

# **Mission-based communities as negotiated orders**

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## **ABSTRACT**

Epistemic communities contain an inherent tension in terms of reconciling a highly diverse membership, with many competing knowledge claims, towards a shared purpose of policy influencing. Deriving from three inductive case studies within the field of international development organizations, we illustrate how epistemic communities resolve this inherent tension by simultaneously negotiating three legitimized sources of power based on formal hierarchical position, on expertise and on value consensus. The cases provide insights into negotiation processes in mission-based communities and contribute to the power-knowledge debate within the literature on knowledge and learning by re-introducing the negotiated order lens to better understand mission-based organizations as epistemic communities.

**Keywords:** epistemic communities; mission-based organizations; negotiated order; power/knowledge

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## INTRODUCTION

Epistemic communities are characterized by an inherent tension. On the one hand, members are oriented towards a shared purpose, seeking to develop expertise and institutionalize it within a specific policy domain (Haas 1992a; Knorr-Cetina 1999). On the other hand, their expertise is enhanced by a diverse membership. This implies potential conflicts, in terms of establishing common knowledge and meaning, following the views espoused in the practice-based perspective on knowledge and learning (Contu and Willmott 2003).

This tension is particularly relevant for mission-based epistemic communities. While many knowledge-intensive private and public organizations are characterized by *formal* governing mechanisms in the form of hierarchies (Williamson 1999) as well as by *expertise*-based governing mechanisms (Grant 1996; Spender 1996), mission-based organizations such as non-government organizations (NGOs) also rely on shared *value consensus*, comprising ideas and practices which embody a community's identity and guide its course of action (Barker 1993; Huzzard and Östergren 2002) towards a common value-based mission. In other words, in mission-based organizations legitimacy claims are established by negotiating multiple ontologies, which makes it all the more challenging for communities to pursue a common goal. This complexity that characterizes mission-based communities has seldom been subjected to research, even though one may wonder how such communities negotiate potentially conflicting legitimacy claims so as to influence a policy domain.

Our research is motivated by this gap in theoretical insight. In fact, we wanted to know how mission-based epistemic communities negotiate knowledge claims that are based on heterogeneous ontologies in order to reach a shared outcome. We thereby assumed that in order to reach a shared outcome in such communities, there is a need for negotiations based on various legitimacy claims.

Prior research has recognized the importance of studying negotiations as key phenomenon in understanding professional relationships and decision-making mechanisms (Strauss 1978a), in establishing meaning (Crossan, Lane and White 1999; Handley et al. 2006; Wenger 1998), and in determining organizations' practices (Haas 1990). Contrary to Strauss' expectation that "the topic of negotiation verges on becoming fashionable" and "is *in the air*" (Strauss 1978a: 2), in-depth analysis of how negotiations occur within communities and how sources of power interact to legitimize conflicting claims, has been unduly neglected by subsequent theorists of organization studies. In this paper, we explain how knowledge sharing in

epistemic communities occurs, thereby re-introducing the concept of negotiated order (Strauss 1978a). Negotiated order provides an interesting lens to study mission-based communities as arenas where members engage in dynamic negotiations to legitimize conflicting knowledge claims in order to influence policies.

Our research is conducted within the field of international development cooperation which is characterized by multiple cultures, diverse contexts, and geographically dispersed stakeholders who pursue a common goal of more democratic policy debates and development interventions. Three epistemic communities within the development sector provide the setting for a response to our research question. The cases reflect three legitimized sources of power based on three ontologies: formal hierarchical position, representing claims to what *must be*; expertise, representing claims to what *is*; and value consensus, representing claims to what *should be*. The interplay between these forms of power reveals various temporary forms of a negotiated order: stagnated negotiated order, exploded negotiated order and balanced negotiated order. Our research reveals how epistemic communities cope with the inherent tension between heterogeneity of knowledge claims versus common mission, by simultaneously engaging three legitimized sources of power.

In the following section, we introduce the sensitizing concepts which guided our study. We then present our methods and case studies, followed by a discussion of the implications on theory and practice.

## **NEGOTIATING KNOWLEDGE CLAIMS IN MISSION-BASED COMMUNITIES**

Epistemic communities are collectives of professionals who share a belief in particular forms of knowledge towards a domain or issue area, and who are driven towards a shared purpose in terms of the development of policy-relevant knowledge (Haas 1992a; Knorr-Cetina 1999). Such communities contribute expert judgment to the political processes they are involved in, encouraging debate and knowledge development and sometimes even developing partnership with those they try and influence (Gough and Shackley 2001). Epistemic communities can be scientific (Knorr-Cetina 1999), professional (Adler and Haas 1992), or mission-oriented (Besley and Ghatak 2005). Particularly in terms of mission-oriented communities, participants can be described as motivated agents, who have a personal involvement with a collective good and orient themselves around a value consensus, comprising shared ideas and values which guide its course of action (Barker 1993; Huzzard and Östergren 2002).

From a social-practice view on knowledge (Brown and Duguid 2001), knowing is socially constructed by people through interaction in practice. This could imply that a varied representation of stakeholders is likely to improve the content of the community's knowledge. However, with a diversity of stakeholders comes a diversity of interests, expressed in the knowledge claims which actors seek to legitimize. This diversity of knowledge claims is at odds with a community's orientation towards a shared framework for meaning and understanding, to establish which policy domain they seek to influence. In fact, mission-based communities need to balance three types of governing mechanisms: as a form of knowledge-intensive organization they are driven by *expertise* (Alvesson 2001); in terms of engaging with policy projects they are affected by *formal mechanisms* such as hierarchies (Williamson, 1999); and by pursuing an interest that does not lie in a material sphere but in a perceived collective good, they are driven by *shared values* (Sebenius 1992). The integration of these three mechanisms makes organizing mission-based communities more complex than 'traditional' knowledge-intensive organizations.

In pursuit of their policy projects, communities evolve by selecting content and participants through a process of socialization (Contu and Willmott 2003; Levinthal and March 1993). In case of epistemic communities, this process revolves around political questions as to which knowledge is shared, with whom, when, to whose benefit, and why (Adler and Haas 1992). While these socialization processes around community values and meaning might be interpreted as quiescent and consensual (Marshall and Rollinson 2004), they are just as much imbued with a 'dark side', where knowledge is isolated, ignored or misrepresented (Gherardi and Nicolini 2002). Participants in communities play out their varied interests, seeking to legitimize competing knowledge claims through an evolving process of negotiations (Levina and Orlikowski 2009).

Negotiations have often been recognized as a central operator of power processes within and between organizations and communities, for instance in general management literature (Levina and Orlikowski 2009; Hardy 1996; Pfeffer 1981); in organizational learning literature (Wenger 1998; Blackler and McDonald 2000; Levitt and March 1988; and in the field of international relations (Ernst Haas 1990; Peter Haas 1992b; Sebenius 1992). Many of these studies call for a clearer articulation of power relations in organization and community processes, and a dissection of how these are negotiated. However, such insight is still largely outstanding (Levina and Orlikowski 2009).

