

Faculty of Natural Resources and Agricultural Sciences

Constructive communication in contexts of complexity

a case study of the wolf conflict in Sweden

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Abstract

Many societal issues of today are characterized by complexity and conflicts, which often arise as a consequence of multiple actors with divergent perspectives. The on-going wolf conflict in Sweden is one example of an issue commonly perceived as complex and with increasing polarization. The conflict is reflected in public communication about the issue where epithets such as 'wolf huggers' and 'wolf haters' are pitted against each other. By using the wolf conflict as a case, this study aims to explore approaches and experiences related to communication in wicked issues in order to reveal underlying factors, which may contribute to or inhibit constructive communication. The case study is informed by a theoretical framework, which draw from a broad understanding of the characteristics of wicked issues and further, through Habermas critical theory, positions such issues in relation to dilemmas of modern society. Jordan's awareness theory gives an operationalized view from organizational theory. A phenomenological approach is applied and the empirical material was collected through 11 in-depth semi-structured interviews with respondents from five different NGOs active within the domain of the issue. Empirical findings from the study are presented in five themes: (1) Conceptualizations of complexity, (2) Arenas for communication, (3) Conceptualizing goals for communication, (4) Perceptions of science and facts in communication, and (5) Multiple roles. Underlying factors inhibiting constructive communication, appeared to pertain to (a) overreliance on scientific authority, (b) 'othering' of opponents, (c) communication as one way transmission of information with educative or strategic goals, (d) dramaturgy of media and (e) competitiveness of debate. The study opens up for discussion and further inquiry on how NGOs, management processes and arenas for communication can become better in supporting development of complexity awareness and constructive communication praxis.

Keywords: communication, environmental communication, complexity, wicked issues, communicative action, awareness, perspectives, wolf, roles, rationality, modernity

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Translations

The Swedish Association for Hunting and Wildlife Management - Svenska Jägareförbundet

National Association of Huntsmen – Jägarnas Riksförbund

 $The \ Swedish \ Society \ for \ Nature \ Conservation-Svenska \ Naturskydds f\"{o}reningen$

The World Wide Fund for Nature - Världsnaturfonden

The Swedish Carnivore Association - Rovdjursföreningen

1 Introduction

This chapter gives an introduction to the selected case as well as the ideas and concepts on which the thesis is further built upon. It ends with a description of the problem and presentation of the research objectives.

People say; 'we live in a complex world'. This may be heard when discussing issues that we experience as difficult to overview and manage and when we are not sure or cannot agree upon what is right and what is wrong. We live in a world with complex societal issues, or so-called wicked problems, referring to issues that are ill-defined and characterized by uncertainty and change (Rittel & Webber, 1973). One can say complexity and conflict are phenomenon often emerging together. Issues within the field of natural resource management are, for instance, commonly perceived as complex and controversial in this way. The reasons for complexity to arise are many but one such is the involvement of many actors with different interests and perspectives. (Hallgren & Ljung, 2005). The ongoing wolf conflict in Sweden is one example that many would describe as highly complex and where polarization among the actors is palpable and potentially increasing (Essen et al., 2015). As a large carnivore, the wolf is protected under the EU's habitat directive. From having been extinct in Sweden, as a consequence of human activity, the populations are now stabilizing and increasing due to the strict EU protection (European Commission, 2015). Indeed, the populations are today the largest in modern time. Studies shows the majority of Swedish citizens are positive towards the recovery of the wolf population and existence of wolf in general but the acceptance of the predator policy and political goals are found to be lower (Sandström et al., 2014). However, noisy discussions in the media testify to a profound conflict with polarized views (Herlitz & Peterson, 2011). This is reflected in for example heated debates, campaigns lobbying for wolves' safeguarding and news reporting about dogs and livestock attacked and killed. It is also apparent when epithets such as 'wolf huggers' are pitted against 'wolf haters' and when facebook-groups form around positions proclaiming either 'pro' or 'against'. Behind the voices that raise stand groups and organizations but also concerned individuals.

When we confine ourselves to our respective camps and erect trenches between positions, the potential for finding common grounds, new solutions and seeing the other side is circumscribed. We simplify and vilify the 'other' (Gergen et al., 2002) and obscure nuances that make up complex issues like wildlife conservation. On this view, and as reflected in the Swedish wolf conflict, the communication that takes place between camps is increasingly characterized by antagonism or one-way rhetoric toward the public, perhaps, to sway them to one's side. While this problem may be systemic or inevitable to a degree, scholars argue more constructive communication praxis is possible and that this should be cultivated in conflict situations (Krauss & Morsella, 2006). Indeed, in the highly networked society of today we also are offered lots of platforms and channels for expressing ourselves and for coming together at the table on contested issues. This is however contingent on willingness of the polarized parties to acknowledge the many sides of the issue and display openness

toward other perspectives. Where, then, might such constructive communication praxis be found, and what characterizes these platforms and ways of discussing on the wolf issue?

To understand constructive communication, one may contrast the traditionally linear transmission of information (see Shannon and Weaver) of communication from a source to a receiver with that of the social constructivist view on dialogue (Cox, 2006). The former recognize communication as a process by which ideas held by one mind are conveyed to other minds, whereas the latter approaches communication in a broader sense in terms of social interaction. This view implies an active co-learning process where meaning is created in collaboration among the participants as a joint understanding. Essential is also the understanding of a communicative manifestation, an utterance for example, as socially situated and thus it can only be understood in the particular context. (Krauss & Morsella, 2006). It is this understanding of communication, as social interaction and a process of colearning rather than transmission of information, on which this study is further built upon.

Let us, then, relate communication to problems perceived within the field of natural resource management. As Cox (2006) illustrates when asking the question of 'Who has the right to speak for nature?' one can consider nature itself ethically and politically silent. Rather it is we, the humans, who attribute nature and its species with meaning and value. When viewed in this way, one can say when we identify a problem that problem is a problem just because we recognize a threat to an essential value we hold (Cox, 2006). In other words, problems can be viewed as socially constructed by humans and those problems emerge through our perspectives. This is so because we always understand a certain phenomenon through a certain perspective, which allows us to pay attention to some aspects of the phenomenon but also overlook other aspects (Hallgren & Ljung, 2005). So to speak, "what we see as reality is really a result of the perspectives we take on in social interaction" (Shibutani in Charon, 2010) and our differences in perspectives can explain why we sometimes have totally different ideas regarding an issue or situation.

With this understanding, how is it then possible for us humans, seeing the world through different perspectives, to at all understand each other and collaborate on complex issues like wolf conservation? Indeed, it is possible since we also have the ability to recognise the limits of our own perspectives, periodically inhabit others' point of view, and indeed even *change* perspectives in light of new information. In other words, we are able to see things from other and possibly new perspectives, from other people's perspectives and to develop and create new perspectives. Our capacity for perspective-taking and using multiperspectives is expressed in and enabled by the communicative acts, i.e. in the social interaction, which also enable us to understand each other. (Hallgren & Ljung, 2005). To sum up, the problems we perceive are contingent on our perspectives going into social interaction and, in turn, our perspectives develop through dialogue with others as we cultivate a communicative rationality that is responsive to intersubjective reason, rather than predefined private goals (Habermas). How we communicate with each other about issues therefore also determine if and how they will be managed (Hallgren & Ljung, 2005).

1.1 Problem formulation

Communicative practice that furthers intersubjective understanding can, moreover, be considered as crucial for realizing the ideas of deliberative democracy. Deliberative democracy (according to for example Smith (2003)) promise institutions that promote democratic deliberation through dialogue and participative processes, oriented towards reaching intersubjective understanding. Accordingly, a deliberative democratic approach is in the context of this study considered as both desirable and feasible and thus constructive when managing wicked issues. However, and as stated above, such an approach is

facilitated by and arises only when the communicative practice that takes place is oriented towards reaching intersubjective understanding.

In this study, qualities such as perspective-taking in communication concerning wicked issues will be examined by using the wolf 'conflict' in Sweden. The subjects of this inquiry are key actors (defined as those associated with or in positions of public/external communication) within NGOs active on the wolf debate. A handful of NGOs are typically positioned on either side of pro- and against attitudes toward the wolf in Sweden, including animal rights and hunting organisations. The reported polarization between these NGOs raises questions as to the efficacy with which its employees are able and willing to transcend their perspectives in order to acknowledge the complexity of the wolf issue. Hence, a critical examination is needed as to how people within these organizations apprehend, attempt to do justice and relate to the complexity of the issue in their capacities as communication professionals. When and in what contexts of communication do they recognise complexity and relate critically to their own perspective?

The rationale of this examination is that the way we acknowledge and communicate about the complexity of wicked issues (insofar as we do so at all), can reveal some communicative platforms and pathways on the wolf issue that are more or less conducive to perspective-taking. For example, are communication channels intended to 'educate' the public necessarily fixed in terms of their predetermined perspectives, and the interlocutor in terms of his or her role as an educator? Oppositely, the study can reveal which platforms or ways of communicating tend to *reduce* perspective taking and therefore undermine prospects for acknowledging complexity. Uncovering these things can thus show where there is potential for improvement in terms of role and perspective-taking.

The overall aim of this study is thus to explore approaches and experiences related to communication in wicked issues, by using the wolf conflict as a case, in order to reveal underlying factors, which may contribute to or hinder constructive communication. Constructive, here, is then taken as communication that shows an openness to the potential transformation of opinions and the transcendence of prior perspectives in light of new input that reveal the full complexity of the issue. Accordingly, as the following research objectives describe, the study attempts to:

- 1. Identify the communicative expressions and manifestations of individuals within NGOs constructively relating to complexity of the wolf issue.
- 2. Explore how these expressions and manifestations appear, or are inhibited, in the communicative practices of the actors chosen for the study.
- 3. Evaluate constructive communication in terms of actors' ability to go beyond their predetermined roles and rationality.
- 4. Consider the causes and implications of findings on the ways we communicate when dealing with wicked issues in natural resource management.

2 Methodology & Method

This chapter presents the methodological approach and methods of inquiry selected for this paper. The purpose is to make visible and provide an understanding for the research process in its entirety as well as choices made along the way. Thus, reflections concerning choices and possible constraints are integrated in this chapter.

