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The Power Mapping Tool:
A Method for the Empirical Research of Power Relations

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ABSTRACT

This paper presents an innovative participatory method to visualize, discuss and analyze the power of different actors in a given governance field. The Power Mapping Tool was first used to analyze the governance effects of Community-Based Natural Resource Management (CBNRM) in Namibia. This example is presented as a case study to show how the method works: The actors involved are represented by board game figures that are characterized through "range-of-action-cards" and put on wooden "power towers" to show their power in the governance field. The result is a three dimensional sketch that provides quantitative data and guides the qualitative discussion about reasons for and effects of the power of different actors. In the case of Namibian CBNRM Power Mapping helped to understand how power indeed had been devolved from the national to the local level. However, on the community level elite-capture was seen as a serious problem. In this research the Power Mapping Tool proved to be easy to use with a very diverse mix of interview partners and provided not only a wealth of data but also increased the interviewees' understanding of their own situation.

Keywords: Governance Research, Participatory Methods, Decentralization, Natural Resource Management, Power Mapping, Namibia

1. INTRODUCTION

Questions of power and empowerment have gained a stronger momentum as experience shows that technically sound interventions regularly fail to achieve their intended goals, because of adverse power structures. In its 2000/2001 World Development Report, the World Bank put "empowerment" high up on the agenda by defining it as one of the three pillars of poverty reduction (World Bank 2000). At that time the term "empowerment" could be found in the documentation of over 1,800 of the World Bank aided projects (Alsop et al. 2003).

Most major donors are currently working on frameworks and methods to capture the political context of their interventions[1]. As Bjuremalm (2006) observes: „A number of donors and creditors have simultaneously developed different approaches to analyzing and understanding the political and institutional factors that shape development outcomes – a true turn of the tide" (p.1). This turn of the tide is gains momentum from a number of simultaneous developments that re-enforce each other: The Millennium Development Goals (MDG) and connected evaluation efforts, a shift towards more country responsibility in donor assistance mechanisms (e.g. with budgetary support and sector wide approaches) and a new emphasis of many development actors on community-based and decentralized approaches to name but a few. Thus both implementers and researchers have put a renewed emphasize on issues of power within the development process.

Questions of power have caught the attention of implementers and researchers alike when they have realized that the benefits of many interventions tend to accrue with the better-off and more powerful community members, even though they were intended for the poorest. Platteau and Gaspart (2005) observe that elite capture deflects a great proportion of community-based development aid towards the local elites and claim that the approaches and organizational structures of donors carry a great deal of responsibility for this. However, the discussion about development and power is not limited to economic empowerment alone. Through the combination of concepts like participatory development and good governance, researchers and development organizations point at economic and political empowerment both as a means and an end of interventions (see e.g. OHCHR 2002).

The devolution of power towards local levels is also one of the driving forces behind a wide alliance for decentralization of governmental activities in developing countries. The logic behind this is that local government actors are closer to local demands and needs and thus in a better position to deliver appropriate service. It has also been argued, that communities have a stronger leverage in bargaining with

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[1] E.g. "Power Analysis" of the Swedish SIDA, "Drivers of Change" analysis of the British DFID, "Stability Analysis Frameworks" of the Netherlands Ministry of Foreign Affairs, "Governance Questionnaires" of the German GTZ.

local government agencies than in approaching national government actors (see e.g. Lovan et al 2004, World Bank 2004).

But while the importance of power structures and positions for development interventions is now widely accepted, Alsop at al. (2003) observe that "despite growing interest and increased investments in empowerment, the development of instruments and indicators with which to monitor and evaluate empowerment processes and outcomes is still at an early stage" (p. 5). This is apparent in donor approaches like the "Power Analysis" of SIDA that so far resembles a barely structured long list of questions that the consultant is encouraged to ask in case they apply to a specific local setting (as reviewed in Bjuremalm 2006).

The methodological approaches to the research of power can be broadly divided into theory-driven general analysis and an empirically based analysis of the power situation on the ground (with approaches like "Power Analysis" falling within the later category). While the former calls for formal models that claim to be applicable in any situation, the later approach results in case studies and the development of general frameworks for analysis which have to be adapted to local settings. Platteau and Gaspart (2005) for example apply game theoretical methodologies to the elite capture problem in community-based development and propose project structures that would minimize the possibilities of elite capture. Their game theoretical approach produces general rules applicable in a whole range of different local settings. However, Agarwal (1997) argues that the analysis of power relations such as the bargaining power of different household members, calls for an empirical in-depth understanding of both the quantitative and qualitative sources of power in a specific setting and thus she provides a broad framework for the analysis. Alsop and Heinsohn (2005) develop frameworks and indicators for measuring empowerment to serve as an even broader structure for analysis that includes:

- Agency
- Opportunity structure
- Degrees of empowerment
- Domains of empowerment and
- Levels of empowerment.