We define power as a strategy that affects outcomes when it is activated by influence, force, or control in evolving social relationships (Day and Day 1977; Hardy 1996; Pfeffer 1981; Roberts 2006). Thus, power is not a structural characteristic, but a social phenomenon that is context or relationship specific, implying that power is meaningless until it is recognized as legitimate. Negotiations to substantiate knowledge claims in epistemic communities therefore occur as a process in which participants engage *legitimized* sources of power. Indeed, even an actor's formal position – for instance in a senior hierarchical position, or as a donor in a funding relationship – is subject to a community's recognition as legitimate, in order to serve a purpose of nuanced influencing (Cobb 1980; Santos and Eisenhardt 2009).

Since epistemic communities' main purpose is the generation of expert knowledge, and its institutionalization in policy domains (Adler and Haas 1992), their ability to realize their objectives is not only determined by the integration of diverse knowledge claims, but also by its inclusion of targeted decision-makers in order to gain reciprocal adaptation to diverging interests between stakeholders in, and beyond epistemic communities. This targeted *mutual learning* emerges:

*“as a result of negotiation and of encounters in which the parties seek to solve common problems so as to advance their interests at the same time. Learning is not sudden enlightenment or even incremental insight. It is the establishment of shared meanings among parties that may be active antagonists but find themselves condemned by their interdependence to negotiate better solutions than they had created in earlier attempts”* (Haas 1990: p72).

Mutual learning is all the more significant for mission-based organizations and particularly for those active in international development, as it contributes to new conceptions of development knowledge that is inclusive of perspectives and solutions provided by the intended recipients of development aid (McFarlane 2006b). This is in line with participation debates which oppose views on knowledge as a packageable 'solution' to development challenges, and seek to overcome prevailing tendencies to export development solutions from the North to the South (McFarlane 2006b).

The interweaving processes of developing expertise towards influencing policy domains are embedded in a constantly evolving social order of shifting power relations among participants, which can be labeled as a *negotiated order*. The concept of negotiated order was developed as a way to describe how groups organize themselves, and represents a temporal

arena or social setting, “within which actors play out their own agendas”, as “performances without script or program” (Strauss 1978a: 4). Negotiated orders therefore represent institutionalized practices that are the product of ‘power relationships’ related to the legitimation of members and their claims (Strauss 1978a, b). The context of epistemic communities provides an adequate framework by which to understand how these interactions occur, and how community members engage in a ‘dance for order’ (Parhankangas et al. 2005: 436). Negotiated order is specifically conceptualized to understand the finer mechanisms of sharing knowledge and enacting meaning in highly dynamic and contestable environments, rather than those characterized by stability or predictability. In the remainder of this paper, we explain how epistemic communities act as negotiated orders and to what extent these orders contribute to targeted situations of mutual learning.

## **RESEARCH SETTING AND METHODS**

The development sector provides an ideal setting for research on knowledge sharing and negotiation in epistemic communities. First, it reflects the key characteristics of mission-oriented epistemic communities: as a knowledge-intensive sector (McFarlane 2006a; Powell 2006; Rossi 2004), it draws on the generation and application of particular, exceptional expertise to achieve its results (Alvesson 2001; Starbuck 1992). Moreover, development efforts bring together a wide variety of unequal stakeholders – practitioners, donors, policymakers, and so forth – negotiating different perspectives on a practice, but engaging motivated agents towards a shared mission (Besley and Ghatak 2005). Second, the sector is characterized by inherent inequalities, exemplified by the donor-recipient relation, and thus magnifies the political tensions that have been recognized as inherent to analyses of knowledge sharing (Clegg 2003; Clegg et al. 2006; McFarlane 2006a; Rossi 2004; Adler and Haas 1992). Third and perhaps most significantly, epistemic communities in the development sector act as mission-based organizations and are therefore confronted with a complexity of governing mechanisms: besides formal power and expert-based power, they derive their legitimacy from normative power, embedded in the socially constructed norms, values, beliefs and definitions (Lister 2003; Suchman 1995) that drive them towards their mission.

We took an inductive research approach, consisting of three in-depth, process-based case studies (Eisenhardt and Graebner 2007; Yin 1989) which we analyzed interpretively, in order to consider actual practices and processes over time (Orlikowski 2002). Set within the sector of international development, each community is in a ‘mature’ stage, i.e. it has been around

for at least five years, which allowed us to see how negotiations developed over time. We combined qualitative methods of semi-structured interviews, archival data analysis and coding of email messages, with quantitative methods of semi-automated content analysis for extraction. We triangulate these data sources and methods, to verify findings through convergent, independent observations in order to build and enhance theory (Shah and Corley 2006).

We selected three cases to explore how heterogeneity in sources of power affects legitimacy claims. Our selection drew from a descriptive survey that was sent to an online, international network of development practitioners involved in knowledge management, and yielded 246 responses. We asked the respondents what the main purpose was of the community they were involved in, what kind of participants it mainly comprised, whom they targeted and whether these decision-makers were involved in the community, whether the community communicated via an online forum, and if they were willing to contribute to our research. This resulted in a selection of three epistemic communities ‘Health Cluster’, ‘GRIT’, and ‘KNet’ (anonymized names) as these communities provided us access to their online networks and participants for interviews, and represented varied illustrations of negotiating knowledge claims.

Data were collected in two phases. First, in order to acquaint ourselves with the four communities and their key practices, their targeted policy domains and knowledge claims, we conducted 16 semi-structured interviews. Interviews lasted between 1-1.5 hours, following an interview guide, and were recorded and fully transcribed. The interview guide included broad questions about first, descriptive elements of the community’s emergence and development, and the respondent’s involvement with it; second, the focus of the community, its practices, and its mission; third, the estimated effectiveness of the community in terms of contributing to this mission, as a community and related to development practice; fourth, the community’s stakeholder involvement: how and by whom was the community’s mission determined, what kinds of participants were involved, and how different types of stakeholders interacted with and related to each other (for instance decision-makers and local development beneficiaries); and finally, any further elements the respondent wished to bring about related to the community’s practices. We probed for additional details and examples wherever possible, to gain more insight into the character and dynamics of the communities, while avoiding directiveness. To identify the most knowledgeable key informants (Kumar, Stern and Anderson 1993) we used a ‘snowballing technique’. In addition to these interviews we

studied archival data of each of the communities, including prior surveys and evaluations, annual reports, websites, policy documents, and so forth.

Second, in order to collect in-depth insights into the knowledge claims, negotiation processes and legitimized sources of power, we observed the communities using virtual methods (Hine 2005), coding email exchanges on each of the communities’ online forums between the years 2004-2009. This method is non-intrusive, and allows the researcher to ‘shadow’ participants in their natural environment (Czarniawska 2007). We used AmCat Navigator (Van Atteveldt 2008), a digital environment for computer assisted content analysis, for semi-automated data reduction and extraction. We restricted our selection to a section of the data set that comprised only message threads, i.e. messages that yielded a response, although the total data set was also queried a posteriori in order to ensure that no significant content was excluded. This extraction exercise yielded a data set for each community, as depicted in table 1, comprising all messages covering the respective practice areas.