2.1 Research design

The study has a qualitative approach since it aims to grasp the respondents' own subjective perceptions and experiences (Kvale & Brinkmann, 2014) rather than provide quantitative understanding from a statistical and numerical point of view (Trost, 2010). Moreover, it has a phenomenological basis in seeking the subjective experiences of respondents. Phenomenology is a qualitative approach grounded in the phenomenological tradition of social science, which considers human action as a product of how people experience and interpret the world. Phenomenology thereby attempts to see things from the individual's perspective in order to understand the creation of meaning related to the individual's actions. So to speak, it studies social reality by recognizing this reality accommodates certain meaning-making processes and structures for the individuals who live, act and think there (Bryman, 2011). Therefore it opposes positivism, which stands for an epistemological position that instead advocates the use of natural scientific methods to the study of aspects of social reality (Bryman, 2011). The phenomenological basis places demands on the researcher to critically relate to their own ideas about the world so as to make way for the narratives and subjective meanings of the respondents.

Furthermore, the process of the inquiry is resting on abductive reasoning, which is best understood as an intermediate of deductive reasoning, i.e. working from a theory, and inductive reasoning, i.e. working from empirical data toward a theory. Abductive reasoning can be described as an iterative process whereby intuitive ideas are formed through the interplay of theoretical understanding and empirical findings, meaning it is to some extent based on experience but not confident and hence rather builds on an 'educated guess' of a certain phenomenon (Trost, 2010). This means that the fundamental epistemic and normative premises taken on constructive communication are already in place, but that findings from the subjective experiences of respondents will be openly coded to reflect emergent themes. Thus, abduction enables the researcher to be innovative in the findings but at the same time make use of a theoretical framework. The latter is rather a source of inspiration than something narrowly framing the empirical material.

2.2 Collection of empirical material & Sampling

As part of a phenomenological approach, the empirical material was collected through indepth semi-structured interviews. A total amount of 11 interviews were conducted with informants from five different organizations; (1) the Swedish Association for Hunting and Wildlife Management, (2) National Association of Huntsmen, (3) the Swedish Society for Nature Conservation, (4) the World Wide Fund for Nature and (5) the Swedish Carnivore Association. These organizations were chosen after a context of discovery and familiarisation with the wolf case study revealed them to be the most active NGOs within this issue. Activity was understood to comprise media presence, status among the public, funding and stakeholder positions in fora relating to wolf management, such as game management delegations. Henceforth, for the purposes of ensuring albeit limited anonymity for the respondents, the organizations will be addressed as either a "hunting association" or an "environmental organization", where the Swedish Association for Hunting and Wildlife Management and National Association of Huntsmen are treated as hunting associations and the Swedish Society for Nature Conservation, the World Wide Fund for Nature and the Swedish Carnivore Association are treated as environmental organizations. Five respondents worked at hunting associations and six respondents at environmental organizations. The respondents were chosen by the criteria of being in a communicative position within the organization. Communicative positions were interpreted in a broad sense and therefore the respondents were either employed as experts on predators/wolves, responsible for communication in one way or another or simply having a position where the wolf issue is central. Moreover, as a part of the anonymisation and since gender is not in focus of the study all respondents will be presented with the gender-neutral pronoun h/she.

Face-to-face interviews were preferable but due to some informants time and location constraints two interviews were conducted by telephone using the same interview guide. The latter followed a semi-structured format and was built up by five sub-themes where (1) concerned the wolf issue and descriptions of complexity, (2) was about the organization and perceptions of its role, communication and perspectives, (3) covered views and descriptions of other stakeholders, (4) embraced experiences of the respondent's own roles and finally (5) involved thoughts about the future and ways forward, a more detailed guide is presented in appendix 1. The interviews were conducted with a total length of between one hour and just over two hours depending on the respondent's time available and prioritized for the meeting. All interviews, except the two telephone interviews, were audio recorded after permission from the respondent and then fully transcribed from the recordings to written material for analysis. Audio recording is preferred since semistructured interviews contain open-ended questions where answers and discussions sometimes may diverge from the interview guide. As far as the telephone interviews were concerned, by using headphones and computer, these enabled a greater focus for taking careful notes and quotes simultaneously as the interview progressed.

The majority of the face-to-face interviews were held at the respondent's office, but in separated rooms. However, in a few cases colleagues to the respondent had access to the room and were, at least for a little while, able to take part of the interview. This might have had limiting effects on the narratives shared by the respondent. Also the fact that most of the interviews were held at the organizations' office might have influenced the respondent's ability to reflect critically about self and the organization insofar as different nuances pertaining to role taking might have been obtained when the respondent was interviewed in the home setting. In a couple of cases, however, the interview did take place in the respondent's home or at another office. All respondents were first contacted by telephone were the study was briefly presented and interviews booked either directly or afterwards through email contact. Thus, the informants did not know much about the aim of the study

before the interview took place and they were told they did not have to prepare anything. They simply got the information that the study was about communication in complex societal issues and that the wolf issue was chosen as a case study. Since the issue might be sensitive and for many people fraught with conflict it was also emphasized that I do not have any personal opinions regarding the issue in particular and absolutely no intentions to name and shame. Moreover, it was stressed that the results from the interviews will be presented anonymously, which is considered as important in order to create the best conditions for the respondent to speak freely. When the interview took place, another briefing of the study, including the purpose and general structure of the interview, introduced it. The respondent was given room for asking questions and practical matters such as recording and the time available for the interview was confirmed. Moreover, the respondents were encouraged to give answers and share reflections based on personal experiences, perceptions and thoughts. In most cases an informal chat began the interview before the conversation went over to the interview questions. The interview was rounded off with a debriefing in which the respondent could ask questions, some interesting point from the interview was discussed and the respondent got an opportunity to bring up additional thoughts. The initial briefing and closing debriefing, where also more informal topics were discussed, were considered as important in order to establish a good and trustful contact which may further the respondent's convenience to share freely and personally (Kvale & Brinkmann, 2009).

2.3 Analysis of empirical material

By following an abductive approach, analysis of empirical material was conducted through an iterative process between theory and collection of empirics. The collected empirical material were further analysed with an open coding approach where information were grouped into clusters in order to identify concepts and categories (Kvale & Brinkmann, 2014). Proto-themes were thus identified at an early reading of the data, which constituted a total of five themes to be presented in the results: (1) Conceptualization of complexity, (2) Arenas for communication, (3) Conceptualizing goals for communication, (4) Perceptions of science and facts in communication and (5) Multiple roles. The constitution of the final themes was informed by awareness of the theoretical framework so as to facilitate analysis in the final chapter.

3 Theoretical framework

This chapter presents the theoretical framework developed for the paper by providing a deeper understanding of the theoretical aspects of (1) Complex societal issues (2) Communicative rationality and action and (3) The role of awareness when managing complexity. The chapter is tied together through a final section that discusses how the selected theory relate to each other as well as benefits of the theoretical framework.

3.1 Complex societal issues

Complex societal issues can be framed by the concept of 'wicked problems', which was coined by Rittel & Webber (1973) when investigating why social planning problems were so resistant to resolution. Such so called wicked problems were analysed in contrast to 'tame problems', referring to problems that may be complicated but nonetheless definable and soluble. One can say tame problems only hold a limited degree of uncertainty since there always is a right answer or solution to the problem. Thus, such problems are akin to, for instance, puzzles, mathematics or chess, and science has through the years developed to deal with them. Wicked problems, on the other hand, are inherently different from the problems managed by science since they are ill-defined and often unresolvable. In contrast to tame problems, one can say they hold a high degree of uncertainty, are affected by constant change and there is never an answer or solution to a wicked problem. So to speak, you cannot say what is right or wrong and thus you can only make things better or worse ideally wicked problems are re-solved over and over again (Rittel & Webber, 1973). Conklin (2005) describes six typical properties of wicked problems as follows: (1) you do not understand the problem until you have developed a solution, (2) wicked problems have no stopping rule, (3) solutions to wicked problems are not right or wrong, (4) every wicked problem is essentially novel and unique, (5) every solution to a wicked problem is a oneshot operation and (6) wicked problems have no given alternative solution.

When speaking about complexity in this way, one evokes premises of soft systems thinking. Crucial to soft systems thinking is the recognition of perspectives as contingent on where in the system one is positioned and, hence, this approach refers to wicked issues as issues consisting of innumerable interacting worldviews within a defined system boundary. This is grounded in the understanding that all people within the system have different positions and thus different taken for granted assumptions about the world which often are unexamined and unconscious but always influence how we see the world (Checkland & Poulter, 2006). The field of social science explain wicked issues in similar ways, simply as a result of subjective frames and multiple understandings of an issue (Grint, 2008). In other words, people always understand issues in different ways since we see it from different perspectives. The perspectives work as filters through which the issue is viewed and explanations and solutions derived, which further results in divergent views and definitions on both solutions and problem descriptions. Profound disagreement may arise as a result of

this perspective phenomenon, which can be considered a central characteristic of wicked issues (Chapman, 2009).

3.2 Communicative rationality and action

When understanding complex societal issues as ill-defined and unresolvable by traditional science, due to their wicked characteristics and social composition, it is imperative to position such issues in relation to the beliefs of modern society. How might we understand the perseverance of for example polarized positions on a wicked issue? In what follows, Habermas' critical theory, in particular The Theory of Communicative Action, is used to clarify modern dilemmas that pertain to rationality, which may be said to evoke a more robust political formulation of 'perspective' described in the above paragraph.

