

Virtual Micro-Politics: Informal Tactics of Influence and Power in Inter-Organizational Networks

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Abstract

Although virtual organizations and networks have been studied for quite some time, there is still need for research regarding their inner dynamics and the mechanisms of leadership and governance. In this paper we investigate micro-political processes—i.e. informal actions of individual actors to gain power and exert influence, which is a well-researched concept in traditional organizations—with respect to inter-organizational networks. By means of a qualitative interview study we investigated structures and strategies of power within virtual networks. Results show that micro-political tactics known from research in traditional organizations are also used in inter-organizational settings. Furthermore, we identified additional micro-political tactics specific to virtual networks. The latter are especially related to the use of ICT. Based on our results, we discuss possible implications for the structure and governance of virtual networks as well as the design of the technology that is used to support virtual cooperation.

1. Introduction

Due to globalization and technological developments, *virtual organizations and networks* have emerged in the last decade as new organizational structures and continue to gain importance on the market. This is especially true for networks of freelancers and small and medium-sized enterprises [cf. 22].

Although virtual networks have been studied for quite some time [e.g. 7, 17, 25, 29, 36], there is still need for research regarding their inner dynamics and the mechanisms of leadership and governance. Network governance is an interesting topic because inter-organizational networks are typically characterized by a lack of formal hierarchies and roles and have no formal structure of leadership [cf. 22, 33, 36]. Thus, it is sensible to assume that *informal* actions

of individual stakeholders play a crucial role in shaping and governing the network.

In our study, we investigated whether the concept of *micro-politics* is useful to explain behavior in virtual networks. The term ‘micro-politics’ refers to informal actions of individual stakeholders to gain power and exert influence within an organizational setting. Originating in organizational science and psychology, micro-political behavior within organizations has been extensively researched in the last decades [e.g. 14, 38].

The aim of our paper is to transfer the concept of micro-politics from the *intra*-organizational setting to the *inter*-organizational level. To investigate whether micro-political behavior is a feasible perspective on virtual networks, we conducted a qualitative interview study with representatives of various networks, questioning them about their perception and use of actions to gain power and influence.

Therefore, the contribution of our work is to *extend* the concept of *micro-politics* to *inter-organizational*—or virtual—*networks* and to provide first *empirical* insights into structures and tactics of power within such networks.

The paper is structured as follows: In section 2, we discuss and define virtual networks, as we understand them in our study. In section 3, we introduce the concept of micro-politics *within* organizations and transfer it to *inter-organizational* relations. Section 4 describes the methodology of our study. Results are presented and discussed in sections 5 and 6. We conclude the article by discussing implications for the design of virtual networks and the supporting ICT from a researcher’s as well as a practitioner’s viewpoint and describing prospects for future work (section 7).

2. Virtual networks

Virtual organizations can take various forms (see e.g. [36] for an extensive review). However, most definitions agree that virtual organizations are forms of “inter-organizational, crossborder ICT-enabled

collaboration between legally independent entities, usually with a specific economic goal” [32, p. 373].

Beyond those basic properties, virtual organizations can vary considerably regarding the stability of membership and participation and also the duration and goals of the cooperation.

In our research, we take a view of virtual organizations as *networks* of independent enterprises or entrepreneurs. Members (or member organizations, respectively) engage in this form of cooperation because they expect economic advantages, e.g. to broaden the customer base or develop new products and services together. On the other hand, network members often also act as individual competitors on the market. Thus, collaboration in virtual business networks has also been termed “coopetition” [5]: A permanent and delicate balancing act between cooperation and competition.

The virtual networks that we studied are mostly *polycentric networks*, i.e. highly distributed [cf. 18] and loosely coupled associations with high degrees of autonomy of its members. This implies that there is typically no formal leader with special authority or superior to the other members. The networks we investigated are constituted predominantly by small and medium-sized enterprises (SMEs) or freelancers.

In such networks, typical elements of virtual organizations become especially apparent, such as a lack of formal hierarchies and rules and a heavy reliance upon information and communication technology [e.g. 33, 36].