In this paper, a new tool for the empirical measurement of power in governance processes, the Power Mapping Tool, is introduced. Power Mapping was developed to strengthen the tool pool for empirical power analysis. While the case study presented shows its use on its own, it readily fits into a greater framework of power analysis. Here the Power Mapping Tool will contribute structured qualitative and quantitative data concerning the perception of power of the different actors involved in the policy

field. The empirical approach can be tailored to focus on different levels and domains of empowerment and while quantitative data on the degree of empowerment is collected, agency and opportunity structure are part of the qualitative discussion (relating Power Mapping to the framework of Alsop and Heinsohn 2005 above).

Power Mapping allows for the direct and hands-on analysis of power structures with the participation of actors involved in the governance field. It was developed to address the need for more structured but still participatory approaches to empirically gaining a better understanding of the role of power in governance processes.

The tool was developed for the research of governance in developing countries; so apart from dealing with the conceptual issues of analyzing power, it is also adapted to the specific requirements for research in third world countries. Among them are:

- Generally low level of formal education, high illiteracy-rates

- A high diversity of research partners and interviewees in terms of culture and language. Often interviews have to be conducted with the help of interpreters

- Restricted technical infrastructure (such as computers, electricity) calling for "low-tech" and low-cost methods.

The following chapters will introduce the Power Mapping Tool in a hands-on, practical way to encourage social scientists and development practitioners to use and develop it further.

The paper is structured as follows:

Chapter 2 gives a conceptual introduction of power. It points to the specific characteristics that make it difficult to analyze power directly and discusses different approaches to developing indicators.

Chapter 3 describes the case of Namibian Community-Based Natural Resource Management, where this method was used to analyze local and national governance effects of the decentralization of wildlife management to the community level.

Chapter 4 introduces the Power Mapping Tool as a method for the empirical analysis of the perceived power of different actors involved in one governance activity. This chapter introduces the method step-by-step to enable the reader to use and adapt the tool in different research contexts.

Chapter 5 discusses the method, exploring its strengths and weaknesses as experienced in the field.

Chapter 6 provides concluding remarks and explores avenues for further methodological development, namely towards an integration of networking aspects leading to the development of Influence Network Mapping.

2. CONCEPTUALIZING POWER

In the analysis of political processes the concept of "power" has always played a great role. Power is one characteristic structuring the interactions of groups of people. A basic definition of power that is still rather widely used was developed by one of the founding fathers of modern sociology, Max Weber: "Power is the probability that one actor within a social relationship will be in a position to carry out his own will even against resistance, regardless of the basis on which this probability rests" (Weber, 1922, Vol. 1, p.53). This understanding is also reflected in a more recent definition of empowerment as the ability to make effective choices i.e. to choose and to achieve what one has chosen (Alsop et al. 2003). In their framework for the analysis of empowerment Alsop and Heinsohn also point to the "basis on which this probability rests" (Weber 1922), claiming that the power of the individual rests both in his or her agency (the individual capacity to make a choice) and opportunity structure (the institutional context in which this decision is made) (Alsop and Heinsohn 2005).

While it is generally understood that power is one of the factors structuring every society, it is rather difficult to analyze and *empirically measure* power in a given social setting. This problem derives from a number of characteristics of the phenomenon itself.

Power is a social construct that only materializes in the interaction of people. Thus, power is relative; it characterizes relationships between individuals or groups. It is not a fixed characteristic of a person (or organization) thus it cannot be said that one individual has a certain absolute "amount" of power. The power of one actor is assessed by finding out how strong or weak this actor is in relation to others within a certain social setting and concerning the achievement of a certain set of goals. To cater for this fluent nature of power, some scholars have developed concepts of domains of empowerment or spheres of power (Schuler and Hashemi, 1994). This takes into account that one person or organization can be very powerful in a certain sphere and not so in another. For example a male office clerk might be rather powerless in his work environment (as compared to his colleagues and superiors) but exercise a great deal of power back home in the family setting when it comes to decisions on household spending. Alsop and Heinsohn propose three domains of power - state, market and society - that are further divided into eight sub-domains:

- State is subdivided into: justice, politics and service delivery

- Market is subdivided into credit, labor and goods

- Society is subdivided into family and community

But not only is power not measurable in absolute terms and might differ in different spheres, furthermore it evades *direct* measurement. The different approaches to "measuring" power empirically rely on indicators that reflect the power of actors. The probably most common single indicator for power relations between actors is the distribution of material resources (e.g. Platteau and Gaspart 2005, Markovsky 1993).

For example an indicator for the power of different government departments could be the size of their budget in relation to the whole budget. Indicators for bargaining power within a developing country household could be the observable results: the things different household members have bargained for successfully (see e.g. Agarwal 1997).