Habermas and The Theory of Communicative Action I & II (1984) acknowledge rationality tied to two separated realms of society; the life-world and the system. Habermas, whose social theory is grounded in the theory of language and communication, describes the lifeworld as the subjective realm compromised of worldviews, i.e. values and understanding culturally developed through intersubjective communication. The system, on the other hand, consists of society's structures and institutions, which is characterized by instrumental and technological rationality. The two realms of society are described as separated in the sense that the complexity of the life-world and the rationality of the system are growing and consequently they become more and more differentiated, i.e. the instruments of society's structures and institutions are increasingly separated from social life, norms and values (Habermas, 1987). This differentiation process results in the presence of different forms of language, for instance ethics and science, which lean on different truths and validity claims. Moreover, Habermas states the process of modernization entails instrumental and technological rationality of the system not only to differentiate from but also to colonize upon the life-world. So to speak, paradoxically the system is on one hand rationalizing the life-world but on the other hand it is also dependent on the life-world. This, since the life-world defines the existence of the societal system as a whole. Hence the systemic instruments, Habermas claims, need to be anchored in the lifeworld (Habermas, 1987).

Habermas' theory of communicative action can be understood, in part, as a critique and an amelioration that builds upon Weber's (Dillon, 2014) understanding of instrumental rationality as the optimizing mean for achieving goals, i.e. purposive rationality. Habermas claims this is a reduction of rationality and seeks for a broader concept involving action orientation and worldviews (Habermas in Elling, 2008). Thus, he coins the concept of communicative rationality, which arises as a result of free and consensus focused communication among actors, i.e. through communicative action. Habermas (1984) states "the aspects of rationality of action that we found in communicative action should now permit us to grasp processes of societal rationalization across their whole breadth and no longer solely from the selected viewpoint of the rationalization of purposive action".

Habermas describe communicative action distinct from instrumental action and strategic action, within a two-fold system of orientation: towards success and towards consensus. One can say instrumental action is non-social and oriented to success through technical rules of action, whereas strategic action is social and oriented to success through following rules of rational choice to influence decisions of rational opponents. Communicative action is also social but differs in that sense that it is oriented towards reaching mutual understanding. This means the actions by the involved actors are coordinated not by own purposive rationality, i.e. actions oriented towards egocentric goals, but towards reaching understanding through intersubjective communication (Habermas in Elling, 2008).

Moreover, Habermas (1984) claims the rationality leading action oriented towards success is actually derived from action oriented towards reaching mutual understanding. There is a notion of action being transferred from language and intersubjective communication to so called steering media, such as money, power and influence, which allow consensus-oriented communication to be by-passed. Indeed, the process where the life-world is being colonized by instrumental rationality occur when ideas of steering media gains communicative power, resulting in political and moral questions being managed through science and economics by technocrats. Thus, communication is being systemically distorted and the discursive process comes to its terminus.

In Habermas' critical theory society is recognized as resting on foundations of language, since human action and understanding "can be fruitfully analysed as having linguistic structure" (Habermas in Elling, 2008). Although, communication in terms of communicative action has a comprehensive approach, viewing communication as interaction that is co-ordinated through actions of speech. The on-going detachment of communicative practice from contextual circumstances in society is, Habermas (in Elling, 2008) claims, the phenomenon that makes the process of modernization possible.

Habermas (1984) asks for a redirection of the modernization process, which implies a reintegration of the system and the life-world and where communicative rationality can be considered as the necessary means. Already in one of Habermas' earliest works; *The Public Sphere* (1964), which the theory of communicative action builds upon, Habermas elaborates on the idea of anchoring societal decisions in the life-world. The concept of the public sphere is presented as a realm of our social life in which "something approaching public opinion can be formed" (Habermas, 1964). Crucial to the theory is the recognition of the citizen's role, which is explained as a role that enables behaviour tied to professional positions and private interests to be bridged. Yet, the public sphere asks for and promise a sphere where "Citizen behave as a public body when they confer in an unrestricted fashion – that is, with the guarantee of freedom of assembly and association and the freedom to express and publish their opinions – about matters of general interest." (Habermas, 1964). To put it briefly, the public sphere enables people to participate with citizen roles which, in turn, make possible public perspectives on common issues.

3.3 The role of awareness when managing complexity

When having an overview of the characteristics of wicked issues and adding the understanding of a society resting on instrumental and strategic beliefs that allows consensus-oriented communication to be by-passed when managing common societal issues, it becomes meaningful to think about practical ways forward. How can we relate to complexity and manage wicked issues in society in a constructive way? This section is based upon Jordan's awareness theory and will, like Habermas' critical theory, address rationalities but now in terms of managing wicked issues by key actors and, therefore, give an operationalized view drawing from organizational theory.

Jordan (2011) claims the notion of 'awareness' is essential when managing complex societal issues. Awareness is described in terms of "directing attention towards something and consciously noticing characteristics of the object of attention" (Jordan, 2011) and when turning attention towards a particular direction becomes a habit, a form of awareness arises. In the paper "Skilful engagement with wicked issues" (2011) Jordan integrates concepts and models from adult development theory (see, for example, Kegan, 2009) into a comprehensive analytical framework for describing variations in meaning-making patterns of societal change agents. With these, I mean NGOs and other stakeholders. The framework

elaborates on the idea of how a societal change agent can to varying degrees turn his or her attention, i.e. raise awareness, in directions towards (1) the task, (2) the context, (3) the stakeholders, (4) the self and (5) perspectives, termed as 'going meta' (Jordan, 2011).

Accordingly, task complexity awareness is described as when different aspects on different levels of the task are noticed and considered. Having vocabulary for naming those aspects may be useful support in this stage and if relevant aspects of complexity are by-passed this will have profound effects for how the actor make sense of the issue and thus handle it. Moreover, complexity awareness implies capacity for actively inquiring into the complexity and constantly learn more, revaluating one's assumptions as well as investigating and testing different strategies. Well-developed complexity awareness typically gives rise to a set of ontological assumptions of reality regarding systems, processes, interactions and perspectives. Related to task complexity awareness is context awareness, because the task is often reconstructed while context awareness increase. Context awareness implies attention directed to the properties of the wider context which may affect how the task, i.e. issue, is managed successfully. Furthermore, stakeholder awareness entails the capacity to role-take by turning one's attention towards the different stakeholders, i.e. the concerned in a particular issue, and implies a willingness to understand whom they are, which perspectives they hold and why they are engaged in the issue as well as reflections on how to relate to these stakeholders. The way one describe other stakeholders reveals much about the level of stakeholder awareness since increasing awareness often lead to more complex constructions of others'. Strong stakeholder awareness often results in adaptions of one's communication, skills in building mutual trust and constructing ideas that make sense to other stakeholders. Self-awareness, on the other hand, focuses attention towards internal processes in order to become aware of, for example, one's own emotions, thoughts, goals and values. Lastly, and overarching the four mentioned domains, is perspective awareness which is described as the notion of one's own and others' perspectives as just perspectives - objects of attention. (Jordan, 2011).

Awareness in the domain of perspectives means perceiving the ways oneself and others reason about, issues and using the differences in viewpoints to deepen one's understanding of the issue, including aspects of complexity and causality (Jordan & Andersson, 2010). Furthermore, it means consciously noticing the dynamics of perspectives, i.e. perspectives can and will constantly develop, and that formulation of a problem is not a description of reality but a grasp of some aspects of the problem. The recognition of perspectives as perspectives and further the differentiation between an individual and the individual's perspectives may have significant effects on one's attitude towards others.

Perspective awareness can also be contrasted with the so-called "monocle syndrome". In operational terms, monocle syndrome illustrates when a certain problem is being handled through the use of a single perspective and without reflecting upon ones actions and purposes behind those (Jordan & Andersson, 2010). Technically, Jordan & Andersson (2010) clarify, the monocle syndrome can be acknowledged in terms of mono logical rationality, referring to the use of one single rationality which, in turn, emerges as a consequence of poor perspective awareness. A consequence following the wake of the monocle syndrome is the complete or partial by-passing of certain aspects of, for instance, an issue. This means blind spots exists which, in turn, means one is not paying attention to opportunities for managing the issue through other actions than those appearing reasonable in the light of one's own perspective (Jordan & Andersson, 2010). Thus, the failure to at all reflect and consider aspects of the issue can be stated as more important than how something is constructed when actually talking about it (Jordan, 2011). In turn, non-reflection can explain people's opinions and actions regarding a certain issue. However, the emergences of blind spots are of course not only a result of an individual's non-reflection.

Crucial are also different structural conditions, such as delimited job and/or task descriptions/instructions, high workload and limited resources, which leads to an oversight of issues requiring long-term thinking and collaboration.

Another consequence of the monocle syndrome is that other's views are countered with disinterest, hostility or simple dismissals resulting in an environment characterized by distrust and territorial thinking. Such a climate inhibits dialogues oriented towards solutions since actors often are fixed in their positions and thus get stuck in debates where representatives operate towards formulated goals in rivalry with each other. Jordan & Andersson (2010) argue awareness in the domain of perspectives is essential for recognizing the differences in perspectives, which can tell much about a certain conflict or disagreement. Taking the properties of the different perspectives into account when describing a certain problem or complex issue opens up for opportunities to actively use these differences in order to detect and acknowledge blinds spots. This may lead to development of more thoughtful strategies for dealing with complexity in constructive ways (Jordan & Andersson, 2010).

3.4 Summary of theoretical framework

The preceding theoretical premises constitute the framework for what follows. I draw from a broad understanding of how complex or 'wicked' issues in natural resource management are mediated by (1) rationality, (2) awareness of complexity and (3) perspective-taking. Cumulatively, these demonstrate how individuals and organizations are affected by rationalities but also negotiate roles and perspectives when communicating about such issues. To this end, the theoretical notions that I draw from in particular is thus (1) wicked issues, (2) spheres for communication, (3) strategic versus communicative action, and (4) perspective awareness.

