended to be emphasized,

which were not, and which did not fit into the study areas as demonstrated through interviews with civil servants and politicians in the municipality of Växjö. The results indicate that there are areas of environmental communication study which tended to be stressed and other areas which were not. Emphasized environmental communication study areas were environmental rhetoric and discourse, public participation in environmental decision making, advocacy campaigns, and representations of nature in popular culture and green marketing. The areas which were less emphasized during the interviews were media and environmental journalism, environmental collaboration and conflict resolution, and risk communication. Environmental experiences and knowledge sharing is a suggested new area for environmental communication study; half of the interviewees talked about this aspect of environmental communication. It should be noted that while the interviewees didn't mention environmental communication as an area of study, they were engaged in environmental communication according to the information given in their interviews.

I acknowledge the existence of limitations on the conclusion of this article since it is conducted from my own point of view where I have interpreted the interview results. Regardless, this article strives to stimulate both environmental communication study and environmental communication in the field.

8. Reference

Alvesson, M., 1999. Beyond Neo-Positivists, Romantics and Localists – A Reflective Approach to Interviews in Organization Research. *Institute of Economic Research Working Paper Series.* Available at: http://www.lri.lu.se/en/publications/workingpapers?item=18 [accessed 19 April 2009]

Charon, J., 2007. Symbolic Interactionism: A Introduction, an Interpretation, an Integration. 9th ed. New Jersey: Pearson Education, Inc.

Cox, R., 2006. Environmental Communication and the Public Sphere. California: Sage Publications, Inc.

Daniels, E. and Walker, G.B., 2001. Working through Environmental Conflicts. The collaborative learning approach. Westport: Pager Publishers. Ch. 3.

Depoe, S., Delicath, J., & Aepli, M., 2004. Communication and Public Participation in Environmental Decision Making. Albany: State University of New York Press.

Encyclopædia Britannica, 2009, 'metatheory', [Online] Available at: http://www.britannica.com/EBchecked/topic/378037/metatheory [accessed 5 June 2009]

Hallgren, Lars., (in press) To *"lugna upp sig"* –The social responsive character of environmental conflict.

Växjö kommun, 2006. *Environmental Programme*. [Online] Available at: http://www.Växjö.se/upload/3880/CO2%20engelska%202007.pdf [Accessed: 18 May 2009].

Växjö kommun, n.d., Greenest City in Europe. [Online] Available at: http://www.vaxjo.se/upload/24486/Greenest%20City%20in%20Europe,%20poste r_www.pdf [Accessed: 18 May 2009].

Statistics Sweden, 2005. *Tätorternami0810tab1.xls* [Online] Available at: http://www.scb.se/statistik/MI/MI0810/2005A01B/T%c3%a4torternami0810tab1. xls [Accessed: 18 May 2009].

Statistics Sweden, 2009a. *Population Statistics* [Online] Available at: http://www.scb.se/Pages/TableAndChart___159278.aspx [Accessed: 18 May 2009].

Statistics Sweden, 2009b. *Land and Water Areas* [Online] Available at: http://www.scb.se/Pages/ProductTables____12833.aspx [Accessed: 18 May 2009].