Furthermore, facing the “coopetition” explained above, a certain amount of trust among members is crucial to deal with the insecurity and informality of the situation [e.g. 33]: Thus, *personal relations* between network members (or representatives of member enterprises, respectively) play a vital role.

Based on this characterization, we will use the terms “virtual networks” and “inter-organizational networks” interchangeably in this paper.

3. The concept of micro-politics

Organizations consist of individual actors who interact constantly. Micro-political processes are understood in organizational science as strategies of individuals to negotiate their interests in interaction with others and gain and exert influence and power. Even though these processes are typically informal in nature and not organizationally sanctioned, they nevertheless influence power structures within organizations [10, 37].

3.1. Intra-organizational micro-political processes

In the last decades there has been a rapid growth in theoretical publications and empirical studies in organizational science and psychology that have focused on influence and politics in intra-organizational settings [e.g. 12, 13, 16, 24, 31, 39].

One approach to micro-political processes that has been extensively discussed focuses on the organizational members’ political behavior. On this note, micro-politics is regarded as part of a general set of social behaviors that can contribute to the basic functioning of organizations [30].

Accordingly, micro-political processes have been frequently investigated by means of observing employees’ *influence tactics*. Such influence tactics used at work can be aimed at different goals and self-focused as well as organization-focused [24]. Work in this field has led to a variety of typologies of influence tactics as well as their possible antecedents and consequences [e.g. 24, 38, 42].

In Table 1, we summarize a representative set of tactics that were identified in seminal studies [2, 24, 42] and have been extensively re-examined since then [3, 14].

Table 1: Influence tactics in traditional organizations

CATEGORIES	
Rational Persuasion	Blocking
Ingratiation	Sanctions
Coalitions	Legitimizing
Personal Appeals	Exchange
Inspirational Appeals	Consultation
Assertiveness	Self-Promotion
Upward Appeals	

Rational persuasion: Using logical arguments and facts; giving information to persuade the other that a desired result will occur.

Inspirational appeals: Arousing enthusiasm by appealing to universal or common values, ideals, and aspirations.

Consultation: Asking for participation in decision-making when the other person’s assistance and support are desired; showing willingness to modify a proposal to deal with the other’s concerns and suggestions.

Ingratiation: Using praise and flattery or helpful behavior to get the other person in a good mood or to think favorably of oneself; making the other person feel important.

Personal appeals: Appealing to the other's feelings of loyalty and friendship towards oneself.

Exchange: Offering an exchange of positive benefits, indicating willingness to reciprocate at a later time, or promise a share of the benefits if the other person helps accomplish a task.

Coalition: Using the assistance of others or securing other persons' support to achieve the desired goal.

Legitimizing: Indicating that a request is consistent with organizational policies, rules, practices or traditions.

Assertiveness: Seeking compliance by using demands, threats, frequent checking, or persistent reminders.

Self-Promotion: Presenting oneself as competent, smart, successful, and proficient; showy behavior.

Blocking: Ignoring other people or spreading (wrong) information to thwart others.

Sanctions: Threatening to prevent benefits or job security.

Upward appeals: Causing pressure to conform by invoking the influence of higher levels in the organization (making a formal appeal to superiors or obtaining their informal support).

3.2. Inter-organizational micro-political processes

In our view, micro-politics is a useful concept to study and understand inter-organizational relations as well, especially *polycentric* networks without formal structures and rules of governance, giving way to informal processes and tactics of influence and negotiation and also raising actors' consciousness regarding the importance of "political" behavior [16]. As formal structures of leadership are missing, individual activities to form coalitions and build an influential position in order to benefit from the cooperation should be especially effective in virtual networks.

Furthermore, information and communication technology (ICT) used by virtual networks might contribute to or even constitute micro-political processes, as technology serves to both make existing

processes and structures more explicit as well as bring forth new roles and rules [cf. 20]. Network actors who are well experienced in the use of ICT might use their knowledge to gain power.

Therefore, in our study we investigated the following main research questions:

1. What micro-political processes can be identified within inter-organizational networks? Are they different from typical tactics found in the intra-organizational context?
2. How successful is micro-political behavior in an inter-organizational setting? How does it affect the virtual network?
3. How are micro-political processes enacted through technology in virtual networks?