Thus, I use Habermasian critical theory as a backdrop for understanding rationalities in society as well as different orientations of actions and roles and Jordan's organizational theory as a concretization of how rationalities, roles and actions are operationalized in practice. The critical theory enables us to lift the eyes from an individual and organizational level to structures of the modern society as a whole. Thus, it helps us explain and understand Jordan's conclusions concerning for instance pathologies in perspectives, including the monocle syndrome and blind spots. In turn, and in the light of a redirection of modernity which Habermas calls for, Jordan's awareness theory contributes with more practical anchored descriptions and suggestions for improved skills and processes when managing wicked issues. Indeed, the rationale for merging the two theoretical points of departure is that Jordan's organizational theory calls for positioning in modernity. By supplementing with Habermasian insight, the framework can show how individuals torn between roles, allegiances and perspectives are also sliding around the political terrain. They do so insofar as their takes on and ways using communication when dealing with complexity reflect systemic, private or public rationalities - corresponding to Habermas' instrumental and communicative rationalities. Indeed, it all comes down to communication. Jordan's theory does not explicitly address communication but when understanding the importance of awareness of complexity on different levels (for example task, context, stakeholder, self and perspectives) when dealing with wicked issues a more consciously approach to complexity may develop. In accordance with Habermas theory, this will affect actions (communication) and further intersubjective understanding instead of leaning on understanding based upon strategically oriented rules. Therefore, I claim, the notion of 'awareness' becomes a meaningful cornerstone when integrated with Habermas understanding of strategic versus communicative action. Moreover, one can interpret Jordan's management suggestions as consistent with the ideas of communicative action but Habermas also add descriptive structures anchoring and enabling those ideas, such as the spheres for communication.

To sum up, the theoretical framework for this study elaborates from a general understanding of complexity and wicked issues but also positions such issues in relation to rationalities of modern society. This enables the framework to explore the causes and consequences of different action orientations but also roles and, thus, further explain the ways we communicate (as socially interact) with each other when we have to manage complexity. The recognition that complexity characterizes not only the issue itself but also the task, the context, one's own internal processes, other stakeholders' and our perspectives adds an practical applicable view to the framework, based on the premise that awareness, i.e. what we direct attention to, also powerfully affects the ways we communicate in one way or another.

4 Empirical findings

In what follows, findings from the semi-structured interviews are presented in five themes: (1) Conceptualizations of complexity, (2) Arenas for communication, (3) Conceptualizing goals for communication, (4) Perceptions of science and facts in communication, and (5) Multiple roles. These themes have been constructed through a proto-assessment of commonalities raised by the respondents and were later focused for clarity. The themes are formulated on a first-tier analysis level. This means that they involve the grouping of issues discussed in relation to communication of complexity into categories that broadly correspond with the theoretical framework.

4.1 Conceptualizations of complexity

In terms of grasping the complexity of the wolf issue, respondents describe complexity in, for example, terms of emotional engagement, historical symbolism, urban and rural conflicts, lack of understanding, legislation and biology.

As stemming from emotional engagement

For the first of these, emotional engagement, what was evident was that it was seen as a component that contributed to complexity in potentially undesirable ways. Charges of strong emotions or emotionally driven acts and arguments were especially levied toward others, either other actors or other individuals or groups of people within the own organization. These people were sometimes referred to as 'extremists' furthering polarization within the issue, often with the help of emotionally informed rumours and myths. Communication difficulties were particularly emphasized to emerge. A respondent noted:

"[...] there is always extremists on both the hunter- and the conservation side with whom it is simply impossible to conduct a dialogue with.".

However, the 'extremes' were often distinguished from 'central' representatives, which was described as having more nuanced views. As one respondent tells:

"I have had contact with many people higher up in the organization and there no conflicts occur. There you can discuss. But then you get further down in the organization and it starts to flare up. There I think we become a personal threat against them and at the same time they do not know who we are.".

The media and its attendance to the wolf issue were also raised as a component that capitalized on people's emotional engagement and colourful narratives and, in so doing, exacerbated polarization. Indeed, the extremes are highlighted as one of the strongest factors contributing to complexity within the issue.

Furthermore, respondents from the environmental organizations tend to stress lifestyle factors, such as changed opportunities to practice hobbies, i.e. hunting, or business so as livestock, as explanations for people's emotional engagement concerning the wolf. Yet, experienced risks and implications on lifestyles are recognized but they are mostly described as exaggerated.

As stemming from cultural history and symbolism

Second, in terms of accounting for the emotional engagement, respondents both from the hunters' associations and environmental organizations refer to the symbolic, cultural history of the wolf. Several respondents declare that people's strong feelings about wolves derive from historical stories, fairy tales, myths and contemporary recognized truths. However, the different organizations use different narratives for supporting their reasoning. For instance, one respondent from an environmental organization states that in the past:

"...taming the wilderness was put in equal as civilizing the country and thus the wolf became a symbol for wilderness in a bad sense".

Also the fact that we have not had any wolves for many decades due to "[...] humans actively eradicate wolves [...]" is used as an argument for negative constructions of the wolf. One respondent thought the lack of legal continuity was problematic for people, since a shot wolf one day was rewarded with bounty and the next day regarded as a crime. Accordingly, respondents from the hunting associations also problematize wolf's history and symbolism regarding people's emotional engagement but, however, from an opposite point of view. For example, several respondents describe the wolf as a beautiful and intelligent animal very similar to the dog and "[...] the fact it also is mythical contributes to people's positive associations [...] " and "[...] the wolf has always been used on posters, t-shirts etc.".

As stemming from entanglement with broader societal conflicts

Third, the word 'symbol' is also explicitly used for describing the issue's complexity in terms of urbanization and/or an urban and rural conflict. This means that for many respondents, the complexity of the wolf issue lay not in the animal per se, but in what it had become symptomatic of in modernity, the complexity is in reality in something else abstract but the concrete things have become the proxy for this complexity. For example, the majority of the respondents from the environmental organizations use 'high urbanization rate' and 'depopulation of rural areas' when describing the wolf as a symbol for dissatisfaction regarding a general negative development in rural areas, implicating for example reduced service basis. One respondent says the wolf has become a symbol for the city's power over the countryside but declares this expressed urban rural conflict is not an actual conflict, it is rather a myth where "[...] the wolf gets blamed for something else that is going on in the rural areas in general."

Similarly, respondents from the hunters' associations illustrate the complexity by using urbanization, rural and urban. However, these respondents describe the situation as an actual conflict between urban and rural and thus wolf is not described as a symbol but rather an expression of the conflict. Some express it as an actual state of power where "the urban is against the rural" or where "[...] people in the city want us to have wolf here [in the rural areas]." Although, most respondents from the hunters' associations explain this power conflict as a result of urban peoples' lack of understanding concerning life on the countryside. The urbanization is used as a model of explanation for an on-going general decrease in understanding of the rural perspectives. Furthermore, this lack of understanding is by all respondents from the hunters associations expressed as problematic and

detrimental to acknowledging the complexity of the issue, most readily manifested when it comes to discussions about solutions. For instance regarding advocacies for safety fences for sheep keepers or that keepers take their sheep inside during night some proclaim "[...] this is very complicated practically or even impossible [...]" and that "[...] these people do not know how it is to have sheep [...]".

As stemming from lack of scientific understanding

To some, the complexity of the wolf issue could be most clearly traced to an imperfect grasp of science and imperfect application of scientific principles on management. Indeed, some respondents, particularly from the environmental organizations, stress biological complexity and/or complexity concerning law as main factors making the issue so difficult to deal with. Biological complexity is most commonly framed within the research fields of genetics and population studies. The scientific derived concept of *favourable conservation status* (GYBS) is frequently problematized by most respondents as crucial to the issue's complexity since this indicator, several claims, can be and is understood and interpreted in many different ways. Also law complexity, on both national and EU level is severely mentioned as problematical. Due to biological and legal complexity the scientific understanding among the actors and the public might be poor, resulting in complexity of the wolf issue as a whole. This phenomenon of imperfect grasp and application of science is also pictured by references to the issue's simplicity, for example when one respondent says "[...] in one way the issue is very simple, we are dealing with endangered species protected by law and therefore they must be protected.".

4.2 Arenas for communication

The communication between the environmental organizations and the hunting associations is in general described as poor and with "[...] no collaboration across the borders.". Some say they hope the interaction will increase but others are expressing doubts regarding possible future communication and collaboration due to the many already 'dug trenches'.

Face-to-face communication

Considering arenas for face-to-face communication the former wolf committee (2011-2013) is highlighted and positive experiences expressed regarding the committee and its meetings. The mission of the wolf committee was to help the government to develop a sustainable predator policy for wolves in Sweden and all organizations concerned was given the opportunity to participate. It promised to take all concerned interests, business, activities and knowledge into account. The committee is by several respondents described as an important arena when it comes to "seeing each others' views", "bring up the members' opinions", "show good cooperativeness" and "conduct negotiations". Furthermore, a few respondents also stress they hope the committee will restart again. However, problematical aspects concerning the committee also arise, such as the environmental representatives feelings of being in a minority in the committee and thus get their proposals outvoted.

Another context where the organizations interact through face-to-face communication is when participating in debates in, for instance, a TV studio. However, almost exclusively negative experiences are expressed regarding such debates. One respondent from an environmental organization says they

"[...] have the policy not to participate [...] the debate programs is just about beating each other and you never get the chance to talk to the end. It serves no purpose. It is just entertainment debate without coming to practical solutions which I think makes it getting worse."

Similarly, a respondent from a hunting association says such debates "[...] is just a meeting 'with elbows out' but when the cameras turns off you meet another person." Furthermore, this respondent recalled that the most meaningful conversations take place before and/or after the debate and says "[...] then I gladly talk about other things such as weather and wind or food [...]".

Moreover, regarding arenas for face-to-face communication one respondent from an environmental organization tells h/she sometimes participates in different meetings arranged by hunters and for hunters and express solely good experiences of that. This respondent describes that h/she has "[...] never been threatened [...]" and believes it is because "[...] they get surprised when I say I am not against hunting. But it must be done in the right way, and then I might have another opinion regarding that." Likewise, a respondent from a hunting association stress the importance of meeting people face-to-face. H/she says face-to-face meetings are not only a way to explain one's opinion but also an opportunity to listen, build trust and not least to open up for further contact. For instance, the values that comes with such a meeting is described as:

"[...] it might create some respect and for example when someone from their organisation says 'these bustards' then someone might say 'I have actually met them and they were after all quite nice even though I do not agree with them'."

H/she continued telling:

"[...] And hopefully I feel the same that 'I have actually talked to them and I can call them and ask what they think and why they do like this.' Then you have got this personal contact and you have a good dialogue. If it is a person you cannot even drink coffee with and instead turn your back on then it is getting much more difficult."