However, the flows of resources between actors only reflect one dimension of their power relation. The power of team members has been analyzed with power-related communication analysis, a sequential model including verbal and nonverbal behavior (Koch et al. 2001). Here the focus is not so much on the outcome but indicators for power are seen in the way different actors *express* their power in the interaction. The team interaction is recorded and the resulting tapes are scanned for certain patterns of communication that are seen to indicate power.

Social Network Analysis is concerned with the difference between formal and informal sources of power. While the formal understanding often assumes that the strongest power sits on top of a hierarchy, network analysts claim that the position of actors in a network is crucial for determining their informal power. Krebs (2004) sees the closeness (distance to all other actors in the network) and betweenness (degree to which an actor links others who are not otherwise linked) as crucial in determining the power of actors.

These examples show that the choice of indicators reveals a lot about the priorities of the researchers and can have a great impact on the research findings. Depending on how they define power and choose their indicators, researchers might find widely varying results as to who the powerful actors are in a given social situation. For example a traditional African chief might be seen as rather power-less if the core indicators concern material flows but as rather power-full when the question asked is: Who can enforce community level rules.

The choice of appropriate indicators is especially important and difficult in intercultural research settings. Pre-defined indicators of power (such as size of budget or position in network) might make a lot of sense in the cultural system the researcher comes from. However, they might miss crucial aspects of culturally specific definitions and exercise of power in their target group (Agarwal 1997). So the Power Mapping Tool introduced here gives a strong responsibility for the definition of power and the choice of indicators to the interview partners.

3. EMPIRICAL CASE: COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT (CBNRM) IN NAMIBIA

The Power Mapping Tool was first used in the analysis of Community-Based Natural Resource Management in Namibia. Below this is presented as a case study to give an example of the use of the tool. In the Namibian case (Schiffer 2004), the Power Mapping Tool proved to be inter-culturally applicable and easy to use and adapt. The following chapter gives a brief overview of this case. For more detail consult Schiffer 2004 and Schiffer 2003.

Namibia is the first country in the world that incorporated the protection of the environment into its constitution. After Independence (1990) the new government put a strong emphasize on empowering the black majority of the population that had been disempowered through the apartheid system. One step towards this goal was a change of legislation (1996) to give greater rights over wildlife to local communities.

In the new framework communities are entitled to form communal wildlife conservancies with a defined geographical area and membership, in which they have the responsibility for and reap profits from wildlife. Conservancies develop their own plans for wildlife management (both consumptive and non-consumptive uses), and, after getting approval from central government, they exercise these plans, reaping benefits for the community to distribute among households or put into projects, just as the membership decides (Long, 2004 analyses the livelihood effects of this approach).

This new legislation led to a boom of community-based conservation: In 2004, 28 percent of all communal land in Namibia fell under conservancy management. This amounts to just below 9 percent of the Namibian surface (Long, 2004).

One core aim of CBNRM is to devolve the responsibility for and profits from wildlife to the community level. However the discussion among local stakeholders as well as prior research on the issue revealed rather mixed results with regards to whether power really was devolved to the community level. After initial excitement about the potentials that the new legislation gives to the communities, practitioners in the field started to complain about outside interference as well as un-even distribution of power (elite capture) within heterogeneous communities. The research that is presented here aims to move from anecdotal information to a structured approach to the questions of power and governance in CBNRM. The research aims at

- Identifying the relevant actors,
- Determining their range of action in the governance field,
- Analyzing the power of the different actors in this field,

- Assessing whether CBNRM satisfies the stakeholders in reaching the acclaimed governance goals.

The empirical case study was undertaken in two communal conservancies in the North-West of Namibia. Great parts of this region feature ecological and economic characteristics that further CBNRM development: a high tourism and conservation value and a lack of viable economic alternatives for the local population. Both communities look back on a considerably long history of community-based conservation efforts that finally led to the formation of conservancies.

In this study, 33 stakeholders of CBNRM were interviewed using the Power Mapping Tool. They were local conservancy actors, government staff, NGO staff, traditional authorities and researchers. While some interview-partners were illiterates with no command of any European language, others were researchers or NGO staff with university education.

4. THE POWER MAPPING TOOL

The core method used for the analysis of CBNRM governance is the Power Mapping Tool presented in this paper. This chapter gives a hands-on introduction of Power Mapping to encourage the further use of the tool.