4. Method

The study was conducted in the spring of 2009 as part of a larger research project concerned with governance and innovation in inter-organizational networks¹. By means of a systematic Internet research we recruited members of inter-organizational networks for a qualitative interview study. The networks needed to fulfill the following criteria to be included in the study: a) horizontal relationships between members/member organizations, b) polycentric governance, and c) a minimum of three members/member organizations.

Overall, we conducted 15 semi-structured in-depth interviews [27, 28] with members of virtual networks from different sectors and industries (IT, media design, shipping industry, real estate business, consulting business, labeling industry medicine, farming). The enterprise size ranged from single-person enterprises to SMEs with up to thirty members. The network size ranged from three to twelve members/member organizations. Our interview partners were between ages 28 and 61, six were female, nine male.

Economic goals such as joint customer projects or sales orders were named as the network's primary objective by 13 of the 15 network representatives. Slightly different, the medical network's aim was to facilitate communication and exchange across different medical sectors and, therewith, to improve patients' medical treatment. The network of farmers acted as an agricultural cooperative. All networks were aimed at long-term existence and arranged their collaboration mainly through the use of information and communication technologies. The technologies applied

¹ Research project kreanets, <http://www.kreanets.com>

ranged from exchange via e-mail and telephone to sophisticated communication and groupware platforms.

To obtain comprehensive and valid data on interpersonal influence processes, we focused on individuals whose network positions allowed for lively interactions and exchange with the other network partners, or—in other words—who were likely to be both the source and aim of influence attempts. Therefore we concentrated on freelancers and representatives of small and middle-sized enterprises, acting as the organizations’ *boundary spanners* [41] within the network.

The interview partners were asked about their experiences with influence and politics, leadership, and power within their networks, i.e. what tactics and behaviors they had either been using *themselves* or *other* network members had been using to push their interests within the network, and how *successful* these tactics had proven. To elicit these experiences, we asked the interviewees to describe so-called “critical incidents” [15] or key situations in which influence attempts had occurred, following the common procedure of prior research on micro-politics [8, 24, 42]. Concerning the effectiveness of micro-political behavior, no fixed criteria for success were determined beforehand; instead the interviewees were asked for their subjective judgment whether the tactics applied had worked out for them or other network members. This open criterion of success as simply “getting one’s way” has been commonly used in other studies on micro-politics as well [e.g. 24].

Furthermore, the interviewees were asked about the emergence of the network, the issue of competition and trust, processes of innovation, and the use of ICT. Data on formal aspects such as network size, duration, geographical distribution etc. was also collected.

The interviews (30-90 minutes duration) were audiotaped and transcribed literally according to a fixed set of transcription rules that had been defined beforehand. A qualitative content analysis was conducted using a combined a-priori/post-hoc approach: In a first step, the interview data was structured according to a category system deduced from the literature on micro-political processes within organizations (see sections 3.1 and 5.1). In a second step, the category system was refined by adding further categories of tactics identified through the described behaviors and actions of network agents in the data (section 5.2). A total of 31 distinguishable concrete micro-political actions in 15 different categories were identified.

The stability (*intra-coder reliability*, [26]) of the newly developed category system was tested by repeated coding three weeks after the first analysis. Cohen’s Kappa was calculated as reliability index.

Intra-coder reliability was excellent ($k=.91$). Likewise, the *inter-coder reliability* (tested by having the material coded by three independent raters) proved to be very good ($k=.77$).

5. Results

In the next sections, we present the results of the deductive (a-priori) and inductive (post-hoc) analyses.

5.1. A-priori analysis: Use of intra-organizational micro-political tactics

The a-priori analysis showed that the micro-political tactics known from research *within* organizations, which were described in section 3.1 [14, 38], are also relevant in *inter-organizational* contexts. Table 2 shows the number of different *tactical actions* described by the interviewees that could be assigned to the respective tactical categories.