Table 1: Data sources

<b>Data sources</b>	<b>Health Cluster</b>	<b>KNet</b>	<b>GRIT</b>	<b>Totals</b>
Total unique articles in dataset	3947	7682	1473	13102
Threads	447	5077	698	6222
% threads	12.8%	66.1%	47.4%	42.1%
Extracted articles	114	216	87	417
Text lines	8004	30967	28035	67006
Interviews	4	4	4	12
Survey	Yes	Yes	Yes	<i>N=246</i>
Archival data	Yes	Yes	Yes	<i>N/A</i>

Atlas ti, software for qualitative data analysis, was used for coding the extracted data. Querying (extraction) and coding were conducted in an iterative fashion between Amcat Navigator and Atlas ti, constantly refining the dataset and the related codes. Based on our interpretation of the content, matched to our background knowledge of the communities, and building on literature related to learning, epistemic communities, and development, we then applied selective coding procedures (Strauss and Corbin 1998), creating nine code ‘families’, using color coding. One researcher conducted the open coding, extracting a frequency table

of the codes from Atlas ti, including descriptions of each code and exemplary quotes from each of the communities. Two other researchers reviewed the frequency table, identifying and resolving inconsistencies or ambiguities, and through consultation the three researchers identified the most significant patterns emerging from the open coding. The first researcher then revisited the data, completing the process through axial coding based on the research team's findings.

A table is included in the Appendix, to illustrate that many discussions reflected participants' use of legitimized sources of power, to substantiate their knowledge claims. By looking at the way in which these knowledge claims were legitimized over time, we were able to uncover how these affected communities' ability to cope with the tension inherent to epistemic communities between diversity of interests on the one hand, and a single mission-orientation on the other.

### **CASES: NEGOTIATING LEGITIMACY CLAIMS**

Our study seeks to explain how epistemic communities cope with the inherent tension in terms of reconciling a highly diverse membership, with many competing knowledge claims, towards a shared purpose of policy influencing. From our data we extrapolated three legitimized sources of power, based on claims to *expertise*: "*what is*"; claims to *formal position*: "*what must be*"; and claims to *value consensus*: "*what should be*". In the following section, we illustrate how participants negotiated competing knowledge claims (summarized in table 2) through these legitimation mechanisms, and describe how this resulted in various forms of negotiated orders. In the discussion, we explain in more detail how the sources of power influence epistemic communities' capability to pursue their mission.

Table 2: epistemic communities' motives and knowledge claims

<b>Community</b>	<b>Motive</b>	<b>Participants (active)</b>	<b>Knowledge claims analyzed</b>
Health Cluster	Sharing health-related information and research can improve development-relevance of policy	<ul style="list-style-type: none"> <li>- NGOs (Northern)</li> <li>- Researchers</li> </ul>	NGOs, researchers: <i>Sharing health-related information and research can improve development-relevance of policy</i> (no competing claims).
KNet	Technology can contribute to more effective development	<ul style="list-style-type: none"> <li>- NGOs (Southern)</li> <li>- Private sector (firms, (social) entrepreneurs)</li> <li>- Policy makers</li> <li>- Ministers</li> </ul>	<ul style="list-style-type: none"> <li>- <i>The community should restrict itself to discussions on technology</i> (some members; donor; moderator).</li> <li>- <i>Other discussions (e.g. family planning) are also relevant</i> (some members).</li> </ul>
GRIT	Infrastructure policy should include a gender component	<ul style="list-style-type: none"> <li>- NGOs (Southern &amp; Northern)</li> <li>- Researchers</li> <li>- Consultant</li> <li>- Policymaker (donor)</li> </ul>	<p>NGOs, researchers: <i>What is the status of gender integration in infrastructure policy?</i> (a priori)</p> <p>NGOs, researchers, consultant, donor: <i>Infrastructure policy should include a gender component</i> (a posteriori)</p>

## **Stagnated negotiated order**

This community comprises a fairly homogenous group of stakeholders, pursuing a common policy domain. The community's strength lay in its expertise in terms of content, and it developed a strong consensus among its participants in terms of the values and ideas it pursued. However, as it lacked connections to relevant decision-makers it sought to influence, the community's negotiated order *stagnated*, which meant that members continued sharing knowledge, but only among themselves. The community therefore served as a useful forum for local or path dependent learning (Levinthal and March 1993). However, the community was unable to leverage its expertise by introducing new directions to policy discussions in the field of development-related health information.

*“Every year more than half a million women die due to complications of pregnancy and childbirth – 99% in developing countries. A further nine million more women suffer complications that can result in life-long pain, disability and socio-economic exclusion”* (DFID 2009). Many of these problems, and thousands of deaths, can be prevented through improved access to emerging knowledge among healthcare practitioners, and the integration of such knowledge in policies (Godlee et al. 2004; Travis et al. 2004).

With this background as their motive, a group of US-based professionals and researchers formed the ‘Health Cluster’. The vast majority of the cluster members received financial support for their activities through a common funding agency, ‘WestCo’. The agency representative was a passive participant in the community, occasionally channeling information to the members in response to concrete questions mostly related to agency reporting requirements, via one of the co-moderators.

Overall, the Cluster reflected a fairly stable order in terms of the contents and modes of its exchanges. The online discussion list was much used to find development professionals and to share information on potentially relevant resources. The constant flow of information showed that new members easily adopted the community's value consensus on significant topics and accepted modes of communication. However, there were instances that ruffled the existing order. For instance, HIV/Aids was a topic the community often encountered (1519 messages), related to for instance the use of contraceptives, transmission of the disease to newborns through nursing, prevention strategies, etc. The Cluster maintained informal contacts with a community working in the policy domain of HIV/Aids, also under the auspices of WestCo. As one of the co-moderators reported: *“...the representatives from the*

*HIV/Aids cooperating agencies meet monthly to discuss a variety of issues - some of which are related to issues of interest to the Cluster. We ... agreed to keep each other informed about issues of interest to both groups.*” In view of the overlap in the communities’ missions, both were eager to join forces in a more formal configuration.

However, political reasons prevented this from being realized. Namely, WestCo maintained strict boundaries in budgeting and monitoring structures for activities related to HIV/Aids versus the domain issue of maternal health, to ensure transparency in terms of WestCo spending. Therefore, no collaboration could be realized, despite the value which both communities recognized in terms of developing their mutual expertise and institutionalizing their domain issues among important policymakers, and its ability to realize its mission stagnated.

In sum, the Cluster represented a knowledge claim that improved access to health information could improve development. This claim was fairly uncontested, and the community maintained a stable value consensus in exchanging information related to its policy domain. However, relevant decision-makers did not actively engage with the community even after active attempts to involve them; there was thus no legitimized formal authority to whom the community directed its efforts. This lack of formal power facilitated an inward-looking orientation, which engendered a gradual shift, from an epistemic community aimed at policy development in the field of development health, into a forum for sharing information related to members’ joint expertise.