Equipment needed

Figure 1: Stakeholder of power tower and range-of-action cards

• Large (at least A3) sheets of **paper** for drawing the **power map** (1 per interview)

• **Board game figures** to symbolize **actors** or actor groups (number depends on the complexity of the governance field and interviewees perceptions, in the below study approx. 35 were needed. Figures have to have individual distinctive features like color, shape, decoration)

• Flat round disks, i.e. **checkers' pieces** that can be piled to form **power-towers** and carry the figures (number depends on complexity and power differences, around 60 pieces for complex set-ups)

• **Range-of-action-cards** (about the size of the checkers' pieces, drawn on cardboard) symbolizing observing (eye), giving advice (mouth), making decisions (stick-figure voting by show of hand) and coins symbolizing giving money (enough cards and coins so that every actor could get one of each symbols)

• **Power-matrix** for noting down the setup:

Name of actor	Color/shape	Range of Actions	Height of Power-tower	Comments
Max Haraseb (TA)	Blue	Observe, advise	3	He always comes to meetings
Ministry of Environment	Green	Decision	6	They can stop everything here if we don't work
…				

Using the tool step-by-step

Assembling stakeholder-list and choosing figures

To begin with, the interviewee is asked to list all individual or organizational actors that s/he sees as involved in a specific governance field, activity or organization (i.e., local water management,

communal wildlife conservancy). This does not only include formal decision-makers but also other groups such as service users, advisors, donors etc. The actors are noted down in the first column of the power-matrix. Then the interviewee chooses one board game figure for each actor. The distinguishing characteristics (color, shape etc.) are noted down in the second column.

Drawing governance map and arranging actors on the map

The governance map is not a geographical map but a sketch of the overlapping stakeholder groups involved in the field/activity/organization. The shape of the map depends on the research focus as well as on the interviewees' perception. When the map is drawn and agreed upon, the actor figures are arranged on it following the assembled stakeholder list. See below a typical governance map for the analysis of community-based wildlife conservancies in Namibia. In this study the conservancy committee as management body (being the core research focus) was put in the central position of all governance maps. The overlapping other stakeholder groups were arranged around this according to the interviewees' assessment. The stakeholder maps differed between different interviews because the interviewees had different perceptions about who was an important actor in this field. Intersections occurred wherever one actor was member of more than one stakeholder group, e.g. being traditional chief and conservancy committee member.

Figure 2: Example for power mapping tool set-up

Adding of range-of-action-cards/coins

The stakeholders influence the analyzed field through various activities. With the help of the range-of-action-cards/coins the interviewee can visualize how each actor exercises power in this field. They cover observing (eye), giving advice (mouth), making decisions (stick figure voting by show of hands) and funding (coin). This list can easily be adapted to other research needs. For example different cards could indicate the goal orientation (such as environmentalists vs. developmentalists) instead of the range of action. Interviewees characterize each actor by putting one or more of the cards/coins next to each figure.

Comments (like "This one is an advisor because he gives us training" or "They don't make decisions but they give us the money, so we won't decide against them") are noted in the last column of the matrix or on an extra sheet, as this is part of the qualitative data that is essential for understanding the whole set-up. When the interviewee has added cards/coins to all actors, the interviewer verbalizes each actor's range of actions and gives the interviewee the chance to re-arrange the set-up. The final arrangement is noted down in the third column of the matrix.

Defining power and arranging power towers

It is essential for stringent results that interviewer and interviewee share one understanding of power. To be useful in the field the definition has to be hands-on and easily understandable. In this study the definition of power was based on Weber (1922), see above. In the definition communicated to the interviewees, the researcher stresses that the sources of power could be diverse, ranging from legitimate decision-making capacity through giving advice or incentives to bending or breaking the rules.

Power is described as the ability to reach one's goals in a social situation and the question is: "How much power does this actor have in this specific field/activity/organization" (and not in a more general sense).

Once a shared understanding of power is established, the interviewees are asked to assess who has how much power in the given field/activity/organization. They put each actor on a tower of checkers pieces. For this, some rules are explained:

- The more powerful an actor, the higher the tower

- The towers can be as high as interviewees want

- Two actors can get the same height of power tower

- The power of actors in one stakeholder group does not add up.

Now that all actors have been identified, grouped and characterized according to their range of action and relative power status, the interviewer verbalizes the set-up and encourages the interviewee to make adjustments until s/he is content with the whole picture. Especially in a set-up with a high number of actors, it is important to verbalize the power-relations: "I see, you have put the chief as the strongest, this NGO is the next one… and finally you say that ordinary community members are the least powerful." It is very likely that the interviewee re-assesses his/her judgment. Naturally, the other actors have to be adjusted accordingly if one power tower is changed. When the interviewee is content with the set-up, the height of power-towers is noted down in the fourth column of the matrix.

Discussing: Why and how

So far, the interviewer has mainly collected quantitative data, i.e. answers to closed ended questions that were visualized by something looking like a board game. Now the set-up can be used as a three dimensional sketch to structure a qualitative discussion of the governance situation. Starting with the most powerful, the interviewer asks about sources and effects of actors' power. The questions asked here are variable according to the field of research. The quality of discussion is likely to improve over time, as the researcher is more familiar with the instrument but also with the crucial issues of the situation researched (e.g. conflicts and coalitions). After a number of interviews it becomes easy to see at first glance what the unusual, special and interesting characteristics of each new Power Map are. The questions asked at this stage go along the line of:

- "I see you have put this one on the highest tower. Why? Where does his/her power come from? How would someone from outside like me see that? "
- "You say that these two have the same power. What happens if they disagree? Is their power based on the same grounds? Does it have the same range?"
- "I have heard there is a conflict about xy between these three organizations. Could you explain to me, what is happening there, how do they use their power in the conflict?"
- "You say this actor has no power at all. Why is that so? What could he do to get more power?"