Table 2: Intra-organizational tactics used in virtual networks

CATEGORY	N _{TACT}	PARAPHRASED TEXT SAMPLES
Rational Persuasion	2	Gathering additional information in view of a forthcoming discussion
Ingratiation	3	Being charming to gain resources
Coalitions	2	Spending more time beyond network meeting with some partners
Personal Appeals	1	Appealing to someone’s friendship to get support for one’s own plans
Inspirational Appeals	2	Evoking the common network idea
Assertiveness	3	Stopping discussions at meetings on one’s own authority
Blocking	2	Circulating rumors, ignoring network partners
Sanctions	1	Counting single agents from the network community
Legitimizing	2	Referring to network contracts
Exchange	2	Reminding others of a prior favor

CATEGORY	N _{TACT}	PARAPHRASED TEXT SAMPLES
Consultation	1	Obtaining an opinion from network partners for a planned project
Self-Promotion	3	Emphasizing one's own good reputation

N_{TACT}: No. of different *tactical actions* that were assigned to this category across the whole sample

All categories of micro-political tactics known from the intra-organizational setting (except for *Upward Appeals* to supervisors, which obviously does not apply to virtual networks without formal hierarchies) were named by at least one interview partner to be one of their own tactics. The category mentioned most often in the interviews is *Rational Persuasion*, both as a tactic the interview partners used themselves and as well as one which is used by others. “Competitive” tactics such as *Blocking* are attributed more to other network members than to oneself (cf. section 6).

5.2. Post-hoc analysis: Micro-political tactics specific to virtual networks

Beyond the micro-political tactics known from the intra-organizational context three additional tactics specific to virtual networks could be identified: *Mediating*, *Being Visible*, and *Claiming Vacancies*.

“Being Switzerland”: *Mediating*. In four cases interviewees reported gaining influence by taking a neutral, mediating position (“being Switzerland”, as one interviewee put it). Contrary to intra-organizational settings there will seldom be dyadic relations of influence between actors, but an individual’s position within the network as a whole will be crucial regarding his or her influence and power. Being seen as a mediator seems to strengthen this overall network position. The following quote exemplifies the tactic:

“I always tried to keep myself out of the playing around, the feuds and coalitions. But when you’re active and still keep a kind of neutral position, that neutrality gives you a central position, and somehow you are the contact person for the others, something like a mediator. And when the others wouldn’t find a common ground, my word was important.”

The interviewees described this more reluctant, mediating role not as putting one’s own interests back or avoiding conflict as such, but as tactical measure in the sense of “when two people fight, the third decides”.

By ‘being Switzerland’ actors maneuver themselves in a better strategic position.

“Add your two cents!”: *Being Visible*. Six tactics that were reported referred to frequent presence and good visibility within the network as a means to gain influence. Contrary to teams coordinating their work in traditional organizations, members of virtual networks are typically distributed not only organizationally, but also in time and space [cf. 18]. Therefore, distributed teams often suffer from a lack of *awareness* [e.g. 9] concerning each other’s activities: Different members’ ways of working and also their respective contributions are often not transparent to the others. In such a setting, frequent visibility might serve as “evidence” of members’ efforts and achievements—quite irrespective of the quality of their contribution.

Naturally, information, coordination, and cooperation processes in virtual networks are largely based on electronic communication. Therefore, being visible is often tied to frequent use of the network’s different communication channels and tools. Members who are visible become a central ‘communication knot’. How visibility serves as a tactic to gain influence is exemplified by the following interview quote:

“I would definitely say that sometimes quantity is much more effective than quality. I always kept the others informed. E-mails, phone calls, postings in the forum. Of course, everybody benefitted from my activities. And at the same time due to that persistent presence, permanent showing that you’re there, you get the status of an active and effective network partner: “Wow, he’s active!” You get to be a core player of the network if you’re so omnipresent. There is no getting around you when you have that presence.”

Unlike the established category of *Self-Promotion* (cf. section 3.1), which focuses on emphasizing one’s importance, competencies, and success, the tactic of being visible is not aimed primarily at showing off one’s capability, but rather activity as such to gain influence.

“Filling the vacuum”: *Claiming Vacancies*. Another tactic specific to virtual networks that was reported in five cases aims at strategically searching and taking up (new) tasks and roles within the network. Especially in the network’s initial phase, tasks and roles are often not specifically tied to certain individuals. Furthermore, taking responsibility is mostly voluntary in polycentric networks, therefore leaving room for individuals to assume tasks and roles that suit their respective interests, competencies, and needs.