Table 3: Stagnated negotiated order

Stagnated negotiated order	Selected textual fragments related to knowledge claims	Negotiation mechanism
Community develops a strong value consensus but is unable to institutionalize knowledge claims through under-emphasis on formal position.	<i>As a mission-driven partnership, we are dedicated to sharing knowledge specifically around health, (targeting) not very high level policy makers ... within donor organizations. (co-moderator)</i>	Establishing value consensus
	<i>In Ethiopia, where the rate of maternal death is extremely high and women are often desperate for contraception, a rural clinic has no more stock and has been cut off by WestCo. (member)</i>	Sharing expertise
	<i>This (WestCo) policy, everybody that you would talk to would say how horribly it was implemented and it’s been out for I don’t know how many years and it’s still unclear. They just didn’t take the time to say you know this is how</i>	Challenging formal authority

	<i>you do it. (member)</i>	
	<i>But WestCo doesn't really participate. I think from their interest, one of the recurring themes that come up about every 2 years is, "are collaborating agencies duplicating efforts, and we want that to stop." ... Other than that, they're very, well, not very open to suggestions. (co-moderator)</i>	Seeking to engage formal authority
	<i>WestCo makes it very difficult for us to reach their staff. They don't want mailings individually because it's too much paperwork. And they have a knowledge officer in each country but getting a list of those people and figuring out how you can get things to them ... it's taking years and nobody quite knows. (co-moderator)</i>	Seeking to engage formal authority
	<i>As HIV/AIDS programs and research focus increasingly on children, there is an urgent need to ensure that organizations gathering data from children meet ethical standards. ... Please send information about data collection among children, including references to existing guidelines and related materials, examples from the field, or any further suggestions. (member)</i>	Seeking expertise
	<i>We intend to (facilitate) an exchange of information about ... techniques and approaches for disseminating, communicating, and encouraging knowledge transfer about health between, to, and from developing countries. (member)</i>	Establishing value consensus

Ultimately, the Cluster was unable to engage relevant policy-makers and therefore its potential as an epistemic community aimed towards mutual learning and influencing development policy stagnated, continuing instead to build on the expertise it had developed in the process, and facilitating knowledge sharing among members.

### **Explosion of negotiated order**

The second case comprises many competing knowledge claims, deriving from a diverse group of stakeholders, with strong linkages to targeted policy makers. The group generally reflected a stable social order, but was also the arena for a disrupting episode which led to an *explosion* of negotiated order. This occurred when negotiations around a range of conflicting claims to expertise became so vehement, that it was no longer clear which core ideas and

values the community represented. This was further aggravated when an outside authority sought to re-establish order by enforcing her formal position, but which was not legitimized by the participants. With a lack of binding factor, the community's social order '*exploded*', and the community's pursuit of a common mission temporarily dissipated. However, once a new value consensus was negotiated, it was able to re-establish and in fact strengthen its influence as an epistemic community, focusing on the use of technology to facilitate rural development.

KNet represents a diverse group of development practitioners, researchers, entrepreneurs, members of parliament and even government ministers, located in an East-African country, and all interested in computerization processes as a means to improve development. Their discussions were vibrant and fast-moving, revolving around a broad palette of topics related to technology implementation, such as private sector responsibilities, gender empowerment, rural access, broadband, and, importantly, policy implications.

The diversity of the community's participants meant that significant differences existed in the formal positions and interests of different participants. Yet, the community shared a strong sense of common purpose and ideas of what it valued. This was briefly yet vehemently disrupted (41 messages in 2 days) when a participant expressed his moral concern that the topic of family planning was reflected in a local, government-supported (online) newspaper. This elicited controversial reactions, evidenced by two opposing threads. One thread concurred with the participant's disapproval, and with a claim on common (cultural) values and freedom of speech, emphasized the need to discuss the topic despite its marginal relevance to the community's primary focus: "*I take exception to those who are saying this is not the platform for discussing this subject. Technology or media is not an end in itself. It is a platform for sharing information (propositions and oppositions) to whatever is happening around us.*" The other thread disqualified the topic, making a claim on the community's institutionalized expertise related to technology-enabled rural development as a guiding mechanism, and in fact ignoring the fact that this legitimized knowledge was now being contested, with an alternative set of values being proposed. For instance, one participant, who had been influential in terms of developing the community's expertise on rural development technologies, responded: "*I participate in many ... forums. Each of the mailing lists I am on has a 'signal to noise ratio'. This list has more noise than any other I have ever been on.*"

*Unless we get back to the issues at hand (...), I and many others will probably want to unsubscribe.”*

After various participants’ attempts to restore order failed and the tone of the discussion deteriorated, the foreign funding agency which sponsored the community’s website intervened, exerting their formal position. This was done in response to the moderators’ request for assistance, but only the outcome was communicated: *“To KNet Members: Please note that we were recently made aware of potential violations of the Terms of Use of (this platform). After careful review, certain postings contained in the mailing list archives have been removed and certain members have had their access revoked.”*

This did not go down well. Participants saw the donor’s intervention as an infringement on the integrity and autonomy of their knowledge claims. *“Can you give us details of who has been removed and why? If my suspicions are right, then it is high time we set up a (local) based mailing list where we can express ourselves without being gagged because of our “strong opinions” over certain issues that don’t tally with the West. What a shame!!! Very Disappointed.”*

Table 4: Explosion of negotiated order

Explosion of negotiated order	Selected textual fragments related to knowledge claims	Negotiation mechanism
Rejection of value consensus through an overabundance of conflicting claims to expertise, and lack of legitimized formal authority	<i>Has anyone of you been at the Government Newspaper website today? I can’t believe it, but the site is (advocating family planning). Well, I leave the rest of you to comment. (member)</i>	Challenging domain of expertise
	<i>This is IHMO the wrong list to discuss the subject. So stop trolling. (member)</i>	Appealing to value consensus
	<i>I take exception to those who are saying this is not the platform for discussing this subject. ... Aren't ICTs about the improvement of lives of people? Who then says the topic is taboo on this forum. (member)</i>	Challenging value consensus
	<i>The issue of wrong forum, who determines which is a wrong/right forum –it's awareness of the purpose of the Forum: “This workspace enables members to share information about ICT for development.” (member)</i>	Seeking to establish domain of expertise
	<i>Each of the mailing lists I am on has a ‘signal to noise ratio’. This list has more noise than any other I have ever been on. Unless we get back to the issues at hand, I and many others will probably want to unsubscribe. (member)</i>	Appealing to value consensus

In an attempt to overcome this ‘explosion’ of conflicting claims (summarized in table 4), and steer the community back towards a more productive course, the local coordinator, who had been active behind the scenes, stepped forward: *“(On) matters that threaten the harmonious existence of the group I have an obligation to ... guide the group as best as I can. ... We all cherish our freedom in numerous spheres of our lives, and freedom of expression on this forum I believe is no exception. However in my opinion freedom cannot exist without rules and discipline, otherwise we would continually threaten each other’s freedom. ... Personally I would wish to have a self moderating forum so that members can express themselves freely. This indeed is what we have had and you all agree it has been a great forum. I would wish us to continue this way. In this case though the rules are simple and, in my opinion, common sense. Please let us endeavor to follow them.”*

Contrary to the funding agency’s imposition of authority, the formal position which this local coordinator exerted was legitimized by the members. In fact, he was recognized as a community leader in terms of expertise on the topic, and used that expertise to guide the community’s direction. Moreover, in his capacity as appointed coordinator, he was able to reiterate the value consensus which had allowed the community to function so well prior to the explosion of a negotiated order. Through the community’s legitimization of these three sources of power, the community re-established a negotiated order, with new boundaries relating to what was deemed admissible.