In general, it is expressed that face-to-face communication mainly occurs on a central level since central representatives participate in different committees via, for instance, ministries, the Environmental Protection Agency and the wildlife management delegations.

The media

Regarding external communication media is frequently flagged by both environmentalist and hunting respondents as a problematic actor in the wolf issue. As noted, several informants accuse media of contributing to exaggerated views and polarization of the issue since "[...] in media everything is black and white". Several informants underline this phenomenon as 'media dramaturgy'. Thus, all question the media reporting but sometimes from different angles. For example, respondents from hunting associations emphasize a fact that most journalists live in Stockholm and thus lack the perspectives of the rural areas, especially since local media offices are closing and thus the media reporting from these areas are decreasing.

On the other hand, respondents from the environmental organizations question medias choice of news, and in particular regional media, and think media is often favouring negative news regarding the wolf which contains strong feelings, such as incidents with killed dogs and sheep, and in doing so media contribute to skewed pictures and enlarged problems. On top of that, "[...] people with a positive attitude towards the wolf in these areas do not dare to express themselves". One respondent tells about a situation when media contacted them and asked for a representative who could talk 'positive' about the wolf in a news segment, but no one in this area dared to participate. Furthermore, difficulties when it comes to the respondents own contact with and dealing with media emerges. For instance, one respondent describe situations where h/she is interviewed, for

example in TV or radio, and "[...] they are doing an interview on 10 minutes and then they use 10 seconds of that interview." Another informant also shares a similar experience:

"[...] they want a short and rapid answer to a question. [...] and I feel there is no short answer to this question. This is actually a very complex issue [...] and it can be very misleading [...] for example if I say 'No, we do not want wolf hunting' and end there. That is a very undynamic and uncomplex answer."

S/he went on to say:

"[...] we appear to be very inflexible, uncompromising and so on in these short answers [...] because there is no space for this complexity. You might want to say 'on the one hand' and "on the other hand" and so on. [...].

The respondent continues to reflect upon implications and refers to the issue's polarization, meaning that this type of communication can contribute to pictures of the parties as very unwillingly to compromise where "[...] the positions are standing very far away from each other [...]".

Social media and digital communication

Another arena for communication that is highlighted and used by all organizations is social media, such as facebook, twitter and blogs. Also social media is described as difficult to deal with, for instance, one respondent says social media is a 'necessary evil' and another underline that "[...] they must measure the words very carefully when posting something about predators [...]". One environmental organization even has a policy saying that if they post anything on social media about predators one person need to check it every hour in order to filtrate extreme and threatening comments. Furthermore, one respondent from a hunting association describes the experience of posting something in social media and getting responses:

"[...] It does not need to be a positive response but a relevant one. Because it is so many myths and imaginary things out there which have become truths in this world and made it even worse. But when you see that someone has listened to and considered your message and instead respond with 'I think it is like this', then I am very open and take critique seriously and listen and sometimes I think 'what I am doing might be wrong'. [...] it is all about respect from both sides."

Another informant says they "[...] have realized that they actually become responsible for conflicts arising [...]" in their social media forums. As such, they express a need to become experts at moderating digital arenas for communication if these were to hold as viable discussion fora. Both respondents from the hunting association and the environmental organizations state they experience that it is the extremes who are seen and heard in the debate and especially in social media which, again, is described as contributing to polarization. Moreover, social media is even described as a channel for people to exercise power or express one's identity. Another problematic raised by a respondent from a hunting association is:

"[...] social media creates groups. You can belong to a group where all pat on your shoulder [...] and says 'yes we think the same as you' and somehow you grow in this particular issue and group. Eventually you do not see the other side any more. And I think this concerns both sides."

Another social media forum stressed are blogs. One informant tells that at the blogs "[...] you use a sharper pencil since they are not like a boring article, blogs often intend to talk to the ours' [...] it is not that easy to find the balance and know when you go beyond the limit.".

Finally, and beyond the preceding sub-themes, the interviews reveal specific needs regarding arenas for communication. These concern approaches to communication where "[...] you get the opportunity to go into different rationales to different things [...]". However, such conversations, an respondent declares, have not yet occurred and h/she further gives an imaginary but illustrative example explaining how they have participated in different committees and meetings where different issues are addressed but never;

"[...] met together with a 'psychologist' who says to [name] at [name of the organization] 'yes ok [name] why do you think like this?' and then [name] get the opportunity to talk. And then 'Ok [name of the respondent], how do you experience what [name] said?'. We have never done it like that. We have never tried to solve it that way. Never. Now I wonder if it has gone so far so that it would be needed that we get to the bottom of all this."

Another respondent shares a dream of bringing all those "[...] angry people communicating through their computers to this reality [...]" and then the other way around "[...] crawling under the skin of those people [...]" in order to gain understanding of their opinions and actions. Then the respondent puts an end to the discussion by stressing h/she sincerely hopes "[...] media becomes more objective than now [...]".

4.3 Conceptualizing goals for communication

As noted all respondents talk about communication as a natural part of the organizational work. However, as expressed in the section above, the communicative environments of today are sometimes experienced as challenging due to the rapid development when it comes to social media and all people's digital presence. Hence, several organizations tell about growing communication teams, increasing workload and greater effort put on communicative work. Different approaches to communication emerge during the interviews when talking about (1) dissemination of information (2) educating the public and promoting understanding (4) branding and (5) winning debates.

At first, all informants share examples where communication is illustrated as means for disseminating information. The purpose and/or desired accomplishment of external communication is commonly described in terms of linear one-way communication such as "informing", "get our message out" or "explain why we have this opinion". Moreover, several respondents talk about communication as a part of their advocacy work where they attempt to "influence politicians and agencies" or "influence public opinion". Respondents within hunting associations generally express higher willingness than those within environmental organizations to reach those members of the public that were not already converts to the cause. Within the environmental organizations, unlike the hunting associations, however, respondents indicate that a unique goal to communicating on these matters was to "be the voice of nature".

Secondly, 'public education' recurs during some of the interviews, and particularly from the environmental organizations. Communicating science and facts is for example described as a way to educate the public. One respondent highlighted public education as necessary in order to transform Sweden in a sustainable way since "[...] politicians cannot make good decisions if there is a lack of understanding of the public." 'Understanding' recurs as a milder version of this, where the goal is less to educate and more to contribute to

people's understanding of the hunters' lifestyle and/or the life on the countryside/rural areas. Moreover, one respondent tells h/she wants to convey they are not monsters but feeling ordinary people who also "[...] buy kitchen towels at ICA [...].

Thirdly, another purpose commonly mentioned when talking about external communication is 'branding'. However, possible discrepancies regarding branding were also expressed. One respondent recalls a potential internal conflict where the communication team tend to value publicity, for example in terms of number of articles, whereas the respondent thought "[...] it is not guaranteed this is most productive, a meeting at a department might give ten times more." On the other hand, several respondents also emphasize with the downsides to publicity regarding the wolf issue given "[...] you do not want to create unnecessary debates." or "[...] you do not want to add fuel to the fire". This is managed by ensuring the communication is focused on the substantive issue and scientific knowledge.

Fourthly, one communicative word that recurs through the interviews when talking about the wolf issue in general is the word 'debate'. The majority of the respondents replace, for instance, 'the wolf issue' with 'the debate' or 'the wolf debate' when referring to the issue. The goal is thus to win over the audience and/or triumph over your 'opponent' in the debate. However, some mention the role of communication that evokes feelings and impact on an emotional level. For example, one respondent from an environmental organization describes they "[...] probably get more members if raising critical voices when wolf hunting is in progress [...]". And h/she further tells they get a huge response when posting something like "[...] this is what you can do for the predators". Another respondent tells when h/she participate in for example a TV-debate clothing and attributes matter since it is also about appearing likable and "[...] if I want to win this I must at least get the public to think I am sympathetic and sane [...] you communicate a lot through both body language and what you wear."

4.4 Perceptions of science and facts in communication

The role of science and facts is not only emphasized when the respondents describe complexity. Through the interviews science and facts appear to be perceived as the only legitimate point of departure when communicating. Both representatives from environmental organizations and hunting associations state this role, for example when telling:

"I think we often benefit from being objective [when communicating]. We try to lean on research and expertise. [...] Often facts speak for itself. [...]"

And similarly:

"Many are acting with feelings and not with facts. Facts are important, always. There should always be evidence of what we say.".

Although respondents from environmental organizations as well as hunting associations emphasize this importance, respondents from environmental organizations further tend to refer to science and facts when describing communicative strategies for dealing with the wolf issue's complexity. This is for example illustrated when one respondent describe that they always ask themselves if they have scientific basis to make a certain statement since "[...] science and facts set the frame and enable us to rest on our laurels." Moreover, keeping focus on 'the substantive issue' is in general described as an established approach when dealing with for example emotional posts in social media or other confrontational statements or questions about the wolf and wolf management. One respondent from an

environmental organization explains this strategic choice when telling they "[...] are only interested in the substantive issue as restoring the wolf populations to viable populations and the matter does not benefit of the high conflict level.". The majority of the respondents also argue they purposefully manage debate by using scientific arguments and sticking to the substantive issue. Furthermore, using science and facts when communicating is often described as a way to set the discussion "[...] on a higher level that is more difficult to attack." On top of that, when speaking about the complexity and conflict one respondent from an environmental organization stress they try to keep to the facts since "[...] facts somehow balance between the many different wills." 'Facts' typically refer to incontrovertible biological observations about the wolf (such as size, diet, behaviour, propagation) but sometimes in similar ways as 'science', referring to more contested scientific positions such as GYBS.

However, one respondent from an environmental organization also expresses doubts about the organization's approach concerning scientific arguments as a communicative strategy in the wolf issue and says;

"We have said we should use scientific arguments but the wolf debate is about emotions and here we have a clash. It is not certain that what you say matters [...] if it is the feelings that are important. And in that sense we might be perceived as an insensitive organization.".

Additional respondents from environmental organizations make similar reflections by, for example, stating that "[...] we might have been focused too much on the animal and too little on the humans." Several respondents from the hunting associations emphasize this as well. One respondent reason about the preoccupation on scientific accuracy and objectivity;

"[...] it reduces the humans in the issue, they are not important. And I think the humans are as important in nature as the animals. [...] Everyone must be considered. We must be able to live together.".