Examples for taking up roles as a means to gain influence include serving as a host/moderator of meetings (with the possibility to set the agenda) or administrating the network platform. The following quotes point out this tactic:

“You know, there is always a vacuum, some tasks or positions are not clearly assigned to someone—especially at the very beginning. And so it is up to you to take advantage of it. (...) As the moderator of the meeting, of course, you are in the position to co-determine the agenda. Your matters come first, when everyone is listening.”

“And some of the partners always arrived pretty late after the meetings had started already. And, OK, I knew they would argue against my proposal. So the vote was set at the very beginning. Bad luck for them.”

Again, it becomes clear that information and communication technology used within the network serves as a vehicle for micro-political processes:

“One of our partners was very good in technical things. So it was him from the very beginning who created our Internet appearance and answered the customers’ e-mails and, well, of course he did that to his own benefit I would say.”

Further examples show that the power of being an administrator is also due to the possibility to act as a ‘gatekeeper’ and filter or use incoming information first before distributing them to the other network members. Similarly, administrators make use of the possibility to influence the network’s outside presentation (e.g. by controlling web sites) in a way that is favorable for them (e.g. to attract certain groups of customers).

5.3. Acceptance and success of micro-political tactics in virtual networks

To sum up, micro-political behaviors known from intra-organizational research as well as actions specific to inter-organizational networks could be identified in our study. Table 3 summarizes all tactics that were reported by our interviewees.

Success is a fundamental criterion of micro-political behavior [38], raising the question of the *effectiveness* of the micro-political tactics that were identified in this study. Therefore, the interviewees were also asked about the acceptance and success of the micro-political tactics they used and experienced. No fixed criteria for success or failure were determined beforehand; instead the interviewees voiced their own

judgment if and how the tactics worked out for them or other network members.

Table 3: Micro-political tactics used in virtual networks

CATEGORY	N _{FREQ}	N _{SELF}
Rational Persuasion	14	14
Ingratiation	6	3
Coalitions	8	3
Personal Appeals	2	1
Inspirational Appeals	9	5
Assertiveness	4	2
Blocking	3	1
Sanctions	2	1
Legitimizing	3	1
Exchange	6	3
Consultation	4	3
Self-Promotion	6	3
Mediating	4	2
Being Visible	6	2
Claiming Vacancies	5	3

N_{FREQ}: No. of interviewees mentioning this tactic.

N_{SELF}: No. of interviewees reporting this as *own* tactic.

Results show that *Rational Persuasion* is not only the tactic named most, but also the one that is seen as the most promising and successful to promote and push one’s own interests within the network. This tactic was also judged as collaborative [35], since it is seen as preserving not only one’s own position within the network but the network as a whole as well.

Other collaborative tactics named by the interviewees were especially *Inspiring Appeals* and *Being Visible*. Contrary, *Blocking and Manipulating* was seen as a highly competitive tactic. It was also judged as being only temporarily successful, but detrimental in the long run—for the individual position as well as for relations within the network as a whole.

Self-Promotion and *Assertiveness* were evaluated inconsistently: Some interview partners (from more ‘traditional’ areas such as farming and shipping) judged these tactics as clearly competitive and not effective, while others (from newer fields such as media design) praised them as highly effective and important.

One interviewee describes the effectiveness of assertive behavior as follows:

“We were all in the same boat, but I tried to get them to row in the same direction. That means that sometimes you simply have to bang your fist on the table and call everyone to order—quite gruffy if necessary, because men are pretty simple and a

firm stand was understood much better than the whole diplomatic seesaw.”

Generally it became clear that ‘open’ tactics are the most accepted and also the most effective micro-political behaviors in networks. ‘Hidden fouls’ behind the back of others (e.g. *Blocking and Manipulating*) or tactical ‘wheeling and dealing’ (*Coalitions*) were seen as jeopardizing trust and equal cooperation in virtual networks.

6. Discussion

The aim of our study was to investigate micro-political processes in virtual networks. Micro-politics is a well-researched concept in organizational science and psychology describing informal tactics to gain influence and power in traditional organizations.