Although the conflict had temporarily inhibited knowledge sharing, ultimately it benefited the community members’ ability to listen to each others’ voices and refine their mission. For example, a new potential conflict arose a year later, related to commercial spamming on the list, but was quickly deflated by a coordinator’s reference to the earlier episode, and the ensuing consensus established by the community. Moreover, the community’s influence at a policy level intensified: at the time of this writing, KNet was engaged in a close interaction between a parliamentary committee seeking the community’s input on a new legislative bill, even before it was passed to parliament for commentary. One MP writes: *“We are having a committee meeting this morning... And this is where I would implore all members on this list to give input so that we get well refined laws governing our sector. We need to be guided so that the final recommendations in the bill reflect the spirit of harmonization of the technology sector in the KNet Community.”*

In sum, the conflict in KNet initially caused excessive tension on the community's negotiated order, leading to an 'explosion' of knowledge claims which in effect paralyzed the members' ability to share knowledge in pursuit of a common mission, which was no longer clear. In reaction to the donor representative's (non-legitimized) imposition of her formal authority, the community re-established its value consensus based on its desire to be an independent, locally-based epistemic community, and legitimized the coordinator's formal position – through the (local) values he represented for the community – as a guide to how, and pertaining to which expertise the community should proceed. In that sense, the conflict in fact proved to be fertile ground for a re-negotiation of order, and ultimately provided a new impetus to facilitate ongoing mutual learning.

### **Balanced negotiated order**

The final case comprises a highly diverse group of stakeholders. Primarily, the decision-makers related to the community's policy domain were not included, and the community facilitated a temporary situation of a stagnated order (or path dependent learning); but we saw that as the community established a value consensus, participants were able to intensify their expertise related to their policy project, which helped them attract decision-makers in relevant formal positions. This *balanced negotiated order* facilitated mutual learning among the participants of the community, and the policy-makers it sought to influence in the domain of rural infrastructure and development.

Development banks and governments alike have recognized the importance of infrastructure as a way to improve the basic means of living and livelihoods opportunities for people in developing countries, and continue to invest vast sums on high profile infrastructure projects, such as highway construction or railway development (OECD 2008). A highway, however important at a macroeconomic level (if maintained), is a real danger for the many travelers who, for lack of alternatives, access such roads with non-motorized, poorly visible means of transport. A public transit system is inaccessible for women practicing seclusion, perpetuating their social marginalization. If it is the real poor that infrastructure projects seek to benefit, policy needs to take such limitations into consideration and find alternative solutions. Awareness of mobility as a human right among policymakers is what the Gender, Rural Infrastructure and Transportation (GRIT) community advocated.

GRIT comprised mostly development practitioners and researchers in both the North and the global South. The community reflected a constant stream of messages for instance related to

the social consequences which poor infrastructure could have on women, such as rape, early marriage, being ostracized from rural tribes, etc. Through these stories, the community created a value consensus around their priority issues, based on a mutual understanding of participants' motives for joining the community.

GRIT's knowledgeable and experience on the topic of rural infrastructure caught the attention of a high-level multilateral donor and policy maker within the 'Nations Development Group' (Nations), who had significant influence over the entire policy domain at a worldwide level. Nations contracted a consultant to formally seek the community's input on their new transportation strategy. The community agreed to host an online consultation, first facilitated by the consultant and in subsequent weeks by volunteers from within GRIT.

The consultation led to in-depth discussions, covering a wide range of topics at the boundaries of the policy area, such as the need for adapted roadside sanitary facilities for women practicing purdah (seclusion), decision-making impacts on the transportation of women in obstructed labor, gender training for the (male dominated) transport sector, and so forth.

The rich exchange represented an opportunity for members to generate knowledge, on topics directly or indirectly related to their expertise. Even so, members were aware of the boundaries to what they could realistically achieve in terms of influencing Nations' strategy, recognizing that many of their discussions were probably a bridge too far. The consultant advised: *"I know these dears ... they will be willing to go with what we provide if it is focused and helps the final statement to become a more balanced and complete strategy piece. But they will never do anything other than sigh and turn away - and wish indeed that they have never had the idea of contacting us in the first place - if we cannot hand them something which (a) goes some way to acknowledge the progress that they have made over these last years... and then (b) come up with a manageable number of additions and changes that factor in our important issues but without turning the whole piece into a mea culpa and apology."*

The consultation yielded a total of 240 threaded messages, and the Nations' task manager whom the community had been targeting provided positive feedback on the input the community generated: *"Many thanks for this very impressive response... I understand that a group of the participants is currently summarizing the main points for the Strategy. ... I have*

*not yet caught up with all the exchanges but the few that I have seen show that this exercise will make a valuable contribution.”*

Nations’ new infrastructure strategy included the community’s recommendation to recognize gender as a significant dimension of development infrastructure, institutionalizing it as a policy priority (summarized in table 5 below). Moreover, the executive director of the community’s secretariat was invited to attend the high-level ratification ceremony, and Nations’ president publicly commented on the importance of mainstreaming the domain issues into other policy agendas. These negotiations yielded mutual benefits for both the community and policymaker.

Table 5: Balanced negotiated order

Balanced negotiated order	Selected textual fragments related to knowledge claims	Negotiation mechanism
Community is able to intensify and institutionalize expertise by building on a strong value consensus, thereby attracting relevant decision-makers in policy domains	<i>In Africa, where women's economic welfare can be very tightly linked to small trading, ... overly simple Western concepts of road safety can have negative consequences for local women's economic welfare. ... Designing out load carrying may amount to designing out women's participation in the economy. (member)</i>	Seeking to establish domain of expertise
	<i>We gender and transport specialists can be of great assistance to Nations’ policy makers and indeed to local communities in charting the environment and contributing to feasibility and innovatory studies which can help women achieve a modern travel environment. (member)</i>	Establishing value consensus by appealing to expertise
	<i>Our final revised version has to signal a clear break with past thinking and practice in the sector. ... The fact is - and of this I am dead sure - that the more thoughtful people at Nations’ will immediately recognize the validity of what we’re saying here. (consultant)</i>	Acknowledging formal position
	<i>I have had a careful read of the revised document and would like to congratulate you all on this fine accomplishment. With a minimum of fuss and great economy in the text, the group has worked as one and turned this originally “gender-impooverished” piece into something that does a great job of carrying the flag and drawing attention to these important issues and points of view. (Nations task manager)</i>	Legitimizing knowledge claims by formal authority

	<p><i>We need to be encouraged by the words of the Group's president: "Today the Nations Group is committed to intensifying gender mainstreaming in infrastructure, energy and transport sectors" which means we can really hold the strategy to account. (executive secretary, quoting Nations president)</i></p>	<p>Institutionalizing knowledge claims by formal authority</p>
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During the consultation, GRIT developed a dynamic, yet stable order, fostering ongoing negotiations around the development of policy-relevant expertise between highly diverse stakeholders. Following the active engagement of a relevant policy-maker with legitimized formal power, the community established a value consensus in terms of what interests they sought to pursue. The combination of three legitimized sources of power during the consultation facilitated mutual learning among the members and the targeted policymaker. A more relevant development strategy emerged, representing the interests which the community set out to institutionalize among the decision-maker it targeted.

In the following section we will explore further how conflicting knowledge claims brought about by a diversity of members and resulting in various types of negotiated orders, affect epistemic communities' ability to cope with the tension of reaching a shared goal to interact with the 'outside world' while internally coping with diversity of knowledge claims.