Another informant from a hunting association describes h/she thinks what is a highly complex issue is being dressed down in scientific terms, and indicated this is not a good way of finding solutions because "You do not see the complexity when you discuss solely with scientific terms [...]." Also values are brought up when speaking about science and facts, where some of the respondents from the hunting associations stress the lack of values in the current communication about the wolves. For example, one describes: "What is most important is to distinguish between values and facts. [...] It does not matter if you say 'facts say this' if the discussion ends with 'I think this anyway'."

Crucial when speaking about reliance on scientific facts is also who defines the dominant scientific knowledge in the wolf issue, i.e. who possess scientific accuracy and authority. All respondents stress their organization does neither create nor possess first-hand scientific knowledge themselves. Some work in close cooperation with scientists but above all they perceive their role as embrace latest research in order to dissimilate it. One respondent from an environmental organization says they always have worked liked this, embracing and dissimilating knowledge from researchers, and justifies their educative approach by stating; "If you are loyal to the conclusions of research, that will be the image that remains.". However, some respondents problematize when for example media or other actors use the non-profit organizations as sources for scientific facts and says; "[...] expertise knowledge should be taken from agencies, scientists or so. [...] but yet people get facts from for example [name of non-profit organization]".

4.5 Multiple roles

First, considering roles the respondents from the environmental organizations as well as the hunters' associations often use similar pictures and/or point at commonalities when describing themselves. For instance, to convey potentially shared positionality, the majority describe their professional and personal engagement with keywords such as "nature lover" or "environmentalist". Moreover, respondents from the hunters' associations tend to further emphasize their environmental engagement and, similarly, respondents from the environmental organizations tend to underline their acceptance towards hunting when speaking about other actors. For example, one respondent says "[...] but I am also an environmental nerd and that is many other hunters as well." and another respondent says h/she "[...] really respect hunting and its traditions [...]." Furthermore, several respondents and particularly from hunting associations reflect upon images of themselves held by other people, which often are standing in conflict with their self-image;

"[...] I really consider myself very much as an animal lover. I grew up with dogs and I think it is very hard not to be looked upon as an animal lover [...]".

"[...] and we are not any monsters. On the contrary we are very sissy with our dogs and we take care of them and we are just ordinary people and citizens."

Second and relatedly, respondents recall that conveying one's shared positionality and multiple roles were imperative. This was in part for rhetorical purposes to project credibility and in part to achieve harmony between one's attributed external identity and one's self-perception. As one respondent notes:

"[...] images of hunters being murders and animal haters are spreading all the time, but in my world that's so strange because it is exactly the opposite. And that feels so wrong when you go to these pages [for example environmental organizations homepages and facebook] and read about them because I do agree with them in many respects."

Third and finally, challenges or even conflicts between respondents own opinions and predetermined opinions of their constituency were revealed. Several respondents bring up that being a member organization entails a responsibility to represent the members' opinions and interests since the organization's policy is decided at the annual meeting. The majority of the respondents experience it as unproblematic since their professional and private interests were so closely related. But for a few, this was explicitly expressed as challenging on a personal level since they do not themselves agree with the policy. This role conflict is managed in different ways where, for instance, one respondent describe h/she no matter what represent the organization and it's opinions, and never include personal views, whereas another respondent tells h/she always openly express personal views on the issue, also in meetings with own members. On the other hand, some respondents declare they experience the organization holds a self-determined 'low profile' focusing on finding compromises which, in turn, also results in 'scold from all sides', i.e. expressed dissatisfaction from both own members (often referred to as "extremists") and other actors.

5 Discussion

In this chapter, the empirical findings are discussed more explicitly in relation to the theoretical framework. It identifies and discusses those factors, platforms and communication practices that appeared to contribute to or inhibit constructive communication on the wolf issue. As points of departure, Jordan's concept of 'blind spots', referring to the phenomenon that emerges when an issue is being handled through the use of a limited perspective, is borrowed and here used related to implications on communication. The discussion will be summed up and closed with a discussion of implications of blind spots and possible ways forward.

5.1 Potential causes of blind spots

In this section, potential causes of blind spots affecting constructive communication in the wolf conflict will be discussed with regards to limitations in perspectives, organizational circumstances and societal beliefs.

Due to limitations in perspectives

Complex societal issues, such as wolf conservation, are due to their wicked characteristics ill-defined and thus hard to overview and they should be considered unresolvable, without right and wrong answers (Rittel & Webber, 1963). This was clearly reflected in how actors apprehended the complexity of the wolf issue, which was caught in colourful narratives where complexity was grasped as, for example, emotional engagement, cultural history and symbolism, entanglement with broader societal conflicts and lack of scientific understanding. However, these conceptions were often also contradictory. For example, when the wolf's history and symbolism by the environmental organizations is described as accounting for positive associations towards the wolf whereas hunting associations refer to it as accounting for negative associations. Similarly, environmental organizations use factors such as 'urbanization' for explaining aversion towards wolf in rural areas meaning conflict and complexity not lays in the wolf per se but in dissatisfaction concerning something else more abstract. And the other way around, hunting associations refer to 'urbanization' for explaining urban people's lack of understanding as a central aspect of complexity. Such differences in framings of the issue's complexity clearly illustrate how profoundly our perspectives colour our understanding and how we make sense of a certain phenomenon, where some aspects are paid attention to whereas others are overseen (Jordan & Andersson, 2010).

Since wicked issues are so difficult to overview and the aspects we pay attention to are contingent on our perspectives going into social interaction which, in turn, develop through communication with others (Hallgren & Ljung, 2005) it is, I claim, easy under current arrangements to get stuck in monocle syndromes when interaction with those who hold perspectives very different from ours are poor. The empirics described experiences of

'extremes' on both sides in the wolf conflict which are furthering polarization but also making polarization appear more extensive than necessary. With regards to communication, respondents experienced it was easier to talk to central representatives within 'opposing' organizations than their members with extreme views, with whom it was "simply impossible to conduct a dialogue with". The 'extremes' were mainly described as acting and creating conflicts behind screens in social media fora. The opportunities of perspectivetaking through communication in such fora are necessarily lower compared to communication occurring through face-to-face meetings that can decouple from strategic displays and rhetoric to win over audiences. For instance and as expressed in interviews, in social media you rather get together in groups where people express similar opinions and have more concurrent perspectives. In such foras you are more seldom encountered with opposing views and when you are your communication requires a lower degree of perspective-taking when expressing yourself than if you were meeting that person face-toface. Moreover, Jordan (2011) stresses lack of reflection upon one's actions and purposes behind those as a factor contributing to monocle syndromes. Therefore, it can be argued, those circumstances are also less conducive to intersubjective understandings. The empirics describe how face-to-face meetings mainly occur between central representatives, and accordingly that central representatives are experienced as having more nuanced views and being easier to communicate with. This, I argue, may strengthen the reasoning above claiming that interaction helps widen our perspectives and create shared understandings. However, this purpose is better realized when interaction take place face-to-face than through outdistanced communication means.

Due to organizational circumstances

As stated, blind spots often emerge because of poor complexity awareness (Jordan, 2011) and the empirical findings pointed at several organizational circumstances with regards to communication that, I argue, may hinder awareness to develop and thus bound actors to limited perspectives and rationalities further reflected in communication.

At first and in accordance with Jordan (2011), empirical findings pointed at structural conditions such as high workload and delimited job descriptions within the organizations. Such conditions may lead to oversight of aspects but also affect long-term thinking, and more importantly, hinder potentials for collaboration. 'High workload' was primarily expressed in terms of the wolf conflict requiring way too much time at the expense of other issues and tasks, and where communication was experienced as the most time consuming activity. Concerning delimitations in job descriptions I mean there is a risk blind spots in communication appear due to the fact that most organizations today locate communication responsibility at certain units or employees whereas responsibility regarding the issue itself, in this case predators, may be obliged other employed 'experts'. Challenges due to such separation of communicative practice was expressed in at least one case where the respondent was employed as a communicator and proclaimed that the experts do not understand the huge amount of time that is needed to manage social media when they post something about wolves. And more importantly, the communicators experienced they were highly dependent on support and expertise from the already time-pressed experts to at all be able to mediate in for example social media fora. So to speak, the communicator's job is to communicate in different channels but on top of that they have to defend the organizations position using expert knowledge and even conflict management. Thus, the wolf issue's complexity and level of conflict certainly put pressure on tight collaboration between communicators and experts. If this fails, due to for example high workload and strict delimitations in role descriptions, the organization's communication towards the public will lose flexibility and reflect predetermined positions.

Second and related, with a social constructivist view communicative manifestations are socially situated and, thus, the broad public will make sense of utterances differently

depending on the context, including pre-understandings and perspectives. This may help understanding polarization from a communicative point of view, for example the expressed urban and rural tensions in the wolf conflict. Since meaning is created in the respectively context an organizations' communicative manifestation may be interpreted as a solution by one camp and a problem by another. What is evident is that the platforms and channels for communication used by most organizations are not capable of bridging those contexts by furthering intersubjective understanding. Empirical findings discern feelings of great concern regarding other actors' lack of understanding about the complexity of the wolf issue or certain aspects. So to speak, critique was from both sides mainly directed towards others' limited perspectives and seldom reflective about one's own assumptions and limitations. Accordingly, if an opponent fails in displaying openness, oneself is not willing to make any such attempts. However, the empirics show how expectations from one's own camp, rather than the opposing, to a high degree affected and possibly steered organizations approaches to communication. For example, this phenomenon was expressed when an organization held a 'low profile' and experienced they therefore got scold from own supporters. Likewise, if acting in accordance with outer expectations from one's faithful followers the organization were likely to get positive attention and publicity.