The interviewer has to make sure to go through all actors of the set-up. As power is exercised more explicitly around conflicts it is especially interesting to further investigate the different perceptions of conflicts. The Power Mapping Tool can be used to discuss sensitive issues in a more anonymous and abstract way: "People tell me this blue figure has a problem with this yellow one. Tell me, what is it all about?"

Data analysis and results

The information recorded in the interviews is transformed into sets of stakeholder data. One set of stakeholder data is what *one* interview-partner says about *one* stakeholder (i.e. the information gathered in one line of the power matrix shown above).

The interviewees are allowed to build towers as high as they want to. Therefore the absolute power values given in one interview are not directly comparable with all the others: While in one case 4 might the highest value, in the next interview the highest might be 8 (thus, in this case 4 signifies a far lower power). So to allow for comparison between different interviews, the absolute figure representing the power status of one actor in one interview is turned into a **relative power value**: For each interview the highest tower is set equivalent to one and the ground level is set equivalent to zero. So each actor is assigned a relative power value between zero and one (by dividing the power value of this actor by the value of the highest tower in this interview).

Each set of stakeholder data consists of:

- the name and position of the stakeholder,

- his or her range of actions (observe, advise, decide, give money),

- the perceived absolute and relative power status and

- the comments of the interviewee about this actor.

The empirical case of CBNRM highlights the kinds of results that can be produced with this method. The information recorded in the interviews was transformed into 454 sets of stakeholder data.

As a first step the researcher gathered a list of all stakeholders that are seen as influencing the specific governance field. The frequency with which different stakeholder groups were mentioned in this case is shown in Figure 3.[2]

**Figure 3: Proportion of groups in stakeholder data**
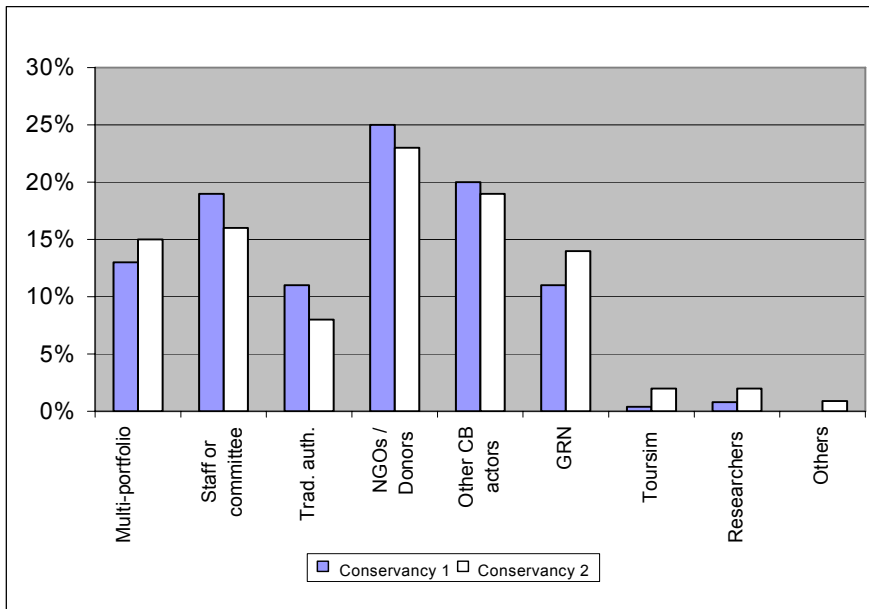
conservancy 1 (100% = 225); conservancy 2 (100% = 229)

With the "range of action cards", the tool collects data about the ways actors influence the governance field. One underlying question could be: Do interviewees see local actors as decision makers in conservancies or is decision-making power still solely vested in the central state. Figure 4 shows, that in this case a high percentage (67 and 76 percent respectively) of the data sets for decision makers characterized local actors.

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[2] Multi-Portfolio actors are those who have more than one position in the conservancy or who combine a conservancy position with one in another group like traditional authorities or NGOs.