**DISCUSSION**

Our re-introduction of the existing notion of 'negotiated order' offers an analytical framework that helps to understand knowledge sharing in epistemic communities. In fact, so far the literature on epistemic communities only touches upon the inherent tension of reaching a shared goal used as input to influence external policy programs, while internally facing a diverse membership with often conflicting knowledge claims. How and if epistemic communities are able to cope with this tension remains unaddressed so far, but is significant in light of the increasing recognition of communities as alternative forms of organization (O'Mahony and Ferraro 2007).

In order to understand this tension, we studied the dynamics of knowledge sharing within mission-based epistemic communities. Our findings are of interest for the sector of development cooperation, because we show that heterogeneity of knowledge claims appears to strengthen communities' ability to influence policy domains. This responds to concerns for

more participatory approaches to development debates (Hickey and Mohan 2004) that are inclusive of intended beneficiaries' knowledge and expertise (;McFarlane 2006a). Moreover, our identification of different forms of negotiated orders involving conflicting and 'power' relationships represents an attempt to describe the (sub)processes by which relationships evolve in highly dynamic social arenas (Strauss 1978b). We thereby respond to the academically growing interest in concepts of knowledge sharing in communities, taking into consideration multiple claims for legitimacy which communities of distributed experts are faced with (Levina and Orlikowski 2009; O'Mahony and Ferraro 2007). We therefore support both practitioners in the field of development as well as scholars engaged in the field of knowledge, communities, and social orders.

Mission-based organizations often function as epistemic communities, in the sense that their potential to influence policy domains depends on their ability to develop and leverage their expertise. They comprise multiple stakeholders across organizational boundaries, and thrive in a fluid setting, in order to enlarge and update their expertise. The empirical setting revealed three legitimized sources of power that act as negotiations mechanisms in terms of convincing other members of the community's shared purpose, and institutionalizing their knowledge claims in a policy domain. In fact, we identified that participants engage in negotiations based on claims to expertise (claims as to what the shared purpose is, based on one's knowledge and experience), to formal position (claims as to what the shared purpose must be, based on one's formal status and/or hierarchical position), and to consensus on community values (claims as to what the shared purpose ought to be and why it should be pursued, based on moral considerations). As the cases illustrate, different configurations of these three legitimized sources of power appear to determine communities' ability to negotiate consensus and reach different forms of negotiated orders, making organizing in mission-based communities more complex than in traditional knowledge-intensive organizations.

For instance, in situations where a hierarchy serves as governing mechanism (such as in bureaucracies; Adler and Borys 1996), knowledge claims are based on one's formal position. Within knowledge-intensive organizations where expertise is the main governance mechanism (such as in open source communities; O'Mahony and Ferraro 2007), knowledge claims are negotiated based on both one's formal position and one's professional expertise. Within the realm of this negotiations space or 'social arena' (Strauss 1978b), a balanced order

reflects a situation where expertise-based authority and organizational authority are aligned (Agterberg et al. 2010). This might be portrayed as follows:



Figure 1: balanced order in knowledge-intensive organizations

Mission-based epistemic communities make this picture more complex as they are confronted with yet another governing mechanism that is based on shared values, acting as a driver to steer the community into a certain direction. Within situations where shared mission acts as governance mechanism, knowledge claims are based on the value consensus. Thus, negotiations within mission-based organizations, such as epistemic communities in the development sector, take place within a broader and more complex social arena, seeking to realize a balanced order that might be portrayed as follows:

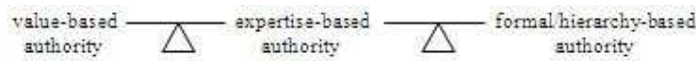


Figure 2: balanced order in mission-based organizations

Mission-based communities therefore face the challenge of simultaneously addressing three types of governing mechanisms. In practice however, epistemic communities are often characterized by an unbalanced order, which results in the different forms of negotiated order as we illustrated with the case studies: a stagnated order and an exploded order.

Our first case provided an illustration of an unbalanced order that we labeled a “stagnated order”; negotiations involved moral value based and professional expertise based knowledge claims, but neglected claims based on formal institutional knowledge. This unbalanced order can be portrayed as:

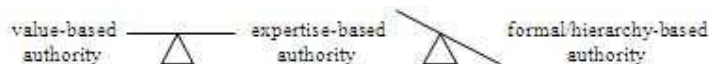


Figure 3: unbalanced order in mission-based organizations (“stagnated order”)

The community still had a shared purpose, related to the policy realm it convened around, but lacked access to decision-makers and thereby a way to attain their purpose. Knowledge claims were legitimized only by the community itself, resulting in an inward-looking perspective. A stagnation occurred in the development of its expertise, and an inability to influence its targeted policy domain. In effect, it rendered itself ineffective as an epistemic community, hence its label “stagnated order”.

Our second case reflected an unbalanced order, labeled as an “exploded order”. Negotiations were about professional expertise only, without taking formal institutional and moral value based knowledge into account.

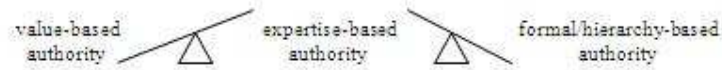


Figure 4: unbalanced order in mission-based organizations (“exploded order”)

Heterogeneity in fact appeared to become counterproductive: without a value consensus there was no legitimation of individual knowledge claims towards a common purpose, nor was it clear at which level the community seek to institutionalize its claims. These aspects negatively influenced the ability to generate expertise, and in effect defeated its purpose. If no new value consensus is negotiated related to the mission, it is likely that the community’s appeal will ultimately dissipate, but at the same time it can represent a fruitful opportunity to re-negotiate new knowledge claims, and re-establish a balanced social order – which our data indeed reflected.

Our cases did not reveal situations in which a lack of value consensus created an unbalanced order. Such a situation is likely to also result in an exploded order (as represented above) whereby a community predominantly seeks formal power as a legitimation of its expertise, adapting its knowledge claims according to the needs of dominant policy-makers rather than its emergent mission which enticed it to convene in the first place.

Our final case study revealed that heterogeneity seems to help an epistemic community to cope with the tension of reconciling a highly diverse membership, with many competing knowledge claims, towards a joint purpose of policy influencing. Negotiations resonated with the community’s value consensus while including targeted stakeholders. This appeared to contribute to its ability to facilitate mutual learning, strengthening its expertise as well as their engagement of relevant decision-makers (and beneficiaries). The case study referred to a ‘balanced order’, therefore illustrated that heterogeneity, where legitimacy claims are based on the interaction between three sources of power, can indeed support mutual learning. This finding is somewhat surprising, particularly in view of studies arguing that more heterogeneity represents greater epistemic differences and more diverse interests, limiting a community’s ability to reach collective outcomes (Newell and Swan 2000; Sole and Edmondson 2002; Lave and Wenger 1991).

Our study emphasizes the dynamic, temporal character of social orders, and identifies mission-based communities as a particular form of organizing that is distinct from traditional knowledge-intensive organizations or bureaucracies, yet even more complex, in that they draw on formal position, expertise *and* value consensus to validate knowledge claims and pursue a common goal. However, it is interesting to note that this complexity in terms of heterogeneous sources of power is not necessarily problematic in terms of resolving the inherent tension in epistemic communities, but at least in our cases appeared to strengthen their pursuit of a common mission. In fact, the most heterogeneous communities in our sample (GRIT, and ultimately KNet), were strongest at facilitating mutual learning, ultimately influencing policy agendas with their knowledge claims, while ongoing negotiations within more homogeneous communities (Health Cluster) stagnated. Therefore, communities where all three forms of power were negotiated seemed to reflect a stronger ability to achieve collective ends, than communities where this was not the case.