By transferring this approach from the *intra-organizational* to the *inter-organizational* level, we aimed to shed light on the occurrence, characteristics, acceptance, and success of micro-political behavior in virtual networks.

Results indicate—despite some limitations discussed below—that the concept of micro-political behavior in organizations is indeed feasible and useful to explain the dynamics of virtual networks, which comprise actors from different enterprises. In the absence of clear hierarchies, structures, and roles, which is a key characteristic of the virtual networks we explored, micro-political behavior even seems to fall on especially fertile ground.

This leads us to the question whether micro-political behavior in inter-organizational networks is at all different from tactics found within traditional organizations. Our results show that members of virtual networks use the whole repertoire of micro-political tactics to gain and exert influence and power. However, there are some differences:

For one thing, we identified tactics *specific* to virtual networks and organizations, namely *Mediating*, *Being Visible*, and *Claiming Vacancies*. Future studies with larger samples might discover additional ones.

We argue that these results are indeed new, since in the extensive body of research on intra-organizational micro-political tactics, these specific tactics have not been identified so far [cf. 2, 3, 14, 24, 42].

In our view, the newly identified tactics are rooted in the *non-hierarchical* character of virtual networks (e.g. forming and seizing (new) tasks and roles), but also in the reliance on *technology-supported interaction* (e.g. exploiting the possibilities of electronic communication for visibility within the network). Nevertheless, it is an interesting research

perspective to explore whether and how micro-political processes are enacted through technology in traditional organizations as well.

Furthermore, networks are typically characterized by especially strong interdependencies between individual actors. Therefore individuals have more opportunities to ‘control’ others and push their own interests by micro-political behavior than in traditional organizations.

Nevertheless, unlike one might assume, micro-political behavior in virtual networks is not excessive or detrimental (see section 5.3). It seems to be restrained by a self-regulating mechanism: As soon as competitive tactics threaten the integrity or stability of the network, micro-political behavior ‘backfires’ on the actor. Thus, actors have a strong motivation to abandon the behavior and protect the network as well as their own position.

A prerequisite for this self-regulatory mechanism seems to be a somewhat stable network structure and set of rules, legitimizing or sanctioning certain behaviors. As transparency, reciprocity, and trust are essential for successful cooperation in virtual networks, especially transparent and cooperative micro-political tactics [35] seem to be viable and successful in the long run.

Quite generally, micro-politics is a controversial topic [4]. The negative connotations often associated with ‘power’ or ‘politics’ seem to contradict the positive notions of trust and cooperation on an equal footing associated with virtual networks. However, cooperation always involves interactions of humans—and humans do not act strictly ‘rational’ or as representatives of organizations, but also according to their very personal interests and needs.

A clear limitation of this preliminary qualitative study is that we did not collect independent measures of the effectiveness of micro-political behavior. Likewise, we were not able to judge the networks’ overall success.

Furthermore, we have to bear in mind that *social desirability* plays a vital role in investigations of power and influence. Therefore, when interpreting the results, we have to be careful, especially when it comes to the question of *who* is using certain (more or less desirable) tactics: Quite interestingly, competitive or egoistical tactics are mostly attributed to *other* network members.

Nevertheless, we see qualitative interviews as a sensible approach for a first inquiry into the topic of micro-political behavior within virtual networks. Even though the sample size was relatively small, the interviews were very profound and provided a broad picture of the participants’ subjective views and

experiences in different types of networks and industry sectors.

In future studies, it is necessary to triangulate the members' subjective views with other measures.

E.g., micro-political behavior could be investigated through observations of network interactions and communication patterns. An analysis of *electronic* artifacts and communication records seems especially promising in this regard. Additionally, standardized tests that exist to examine micro-political behavior within organizations [14, 38] need to be adapted to fit the inter-organizational context.

Measures of *effectiveness* could include the networks' stability in terms of membership (size, duration) as well as economic indicators.

Furthermore, it would be desirable to include *whole* networks (or at least a larger number of their members) in future studies. This would also serve as a means to test the *convergence* of senders' and receptors' perception of micro-political processes, and thus help to validate results—or gain further insights into the mechanisms of 'virtual micro-politics'.