Figure 4: Proportion of local and external actors described as decision makers
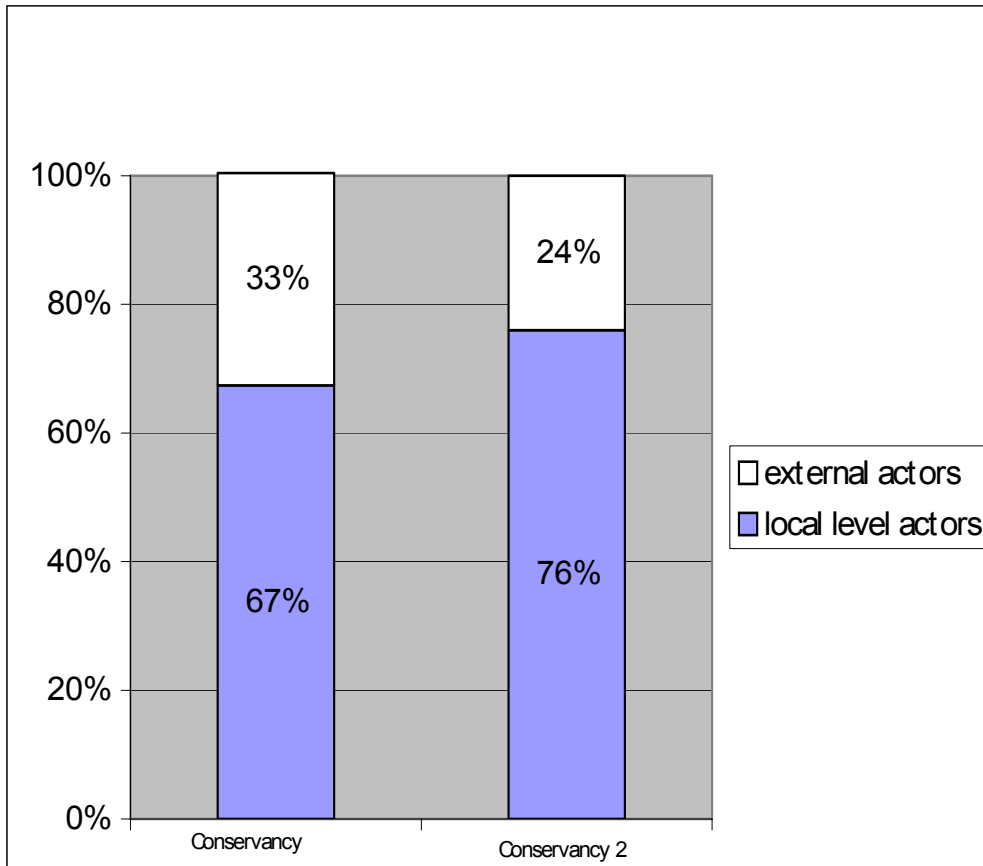

Conservancy 1: 100% = 125%; Conservancy 2: 100% = 94

With the transformation of the height of power towers into relative power values the status of actors is comparable between the different interviews. Figure 5 gives an overview over the average perceived power of the different actor groups.

In analyzing these figures it is apparent that perceived power and frequency have to be seen together. If only analyzing perceived power, the tourism actors will be seen as by far the strongest in Conservancy 1. But Figure 3 shows that they were only mentioned by a very small proportion of the interview partners. In the data analysis tourism in Conservancy 1 was treated as an outlier as it was only mentioned by one interviewee though he thought it to be a very influential actor[3]

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[3] In this analysis I was reluctant to develop a combined measure for frequency and power as I preferred the transparency of two disaggregated measures. With a combined measure the picture might look as if tourism actors –

Figure 5: Perceived power of stakeholder groups
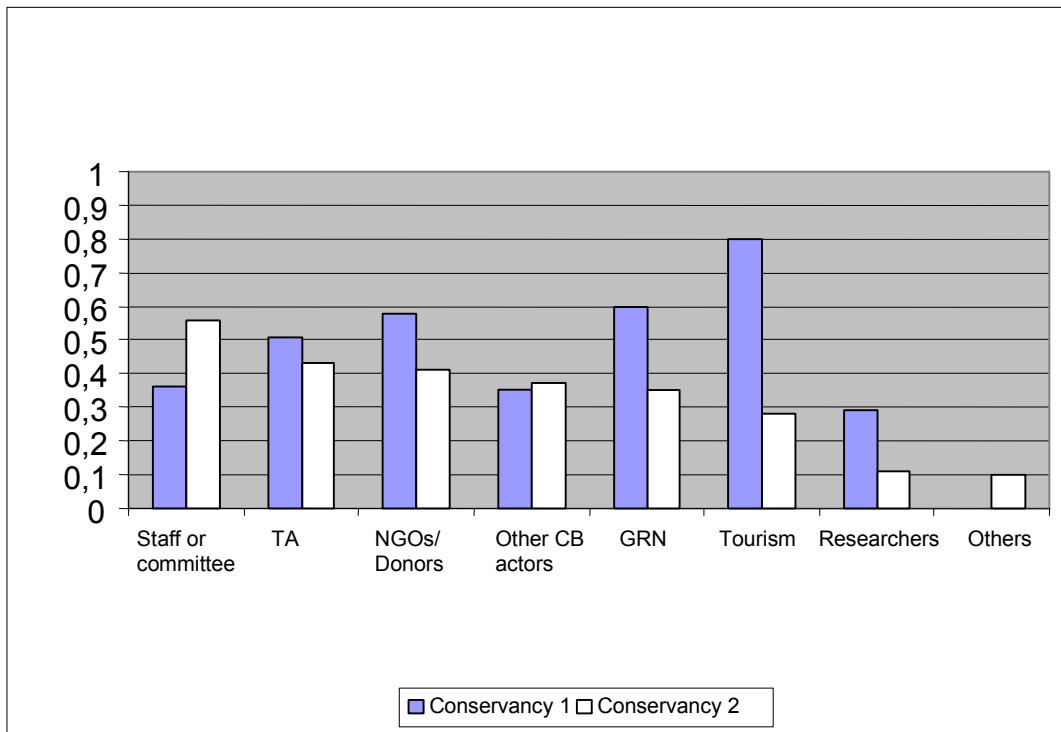
The quantitative analysis of the Power Mapping Tool delivers a skeleton that is then filled with the flesh derived from the discussion of the governance set-up. Only the combination of both allows for a thorough understanding of the points of view of the interviewees.