It is plausible that the conjunction of all three sources of legitimation is particularly relevant to mission-based epistemic communities, which derive their validation from external constituents, namely their targeted policy-makers, and ultimately, the external (development) constituents whom their efforts seek to benefit. They are therefore confronted by a need to reconcile diverging interests in order to define and achieve their common goal, across the situated practices of diverse social worlds (Elkjaer and Huysman 2008) which development stakeholders represent. This is distinct from for instance religious organizations (Vlaar 2010) which can also be characterized as mission-based, but which are not epistemic communities, in the sense that they primarily derive their legitimacy claims through the buy-in to a value consensus of their internal constituents' (i.e. congregants), rather than external policy-makers. In this sense, mission-based religious organizations are more inward-looking, and might be seen as thriving in contexts of 'situated learning' (Lave and Wenger 1991), which in fact curbs (stagnates) the development of expertise among mission-based epistemic communities in the development context.

Our interpretative study revealed that because mission-based epistemic communities need to negotiate three ontologies – related to values, to formal position, and to expertise – their organizing is a more complex venture than in other forms of community which have been studied (O'Mahony and Ferraro 2007; Handley et al. 2006; Brown and Duguid 2001). We suggest that the concept of negotiated order can prove a useful lens to unravel the mechanisms which allow mission-based communities to develop a social order, amidst this

heterogeneous and contestable arena of knowledge claims. Through our analysis of negotiations in communities we provide an empirical response to calls for a more thorough explanation of sources of power as an engine of knowledge sharing (Alvesson and Kärreman 2001; Contu and Willmott 2003; Roberts 2006), and provide a particular focus on mission-based organizations as an alternative, yet important, form of organizing.

A limitation to our study pertains to the method of communications we analyzed. It can be assumed that certain critical negotiations are in certain instances conducted bilaterally between stakeholders, either via direct email or face-to-face offline, rather than via online platforms such as the ones we studied. This is particularly likely to be the case where online platforms are not the sole communications channels for a network. Further qualitative research into the negotiations that take place in 'offline' settings would help identify the particularities of negotiations processes in online, versus offline settings, and contribute to the further fine-tuning of the theory presented here.

## **CONCLUSIONS**

Our study illustrates how mission-based communities reconcile heterogeneous knowledge claims, in the joint pursuit of policy-relevant knowledge. The negotiation of a social order comprises a dynamic struggle to legitimize knowledge, by engaging claims to formal position, expertise, and particularly for mission-based communities, value consensus. This struggle provides mission-based communities with the vitality to continually reassess and reinforce their pursuit of a shared policy project. The cases revealed that a heterogeneous representation of claims seems beneficial for reaching a balanced negotiated order characterized by mutual learning. Our introduction of a negotiated order lens fills a recognized hiatus in literature by positioning power as a central operator in community knowledge sharing processes, and emphasizes the contested and dynamic nature of knowledge as recognized by the practice-based view on knowledge. Moreover, through our analysis of mission-based epistemic communities, we contribute to the study of community forms of organizing.

## REFERENCES

- Adler, P. S., & Borys, B. 1996. Two types of bureaucracy: Enabling and coercive. *Administrative Science Quarterly*, 41(1): 61-89.
- Adler, P. S., & Haas, P. 1992. Conclusion: epistemic communities, world order, and the creation of a reflective research program. *International Organization*, 46(1): 367-390.
- Agterberg, M., Van den Hooff, B., Huysman, M., & Soekijad, M. 2010. Keeping the wheels turning: The dynamics of managing networks of practice. *Journal of Management Studies*, 47(1): 85-108
- Alvesson, M., & Kärreman, D. 2001. Odd couple: Making sense of the curious concept of knowledge management. *Journal of Management Studies*, 38(7): 995-1018.
- Alvesson, M. 2001. Knowledge work: Ambiguity, image and identity. *Human Relations*, 54(7): 863-886.
- Barker, J. R. 1993. Tightening the iron cage: Concertive control in self-managing teams. *Administrative Science Quarterly*, 38(3): 408-437.
- Besley, T., & Ghatak, M. 2005. Competition and incentives with motivated agents. *The American Economic Review*, 95(3), 616-636.
- Blackler, F., & McDonald, S. 2000. Power, mastery and organizational learning. *Journal of Management Studies*, 36(4): 833-851.
- Brown, J. S., & Duguid, P. 2001. Knowledge and organization: A social-practice perspective. *Organization Science*, 12(2): 198-213.
- Clegg, S. 2003. Managing organization futures in a changing world of power/knowledge. In H. Tsoukas & C. Knudsen (Eds.), *The Oxford Handbook of Organization Theory*: 536-567. Oxford: Oxford University Press.
- Clegg, S., Courpasson, D., & Phillips, N. 2006. *Power and Organizations*. Los Angeles: Sage.
- Cobb, A. T. 1980. Informal influence in the formal organization: Perceived sources of power among work unit peers. *The Academy of Management Journal*, 23(1): 155-161.
- Contu, A., & Willmott, H. 2003. Re-embedding situatedness: The importance of power relations in learning theory. *Organization Science*, 14(3): 283-296.
- Crossan, M. M., Lane, H. W., & White, R. E. 1999. An organizational learning framework: From intuition to institution. *Academy of Management Review*, 24(3): 522-537.
- Czarniawska, B. 2007. *Shadowing, and other techniques for doing fieldwork in modern society*. Malmö: Liber AB.
- Day, R., & Day, J. V. 1977. A review of the current state of negotiated order theory: An appreciation and a critique. *The Sociological Quarterly*, 18(1): 126-142.

- DFID, 2009. *Millennium Development Goals*. Retrieved December 2, 2009, from [http://www.dfid.gov.uk/Global-Issues/Millennium-Development-Goals/5-Improve-maternal-health].
- Eisenhardt, K. M., & Graebner, M. E. 2007. Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1): 25-32.
- Elkjaer, B. and Huysman, M. 2008. Social worlds theory and the power of tension. In: D. Barry and H. Hansen (Eds.), *The Sage Handbook of New Approaches in Management and Organization*, Los Angeles: Sage.
- Gherardi, S., & Nicolini, D. 2002. Learning in a constellation of interconnected practices: Canon or dissonance? *Journal of Management Studies*, 39(4): 419-436.
- Godlee, F., Pakenham-Walsh, N., Ncayiyana, D., Cohen, B., & Packer, A. 2004. Can we achieve health information for all by 2015? *The Lancet*, 364(9430): 295-300.
- Gough, C., & Shackley, S. 2001. The respectable politics of climate change: The epistemic communities and NGOs. *International Affairs*, 77(2): 329-345.
- Grant, R.M. 1996. Towards a knowledge-based view of the firm. *Strategic Management Journal* 17 (Winter, Special Issue): 109-122.
- Haas, E. B. 1990. *When Knowledge is Power*. Berkeley: University of California Press.
- Haas, P. M. 1992a. Introduction: Epistemic communities and international policy coordination. *International Organization*, 46(1): 1-35.
- Haas, P. M. (Ed.). 1992b. *Knowledge, power, and international policy coordination*. Columbia: University of South Carolina Press.
- Handley, K., Sturdy, A., Fincham, R., & Clark, T. 2006. Within and beyond communities of practice: Making sense of learning through participation, identity and practice. *Journal of Management Studies*, 43(3): 641-653.
- Hardy, C. 1996. Understanding power: Bringing about strategic change. *British Journal of Management*, 7 (Special Issue): S3-S16.
- Hickey, S., & Mohan, G. 2004. *Participation: From tyranny to transformation*. London: Zed Books.
- Hine, C. E. 2005. *Virtual methods. Issues in social research on the internet*. Oxford/New York: Berg.
- Huzzard, T., & Östergren, K. 2002. When norms collide: Learning under organizational hypocrisy. *British Journal of Management*, 13(S2): S47-S59.
- Knorr Cetina, K. 1999. *Epistemic cultures: How the sciences make knowledge*. Cambridge, Mass.: Harvard University Press.