It is important to note that our results describe micro-political processes in inter-organizational networks with a *polycentric* structure, which are made up of independent members or member organizations and lack formal hierarchies and roles (cf. section 2). More formalized types of virtual organizations might experience other forms of micro-political behavior.

7. Implications and future work

In this concluding section, we briefly discuss possible implications for the structure and governance of virtual networks as well as the design of the technology that is used to support virtual cooperation and identify issues for further research in the area.

7.1. Implications for research and practice

Structure and governance of virtual networks. Based on the results of our study it is feasible to assume that micro-political behavior influences interaction, communication, and decision-making processes in virtual networks in a decisive way. Therefore, the way the 'virtual micro-politics' are played will probably affect the outcome, stability, and success of virtual networks. It is an open research question of the future to shed light on these mechanisms.

Our results suggest that different networks develop distinctive 'organizational' cultures, in which different levels and strategies of micro-political behavior are accepted and endorsed. Therefore, we hypothesize that individual micro-political tactics and preferences play

a role in the process of becoming (and staying) a member of a certain network. If virtual networks manage to convey their 'micro-political culture' they might be more successful regarding these (self) selection processes, resulting in greater stability and less conflicts within the network. Again, these effects need to be clarified in future research.

Design and use of technology. The results of our study also show that technology is an important carrier of micro-political behavior. Therefore, as designers of groupware and other information and communication technology, we should take a closer look on how design decisions facilitate or constrict micro-political behaviors.

For example, showing presence by means of electronic communication media is closely related to the design of *awareness features* in shared workspaces [e.g. 9, 11, 19, 21]. Albeit the extensive body of research in the area, it still needs to be investigated e.g. how people *purposely* use awareness features for influence and power.

Practical implications. As was stated above, there are numerous implications for the structure and governance of virtual networks that are of equal interest for researchers as well as practitioners. Examples include selecting new members, handling conflicts, devising network rules, assigning roles, or even choosing technology.

However, at this early stage of research on micro-political processes in virtual networks, detailed recommendations are hard to make.

As a general statement—learning from research on intra-organizational micro-political processes—organizations are well advised not to ignore or try to restrain informal rules and behavior. Micro-politics is part of the organizational reality that can also have beneficial effects as it unleashes employees' creativity and motivation. Likewise, members of virtual networks should accept micro-political behavior as 'part of the game'.

Given the negative associations of power, this might not be an easy task: „*The taboo about power is still perhaps more profoundly rooted in conscience of modern man than the taboo about sex*“ [6, p. 214].

Similarly, prior research has shown that members of virtual networks often try to avoid the issue of *competition*, which is undoubtedly another reality of inter-organizational cooperation [22].

Overcoming these taboos is a challenge for the organizational development of virtual networks, which might be addressed in consulting processes.

7.2. Future work

In our own research, we plan to take a closer look at the *associations* between *technology* and *virtual micro-politics*. Research questions to ask include how different types of media encourage or prove efficient regarding different micro-political tactics. In doing so, we will especially investigate electronic artifacts and communication patterns in virtual networks.

Furthermore, we plan to investigate micro-political behavior at *different stages* of cooperation in virtual networks: For example, specific tactics might exist in the initial phases of cooperation (e.g. pretending to possess certain resources) that might become obsolete or even detrimental later on. Also, the processes of entering and leaving virtual networks will be analyzed with respect to micro-political behavior.

There are also some hints in our data that actors make use of different tactics depending on their *age*, *gender*, and also their *professional background* or the *industry sector* they come from. However, our current sample was too small to investigate these differences further. We are currently conducting additional interviews with a revised version of our interview guide to address these issues. We will also account for these variables in future quantitative studies to explore the relation between socio-demographic factors and professional background and micro-political behavior.

To account for the methodological aspects discussed in section 6, we also plan to conduct complete surveys of all (or at least a great number of) members belonging to a virtual network. To do so, we will apply methods from *social network analysis* [40] and *value network analysis* [1].

Starting with the results of the study presented here, we are also currently developing a *standardized instrument* that can be utilized to obtain comparable data on the use, perception, and effects of ‘virtual micro-politics’.

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