Third, medias competition for public attention through sensationalism, i.e. dramaturgy, appeared in the empirical findings to be a component adding to the complexity and blind spots through creation of exaggerated views. This can be viewed as a result of structural conditions, which force actors, organizations and individuals, to appear strategic and bounded to certain perspectives. For example, situations are described where media contact an organization since they want a representative to a news segment who, for example, is 'positive' towards wolves. The purpose of the news segment may be to give a nuanced view from different angles and different actors but one wonders what actually happens when media impose roles on actors with premises bounded to, for instance, 'pro' or 'against'. So to speak, actors are being put in pre-determined pigeonholes. Moreover, medias inherent inflexibility, concerning for example word-, space- and time limits as well as limited opportunities for reporters to deepen one's understanding in every topic at hand, contributes to problematic since blind spots in public communication will have profound consequences on public perceptions as well.

Due to societal beliefs

Situating the causes to blind spots discussed above in the context of modernity enables us to lift the explanations from organizational and individual levels to ideas of modern society as a whole. In doing so rationalities underpinning communication about wicked issues reveal, concerning for example communicative legitimacy through science and facts and communication with strategic orientation.

At first, concerning science and facts the case shows scientific knowledge constitutes the premises of legitimacy on which one's and others' communicative utterances are based upon but science also serves strategic purposes as a tool in conflict management or for fulfilling rhetoric goals. This goes in line with Habermas (1984) critical theory of modernity which mean society are being rationalized and thus, instrumental and technological rationality of the system's structures and institutions comes to dominate at the expense of intersubjective understanding of the life-world. The empirics confirm the idea of how instrumental and technological rationality becomes reflected in communication. For example, all organizations put emphasis on the importance of sticking to science and facts when communicating about the wolf issue and some explicitly consider their role in society as transferring scientific knowledge and thus educate the public. And furthermore, in complexity and conflicts science is described as the only thing to rely on. If your utterance is based on scientific understanding, then it is at least not wrong and you can, as someone

noted, 'rest on your laurels'. Science in this case is perceived as a solid ground balancing between emotionally informed wills and offering navigation when things are complex.

Although social and moral aspects of complexity are recognized within the apprehensions of complexity science is simply perceived as providing legitimacy when communicating. This paradox was particularly evident regarding hunting associations which in general inform their arguments by using social aspects and social threats concerning wolves. Yet, when describing what the organizations (and not the individuals) consider as important when communicating about the wolf issue (organizational guidelines for example) utterances based on scientific evidence was stressed as most important. I mean this adaption and example in particular, but the overall scientific focus in general, at least says something about what rationality is underpinning communication and thus how societal issues are being managed today. However, both representatives from hunting associations and environmental organizations also problematized the current emphasis on science at the expense of humans in discussions about wolf conservation. Is this critique something indicating a paradigm shift? If not, Habermas would say there is a risk today's wicked issues are being managed by technocrats. Or what Jordan (2011) in operational terms would call limited perspectives and monocle syndromes.

Furthermore, rationalization of modern society is according to Habermas (1984) strategic in that sense that it leads action oriented towards outcome instead of, as communicative rationality promises, intersubjective understanding. The ways actors construe goals for communication point at such strategic approaches. So to speak, communication was framed purposeful in that sense that it was oriented towards goals such as 'educating', 'influencing' or 'branding'. When steering media so as power, money and influence gain communicative power, Habermas (1984) says, there is no discursive communicative processes. In the empirics, such pathology of modernization was actually explicitly questioned when one respondent reflected upon a possible discrepancy within the organization. The respondent thought too much effort was put on branding and wondered whether it would be ten times more meaningful to prioritize participating in meetings instead of counting number of publications.

5.2 Implications of blind spots and possible ways forward

To sum up, in this study the underlying factors that may inhibit constructive communication appeared to pertain to (1) overreliance on scientific authority, (2) 'othering' of opponents, (3) communication as one way transmission of information with educative or strategic goals, (4) dramaturgy of media and (5) competitiveness of debate. In this context, I argue these factors are undesirable in that sense that they force actors to participate in discourse with perspectives bounded to roles and positions and, thus, further prevent communication practice oriented towards reaching mutual understanding. A consequence is that actors interpret every utterance or act as hostile and likewise counter with attempts to defend ones position. Interaction among the actors becomes poor as trust decreases accordingly. As someone noted, the already 'dug trenches' make interaction, i.e. communication, with other actors very difficult to re-establish. However, the empirical findings also show NGOs are, indeed, not giving up on external communication to the public. With a social constructivist view one may thus wonder how actors influence public perceptions when external communication reflect perspectives bounded to roles and fixed positions? This study cannot answer how it influences but through the glasses of the theoretical framework it can at least claim it does influence. Therefore, implications of factors inhibiting constructive communication can be said to go far beyond decreased opportunities for managing wicked issues in constructive ways.

However, also factors that may contribute to constructive communication, revealed in this study, such as (1) reflections on multiple dimensions of the conflict and (2) multiple roles, including expressions of potential shared positionality, private and professional roles as well as critical reflections of self-images versus attributed external identities. These show how individuals to some degree recognizes the dynamics and fluently of roles but also how roles may come with underlying premises, such as external expectations, influencing how one choose to deal with a task or issue. And another, (3), is the commitment to the substantive issue by both sides of the conflict which at least shows there are willingness to stick to the matter at hand and disentangle it from broader societal conflicts. However, if unreflected it is probably rather a negative since there is a major risk important aspects of the complexity of the issue are by-passed and unconsidered when managing the issue and communicating. Furthermore, (4) is the fact that there are multiple arenas for discussion and not one, such as mass media, controlling everything. Although, many critical reflections but also needs emerged with regards to those arenas for communication. Some explicitly called for arenas where actors get a chance to deepen and broaden discussions, go into different rationales and create understandings for each other's perspectives. Accordingly and with a Habermasian view, the arenas for communication should free actors from roles and bounded rationality and, thus, promote public perspectives on the issue (Habermas, 1984).

This study has, so far, revealed and discussed underlying factors, platforms and communication practices that hinder or contribute to constructive communication, and those have been torn between individual efforts and structural factors. For example, individual efforts have concerned efforts to take multiple roles, relate critically to one's assumptions and display openness to other perspectives whereas structural factors have concerned organizational structures but also arenas for communication, arguing that certain arenas due to their format are more conducive to constructive communication than others. On top of that, premises behind communication, for example purposes and goals, have been concerned. Which factors have most profound influence on communication? Is it the arenas for communication, individual's awareness or the premises behind communication? A reasonable claim is that all three are interacting. Investigating how they interact and perhaps reinforce each other was not within the scope of this study but, nevertheless, the study contributes with identification of factors, platforms and pathways affecting the ways NGOs communicate constructively in the Swedish wolf conflict, and within the whole breadth of these three categories. However, some interrelations can be distinguished. For example, if considering structural factors such as arenas for communication they, in turn, seem to come with certain inherent premises. For instance, debates come with premises encouraging participants to beat the opponent by impressing the audience and, similarly, social media is very much about being liked, driven by an 'most likes win' mentality. Therefore, how the individual act in such a communicative situation is certainly highly characterized by the 'communication format'. If the structures inhibit rather than support constructive communication it is probably much more difficult for an individual to practice it. It may be possible but it is perhaps not reasonable to expect it from someone. I argue it, on one hand, is more justifiable to call for new arenas that facilitate constructive communication than expecting individuals to practice it when conditions are poor and even obstructive. In that sense the study positions on the structure side of the structure and agency spectrum. On the other hand, I claim individuals are at the same time building or reproducing structures when acting and communicating, but also when deciding on format and processes for managing a wicked issue.

6 Conclusions

In a world of wicked issues, where polarization and conflict not seldom become expressions of complexity and diverging perspectives, communication platforms that encourage collaboration across previous trenches are necessary. Indeed, today's networked society offers several platforms for communication and, as the study shows, individuals as well as organizations certainly invest in and seize the opportunities to use the digital platforms for one's communicative purposes. Therefore, such media come to reflect wicked issues of society, such as the Swedish wolf conflict. Although fundamental characteristics of wicked issues concern high degree of uncertainty and thus lack of right and wrong answers, the wolf conflict can easily be taken for a conflict between 'wolf huggers' and 'wolf haters' arguing either 'pro' or 'against'. Some NGOs are typically associated with such positions but, however, this study contributes with understanding of how individuals within the organizations are sliding between positions and multiple roles when reflecting on multiple dimensions of the conflict and its complexity. The camps that appear can with this understanding be considered as a consequence of shortcomings related to the arenas most frequently used for communication, in which complexity simply does not fit within and constructive approaches to communication are inhibited or even antagonized. For example, digital platforms for communication, including homepages, social media and blogs, but also mass media and face-to-face communication in debate formats appear to be less conducive to complexity awareness by hindering actors ability to perspective-take and display openness towards others. Through those channels, communication tends to reflect rationality bounded to pre-determined positions. This phenomenon may, moreover, be an implication of too fixed formats due to for example time, space and language limits. But also organizational factors and circumstances, such as delimited job descriptions, may have profound impact on communicative practice.

Moreover, the study reveals that purposes and goals behind communication particularly are construed as 'disseminating information' in order to 'educate', 'strengthen the brand' or 'influence'. If the potentials for ways forward in the wolf conflict lays in finding common grounds and, accordingly, constructive communication to this end is viewed as co-learning and a process of developing shared understanding, the informative and educative approach can be said to miss those communicative qualities. Communication rather becomes an expression of one-way rhetoric and opportunities for co-learning through the communicative act are eliminated. One can say some arenas associated with communication today, such as digital platforms, come with certain premises which promote strategic approaches oriented towards self-achievement. This study concludes such arenas must be used in a conscious, critical and reflective way when circumstances are complex and fraught with conflict. However, on a societal level this becomes an egg and hen issue since one can also reason it is the instrumental and strategic rationalities (the underlying premises, i.e. goals for communication) of modern society, which are steering actions in

society toward outcome and, hence, drive a technological development through which these strategic arenas for communication develop.