- Kumar, N., Stern, L. W., & Anderson, J. C. 1993. Conducting interorganizational research using key informants. *The Academy of Management Journal*, 36(6): 1633-1651.
- Lave, J., & Wenger, E. 1991. *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Levina, N., & Orlikowski, W. J. 2009. Understanding shifting power relations within and across organizations: A critical genre analysis. *Academy of Management Journal*, 52(4): 672-703.
- Levinthal, D. A., & March, J. G. 1993. The myopia of learning. *Strategic Management Journal*, 14, 95-112.
- Levitt, B., & March, J. G. 1988. Organizational learning. *Annual Review of Sociology*, 14(1): 319-338.
- Lister, S. 2003. NGO legitimacy. *Critique of Anthropology*, 23(2): 175-192.
- Marshall, N., & Rollinson, J. 2004. Maybe Bacon had a point: The politics of interpretation in collective sensemaking. *British Journal of Management*, 15(S1): S71-S86.
- McFarlane, C. 2006a. Knowledge, learning and development: A post-rationalist approach. *Progress in Development Studies*, 6(4), 287-305.
- McFarlane, C. 2006b. Crossing borders: Development, learning and the North-South divide. *Third World Quarterly*, 27(8): 1413-1437.
- Newell, S., & Swan, J. 2000. Trust and inter-organizational networking. *Human Relations*, 53(10): 1287-1328.
- OECD. 2008. *Policy Brief: Infrastructure to 2030*. OECD, Paris. Retrieved December 2, 2009, from [www.oecd.org/dataoecd/24/1/39996026.pdf ].
- O'Mahony, S. and Ferraro, F. 2007. The emergence of governance in an open source community. *Academy of Management Journal*, 50(5): 1079-1106.
- Orlikowski, W. J. 2002. Knowing in practice: Enacting a collective capability in distributed organizing. *Organization Science*, 13(3): 249-273.
- Parhankangas, A., Ing, D., Hawk, D., L., Dane, G., & Kosits, M. 2005. Negotiated order and network form organizations. *Systems Research and Behavioral Science*, 22(5): 431-452.
- Pfeffer, J. 1981. *Power in organizations*. Cambridge, Mass.: Ballinger.
- Powell, M. 2006. Which knowledge? Whose reality? An overview of knowledge used in the development sector. *Development in Practice*, 16(6): 518 - 532.
- Roberts, J. 2006. Limits to communities of practice. *Journal of Management Studies*, 43(3): 623-639.
- Rossi, B. 2004. Revisiting Foucauldian approaches: Power dynamics in development projects. *Journal of Development Studies*, 40: 1-29.

- Santos, F. M., & Eisenhardt, K. M. 2009. Constructing markets and shaping boundaries: Entrepreneurial power in nascent fields. *Academy of Management Journal*, 52(4): 643-671.
- Sebenius, J. K. 1992. Challenging conventional explanations of international cooperation: Negotiation analysis and the case of epistemic communities. In: Haas, P. M. (Ed.). *Knowledge, Power, and International Policy Coordination*. Columbia: University of South Carolina Press.
- Shah, S. K., & Corley, K. G. 2006. Building better theory by bridging the quantitative-qualitative divide. *Journal of Management Studies*, 43(8): 1821-1835.
- Sole, D., & Edmondson, A. C. 2002. Situated knowledge and learning in dispersed teams. *British Journal of Management*, 13(S2): S17-S34.
- Spender, J-C. 1996. Making knowledge the basis of a dynamic view of the firm. *Strategic Management Journal* 17 (Winter, Special Issue): 45-63.
- Starbuck, W., H. 1992. Learning by knowledge-intensive firms. *Journal of Management Studies*, 29(6): 713-740.
- Strauss, A., & Corbin, J. 1998. *Basics of qualitative research techniques and procedures for developing grounded theory* (2nd ed.). London: Sage.
- Strauss, A. 1978a. *Negotiations. Varieties, contexts, processes, and social order*. San Fransisco: Jossey-Bass.
- Strauss, A. 1978b. A social world perspective. *Studies in Symbolic Interaction*, 1, 119-128.
- Suchman, M. C. 1995. Managing legitimacy: Strategic and institutional approaches. *The Academy of Management Review*, 20(3), 571-610.
- Travis, P., Bennett, S., Haines, A., Pang, T., Bhutta, Z., Hyder, A. 2004. Overcoming health-systems constraints to achieve the Millennium Development Goals. *The Lancet*, 364(9437): 900-906.
- Van Atteveldt, W. 2008. *Semantic network analysis. Techniques for extracting, representing and querying media content*. Charleston, SC: BookSurge.
- Vlaar, P.W.L. 2010. *Strategy at every corner! Inspiration for a new breed of strategists*. Amsterdam: Synspire.
- Wenger, E. 1998. *Communities of practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.
- Williamson, O. E. 1999. Public and private bureaucracies: a transaction cost economics perspectives. *The Journal of Law, Economics & Organization*, 15(1), 306-342.
- Yin, R. K. 1989. *Case study research. Design and methods*. Newbury Park, CA: Sage.

## APPENDIX: Guiding concepts

Category	Concept	Description	Exemplary quotes	Pattern of occurrence			
				Health	KNet	GRIT	total
	Legitimized sources of power	Knowledge that has been legitimized in social relationships (Strauss 1978a; Contu and Willmott 2003)	n/a	n/a			
	Expertise	The capacity to develop and display knowledgeability, depending on extensive experience in the domain (Alvesson 2001; Crossan et al. 1999)	<i>Your point about gender and transport structures varying by locality as do the specifics of gender relations is very true. In my research on women's mobility in Moslim northern Nigeria I found important differences in degree of seclusion in different cultural regions (linked to a variety of factors) and this impacted substantially on women's mobility and their livelihood opportunities in those different areas (various publications if anybody is interested). (GRIT)</i>	25	111	143	279
	Value consensus	The shared ideas and values which embody a community's practices and guide its course of action (Barker 1993)	<i>We have values which are in line with an African community... which we strongly hold high (KNet)</i>	12	86	98	196
	Formal position	The ability to direct a course of action based on one's claims to authority, based on hierarchy (Williamson 1999; Adler and Borys 1996).	<i>To KNet Members, Please note that we were recently made aware of potential violations of the Terms of (this platform) within KNet. After careful review, certain postings contained in the mailing list archives have been removed and certain members have had their access revoked.(KNet funding agency representative)</i>	1	68	50	119