The relationships between the different actors were explored in this discussion. In the course of the research the interviewer came across a number of crucial issues and conflicts in each conservancy. Because power becomes more tangible in conflicts, the interviewers were asked to discuss the role of different actors in these situations.

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in this case – were seen as actors of medium power. This would mask the fact that they weren't seen as an actor at all by most but as very important by few. However, in further methodological development and according to the specific question asked if might make sense to develop a procedure for combining perceived power and frequency.

While CBNRM in Namibia was seen as rather successful in devolving power from the national to the local level, the empowerment effects on the community level were seen to favor local elites. In the two case study conservancies a "central power-group" tended to (more or less) seize benefits and decision-making capacity. Community members and outside observers described the following problems:

- A gap between conservancy staff / committee and the rest of the local population; local disparities were rather aggravated;

- An unclear and potentially explosive role of the respective traditional authorities: Relying on their land rights and traditional power position they acted either as motor or as stumbling block of conservancies;

- A very strong position of NGOs in local decision-making processes due to their role as donors and facilitators.

The perceptions about power of community members varied strongly between different interview partners. In analyzing the discussions it became apparent that this was linked to the position of the interviewee in the system and to his or her understanding of power. There was a tendency that core conservancy actors (staff and committee) described the community as strong because of their formal power put down in the conservancy constitution:

"The conservancy members are the strongest power because they vote and make the basic strategic decisions." (Conservancy actor, Conservancy 2)

However, many community members and observers from outside focused more on how local people actually made use of this potential:

 "Locals, well you could say ultimately they have the power to vote people out, theoretically, but they are not organised and disenfranchised from the process of decision-making, at the moment they have no power." (Researcher)

5. DISCUSSION OF THE METHOD

Advantages of the Power Mapping Tool

The tool proved to have a number of logistical and methodological strengths that are explored below.

The visualization of power relations appeals to the intuition and seemed to be easy to grasp by interviewees and interviewers from different cultural and educational backgrounds.

The highest number of actors given by one interview partner was 35. Even for a highly abstract thinker it would be difficult to rank 35 actors on paper and still keep an overview over everyone's position. The Power Mapping Tool visualizes the answers to a number of questions (Who is involved? What is their range of action? How much power do they have?) and these answers stay visible during the course of the interview so that second thoughts can be accommodated.

Setting up everyone on a board-game helped the interviewees to structure their view of the situation and especially those who named a lot of different actors commented that this improved their own understanding of the set-up. Having all actors represented during the discussion also meant that interview partners were less likely to leave anyone out. By visualizing the positions it was very easy to catch all relations at one glance. After using the tool with a number of interviewees it became easy for the interviewer to spot the crucial issues of one set-up immediately.

The abstraction that height of towers equals power was easy to bring across. The interpreter (a local woman with grade 12 schooling and no prior research experience) very quickly grasped the concept and was soon able to conduct the interview independently.

The fact that the different actors were represented by wooden figures helped to de-personalize the discussion. Especially in approaching touchy issues like conflicts, it helped to be able to point at "this green figure" having a problem with "this blue one", instead of having to mention names. Most interviews were undertaken in settings where privacy was not easily attained (e.g. in the shade of a tree) so depersonalizing made it easier to discuss frankly.

The Power Mapping Tool allows for the structured analysis of the *perceived* power of actors in a social situation. As explained above, "measuring" power can only be done indirectly, by using indicators. In many approaches the researcher decides on the indicator (like: percentage of budget allocated, length of contribution to a discussion). With the Power Mapping Tool the researcher shares the responsibility of determining the indicators with the interview partner. The interviewer gives a basic definition of power; however, the assessment of power rests on the perception of the interviewed and their own priorities and understanding. This leads to results that are meaningful to the local people. It also reflects the highly relative characteristics of power. The method leads to an increased understanding of complex settings,

where the position of the interview partner in the social network strongly influences how s/he sees the power of others involved. With prefabricated indicators and the notion of "absolute" (as opposed to relative) power, some of the more abstract quantitative approaches tend to overlook this complexity.