By using the Swedish wolf conflict as a case, the overall aim of the study was to explore approaches and experiences related to communication in wicked issues in order to reveal underlying factors, which may contribute to or inhibit constructive communication to occur. The study shows such factors can be explored in three different categories pertaining to structures (structural conditions), agency (individuals efforts) and underlying premises behind communication. Although these categories are viewed as intertwined, where factors are interacting in a highly complex way, the theoretical framework turned out to best inform the study on a structural level. Identified inhibiting factors and thus potentials for improvements were most apparent in terms of (1) overreliance on scientific authority, (2) 'othering' of opponents, (3) communication as one way transmission of information with educative or strategic goals, (4) dramaturgy of media and (5) competitiveness of debate.

Furthermore and at last, the study concludes it cannot evaluate neither individuals' nor NGOs' capacity to grasp complex wholes of wicked issues or to practice constructive communication. However, it opens up for discussions and further inquiry on how organizations, processes and platforms can help instead of hinder participants to develop complexity awareness and constructive communication praxis. How do arenas for communication look like in practice when they facilitate processes of co-learning, new ideas and collaborative visions? How can these be flexible enough to manage complexity, uncertainty and change but also handle participants that are sliding between positions and professional, private, and outer attributed roles and identities? This is critical if we are to achieve a less polarized discussion on wildlife conservation and other contested wicked issues of society today.

7 References

Andersson, P. 2009. Perspektivvandringar, Att arbeta med trygghetsfrågor i lokalsamhället. Göteborg: Elanders.

Bryman, A. 2011. Samhällsvetenskapliga metoder. 2th ed. Malmö: Liber AB.

Chapman, J., et al. 2009. "Policy making must start from the idea that there is no single way to identify a problem..." Connecting the dots. Eindhoven, Lecturis.

Charon, J.M. 2010. *Symbolic Interactionism: An Introduction, An integration*. Boston: Pearson Education.

Conklin, J. 2005. Dialogue Mapping: Building Shared Understanding of Wicked Problems, chapter 1. Wiley.

Cox, R. 2006. *Environmental Communication and the Public Sphere*. 3rd ed. London: SAGE.

Dillon, M. 2014. *Introduction to Sociological Theory: Theorists, Concepts and their Applicability to the Twenty-First Century*. 2th ed. Chichester: John Wiley & Sons.

Elling, B. 2008. *Rationality and the Environment: Decision-making in Environmental Politics and Assessment.* London: Earthscan.

Essen, E., et al. 2015. The radicalisation of rural resistance: How hunting counterpublics in the Nordic countries contribute to illegal hunting. Journal of Rural Studies, vo 39, pp. 100-209

European Comission. Large carnivores in the EU – the Commission's activity on large carnivores. [online] (2015-07-25)

Available at:

http://ec.europa.eu/environment/nature/conservation/species/carnivores/index en.htm

Gregen, K.J., et al. 2002. Realizing Transformative Dialogue. The Transformative Power of Dialogue. Public Policy Analysis and Management, vo 12

Grint, K. 2008. Wicked problems and Clumsy Solutions: the Role of Leadership. Clinical Leader, 2.

Habermas, J. 1984. The Theory of Communicative Action, vol. 1: Reason and the Rationalisation of Society. Cambridge: Polity Press

Habermas, J. 1987. The Theory of Communicative Action, vol. 2: Lifeworld and System: A Critique of Functionalist Reason. Cambridge: Polity Press

Habermas, J. 1964. *The Public Sphere: An Encyclopeida article, New German Critique, vo 3*, pp. 49-55.

Hallgren, L., Ljung, M. 2005. Miljökommunikation. Lund: Studentlitteratur AB.

Herlitz, G. Peterson, P. 2011. Vargen: kramdjur och hatobjekt. Sweden: Liber.

Jordan, T. 2011. Skilful Engagement with Wicked Issues: A Framework for Analysing the Meaning-making Structures of Societal Change Agents.

Jordan, T., Andersson, P. 2010. Att hantera de svårlösta samhällsfrågorna, en tankeskrift från Tryggare och Mänskligare Göteborg. Göteborg: Elanders.

Kegan, R., Laskow Lahey, L. 2009. *Immunity to change*. United States: Harvard Business School Publishing Corporation.

Krauss, R.M., Morsella, E. 2006. Communication and conflict. In Deutsch, M., Coleman, PT., Marcus, EC. (Eds): *The handbook of conflict resolution—theory and practice*. San Francisco: Jossey-Bass

Kvale, S., Brinkmann, S. 2014. *Den kvalitativa forskningsintervjun*. 3th ed. Lund: Studentlitteratur AB.

Kvale, S., Brinkmann, S. 2009. *Interviews: Learning the Craft of Qualitative Research Interviewing*. 2nd ed. California: SAGE Publications.

Rittel, H.W., Webber, M.M. 1973. *Dilemmas in a General Theory of Planning*. Policy Sciences, 4, pp. 155-169.

Sandström, C., et al., 2014. Attityder till rovdjur och rovdjursförvaltning. Umeå.

Smith Graham. 2003. *Deliberative Democracy and the Environment*. Deliberative democracy and green political theory, pp. 53-76.

Trost, J. 2010. Kvalitativa intervjuer. 4th ed. Lund: Studentlitteratur AB.

Appendix 1: Interview guide

X = the organization the respondent works for

Y = organization/organizations on 'the opposing side' in the conflict

- Skulle du vilja berätta kort om din bakgrund?
 - o ev utbildning?
 - o ev tidigare jobb?
 - o ev tidigare roller på X?
- Skulle du vilja berätta kort om din nuvarande roll på X?

Vargfrågan idag

- Hur skulle du beskriva vargfrågan? Vad handlar den om?
- Hur skulle du beskriva problematiken?
- Vad upplever du som mest problematiskt? Varför?
- Hur skulle du beskriva komplexiteten i frågan? Är det en komplex fråga? I sådant fall:
 - o Varför är det en komplex fråga?
 - o Vad består komplexiteten av?
 - Kan du sätta fingret på några särskilda saker/omständigheter som gör frågan komplex?
- Hur upplever du den här komplexiteten (som du beskriver)? Finns det några särskilda situationer/sammanhang där komplexiteten i vargfrågan blir extra tydlig eller särskilt problematisk?
- Påverkar den här komplexiteten som du beskriver dig på något sätt? I sådant fall hur?

Organisationen

- Hur ser du på Xs roll i vargfrågan?
- Varför engagerar det X? Vad driver er i ert arbete?
- Skulle du säga att alla på X är överrens om vad vargfrågan handlar om?
 - o Vad som är problematiskt?
 - o Vad komplexiteten består av?
 - o Hur frågan bör hanteras?
- Hur skulle du beskriva Xs (olika) perspektiv i frågan? Med perspektiv tänker jag på hur X ser på vargfrågan, perspektiv som kan ligga bakom och färga de tankar och åsikter kring vargfrågan som X har. Till exempel värderingar.
- Varför har X det perspektivet? Finns det särskilda omständigheter/erfarenheter som påverkar X perspektiv i frågan?
- Skulle du säga att X roll har förändrats (historiskt)? På vilket sätt? Varför?
- Tror du att X roll förändras nu eller kommer att förändras? På vilket sätt? Varför?
- Hur ser du på X framtida roll i vargfrågan?
- Hur skulle du beskriva att X ser på kommunikation?
 - o Varför är det viktigt?
 - o Syfte? Vad vill ni uppnå?
 - o Finns det någon uppsatt policy eller andra ramar ni måste förhålla er till?

Andra aktörer

- Varför tror du att frågan engagerar andra organisationer, till exempel Y?
- Hur skulle du beskriva Y? Vilka är dom? Har Y några särskilda egenskaper?

- Hur skulle du beskriva Ys (olika) perspektiv i frågan? Med perspektiv tänker jag på hur Y ser på vargfrågan, perspektiv som kan ligga bakom och färga de tankar och åsikter kring vargfrågan som X har. Till exempel värderingar.
- Tror du att det finns s\u00e4rskilda omst\u00e4ndigheter/erfarenheter som p\u00e4verkar Ys perspektiv i fr\u00e4gan?
- Hur tror du att Y ser på er organisation/på X?
- Hur har du upplevt kommunikationen med Y?
- På vilket sätt kommunicerar ni med varandra? Varför?
- Har det skett någon förändring i kommunikationen (historiskt)?
- Hur tror du att kommunikationen kommer förändras?
- Hur skulle du önska att kommunikationen såg ut?
- Hur tror du att Y upplever kommunikationen med X? Varför?
- Hur påverkar din upplevelse av kommunikationen med Y ditt fortsatta agerande i frågan?

Egna rollen

- Vad driver dig i ditt arbete/engagemang i vargfrågan?
 - o Professionellt?
 - o Privat?
 - o Som medborgare?
- Hur skulle du beskriva din roll i vargfrågan?
- Hur skulle du beskriva din professionella roll?
- Hur skulle du beskriva din privata roll?
- Medborgarrollen?
- Finns det situationer/sammanhang där den professionella,den privata och medborgarrollen står i konflikt med varandra?
 - o Vilka sammanhang?
 - o På vilket sätt?
 - o Hur upplever du det?
- Upplever du att din roll har förändrats?
 - o I sådant fall, på vilket sätt?
- Tror du att din roll kommer att förändras?
 - o I sådant fall, varför?
 - o På vilket sätt?
- Hur ser du på kommunikationens roll i vargfrågan?
- Vad syftar kommunikationen till? Har du några tankar kring vad du vill uppnå?
 Har du några strategier?
- Ser du att det finns saker som är särskilt viktigt att tänka på gällande kommunikationen i vargfrågan överlag?
- På vilket sätt tar du hänsyn till komplexiteten?
 - Varför gör du det?
- I ditt arbete/kommunikation, har du tydliga riktlinjer och strategier som är uppsatta av X eller bestämmer du själv?
- Hur stor skulle du bedöma att din förståelse i vargfrågan är?
 - Varför?
 - Finns det någonting du skulle vilja veta mer om för att öka din förståelse i frågan?

Vargfrågan framtid

- Hur ser du på framtiden? Hur tror du vi når framgång i frågan/löser konflikten/hanterar frågan på ett konstruktivt och demokratiskt sätt?
- I den bästa av alla världar, hur skulle vi då hantera frågan?
 - O Vad tror du behövs för det? Vilka resurser? Är det något som saknas?