Last but not least, interviewees enjoyed using the tool. When conducting interviews in rural communities there are different ways how interviewees can be rewarded for giving their time and knowledge to a stranger. This kind of research aims at making the voices from the villages heard to the outside world and adding some input to policy processes in capital cities. Also, a number of recommendations were fed back into the local wildlife governance. However as these contributions point towards the future and are out of the control of the researcher, one benefit of the Power Mapping was that people gained a better understanding of their own situation. The wooden tool box and the colorful figurines attracted the curiosity of the interviewees and reduced the tension of an interview situation with foreigners. Initial inhibitions against research being something difficult "only for people who went to university" were eased away. When using the tool with researchers or government officials on the other hand, there was some skepticism in the beginning ("Oh, this is a method for illiterates.") but they were all prepared to go through the process and to see that what looked like a children's' game, inspired serious thinking and discussing of issues.

Uses

So far, the game was basically used in an extractive way, for collecting data. But in a number of interviews with small groups (2-3 people form the same stakeholder-group) it became apparent that it could also be a tool to stir and structure a discussion. In one case an NGO employee had set-up his Power Map when two colleagues entered the room. While first only observing and listening to our discussion, they soon started adding their views, agreeing or disagreeing and giving their own explanations.

When presenting the method to a broader audience nearly inevitably someone remarks jokingly: "Oh, you should come and map the power in our department, you'd be surprised". These remarks touch a potential of the Power Mapping Tool that has not been exploited yet. Visualizing how different actors perceive power structures in their own organizational set-up can be a starting point and reference for promoting understanding and organizational learning. The experience with the tool so far shows that different actors tend to have widely varying perceptions of the power-play in their own governance field. Still they were generally surprised "that anyone could see it differently". So the tool can serve as a starting point for a dialogue as it provides a rather non-confrontational way of spelling out where one stands and learn about other actors' positions.

Limitations and Challenges

The experience in the field showed a number of limitations of this method. Some are specific to this method; others are more general for this "kind" of methods. When it comes to the qualitative second part of the Power Mapping Tool, interviewers face the challenges that are typical for qualitative methods: Interviewer dependency is high, as the interviewer has to flexibly guide the discussion into an interesting direction. Further use of the method by different researchers and enumerators will allow assessing the role of interviewer bias in the data collection. However, the Power Mapping Tool serves as a sketch for guiding the process, which reduces the variability as compared to purely qualitative and narrative interviews.

Another potential problem is that setting up and discussing the map can be rather time consuming. The interviews took between 45 minutes and 6 hours, both being extremes with a "normal" set-up taking between one and two hours4.

While these are the pitfalls of the qualitative side of the tool, there are also some issues to be considered about the quantitative side of it. Transferring the power of an actor into a figure (height of tower) necessarily means a great deal of simplification. The method tries to console that by adding the qualitative discussion for further explanations. However, some interviewees felt it difficult to compare power from different sources in such a simplified way and it remains in the responsibility of the researcher to make sure the qualitative aspect is not neglected for the benefit of simplistic quantitative analysis. The experience with the tool shows that it is essential to clearly define the governance field, question or organization that the researcher wants to analyze. Setting up the map is the easiest and provides the most valuable information if the question at stake is well defined and not too complex.

The height of the power towers describes the power of one actor in relation to all other actors in the set-up. It was felt during the interviews and even more so during the analysis of data, that more specific information about the linkages between actors would increase the understanding of the whole situation. Further methodological development will put a stronger emphasize on visualizing the links as well as the power of actors.

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4 Most interviews had to be undertaken with - time consuming – interpretation, as the majority of interview partners didn't speak English, German or Afrikaans.

6. CONCLUDING REMARKS

In 2005 the method has been applied in a study about decentralization processes in India. There it has passed a further "test" of intercultural adaptability and proved to be useful in structuring data collection and discussion with members of village level organizations. For its application to the case of a multi-stakeholder water board in Ghana (in 2006-2007), the Power Mapping Tool will be extended and developed into a tool that allows for the analysis of both power and networks in this governance setting. The new tool, Power Network Mapping, will combine social network mapping with the core aspects of the Power Mapping Tool. This development takes into account the understanding based on Alsop and Heinsohn (2005) that the analysis of empowerment has to approach both, agency and opportunity structure. The social network analysis aspect that is added to the original method will provide a better understanding of the institutional setup that constitutes opportunity structure. The potential of Power Mapping to fit into a more general framework of governance analysis (as developed by a number of donors, see above) is still to be investigated. Apart from the use as a research tool, the Power Mapping Tool's potential to assist in professional learning, negotiation processes and organizational development will be further explored.

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